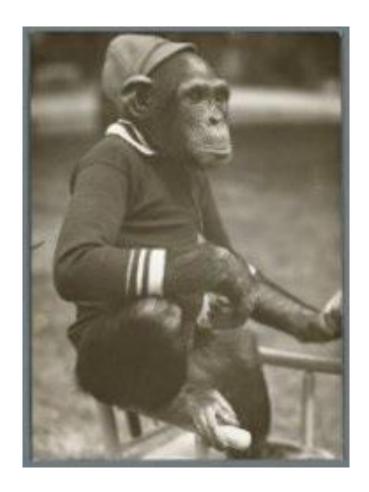
Being Human in Artis

Developments in the Amsterdam Zoo, 1902-1941



Master's thesis, RMA Modern History (1500-2000), Utrecht University

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Elke keer dat ik in Artis ben geweest, begrijp ik de menschen weer zooveel beter.

Every time I have been to Artis, I understand the people so much better again.

J.H. Leopold, 1922, inscription on the outer wall of *De Volharding* in Artis.

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Introduction

At the Rio de Janeiro Earth Summit in 1992, the Convention on Biodiversity was signed. This convention aimed at the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising from commercial and other utilization of genetic resources. A year later, the agreement led to a collaboration of the World and Association of Zoos and Aquariums (WAZA) and the International Union for Conservation of Nature (IUCN), resulting in the first *World Zoo Conservation Strategy*. In this document, it was decided that the threat of extinction of species, habitats, and ecosystems worldwide laid the responsibility upon zoos to commit to the conservation of animal species and wildlife. The idea of a more responsible zoo agenda is still in development and widely discussed by animal ethicists and the zoo community, but the well-being of animals in zoos has, in many cases, been prioritised. In the Amsterdam zoo Natura Artis Magistra, plans for larger exhibits have been developed and, in order to provide more space, animals are not being replaced when they die.³

Debates on the moral defensibility of zoos did not cease after the *World Zoo*Conservation Strategy was written. In an article in British newspaper The Independent from 10 September 2006, philosopher Peter Singer, whose work had a formative influence on the animal liberation movement, states that most present-day zoos can still be considered immoral because they confine animals for our amusement in ways that are contrary to the interests of the animals. "But", he argues "if zoos really put the interests of the animals first, and only then find ways for us to observe them, they are not immoral." The ethics surrounding the interest of the animal are further substantiated by philosopher Tom Regan. In his case for animal rights, he states that animals should not only be appreciated for their instrumental value, i.e. for their functional value for humans, but rather for their own, intrinsic value. In order to achieve this, he argues, animals need to be granted certain rights. Among them is the right not to be harmed, which, according to Regan, does not only disclaim inflicted harm, but also repudiates deprivations of certain needs. Even if no injury is inflicted upon them, he argues, caged zoo animals are still harmed because they are denied the

¹ "The Rio Conventions," accessed July 17, 2017, https://www.cbd.int/rio.

² The World Zoo Organization, *The World Zoo Conservation Strategy: The Role of the Zoos and Aquaria of the World in Global Conservation* (Brookfield: Chicago Zoological Society, 1993).

³ "Welzijn in plaats van vermaak," *Trouw*, June 17, 2013.

⁴ It was Singer's 1975 book Animal Liberation in particular that incited popular interest in animal welfare. He reflects on this matter in newer editions of this work. Peter Singer, *Animal Liberation* (New York: Ecco, 2002).

⁵ Peter Singer, "You Ask The Questions," *The Independent*, October 9, 2006.

opportunity to exercise their autonomy.⁶ Three years after the *World Zoo Conservation Strategy* was drawn up, Regan wrote that as we know them today, zoos are not morally indefensible *an sich*, but, he continued, "we have yet to see an adequate ethical theory that illuminates why they are not."⁷

The issue of freedom of the individual zoo animals is one of the primary concerns in the debate about zoo ethics. As philosopher Stephen Bostock points out, this is not a particularly new issue. In revolutionary France in 1792, a group of Jacobin sympathisers, heavily concerned with the idea of freedom, marched on the private menagerie of the French royal family at Versailles, and forced its director to free the animals inside. Nowadays, the issue of freedom tends to divide the proponents of animal rights from the proponents of zoos as sites of species conservation. Many animal ethicists agree with Singer and Regan and argue that unlike individual animals, species are not conscious entities, which means that their interests should not be placed above the interests of individual animals. Whereas the animal ethicists employ an individualistic framework, the proponents of zoos as sites of species conservation take a holistic perspective and tend to turn to environmental philosophers for support. They see animals as part of a species or of an ecosystem, as part of a greater system in nature.

Behavioural research scientist and wildlife conservationist Terry Maple argues that freedom is a relative term, and we can keep on debating it, but there are other aspects, such as health care and living space, in animal welfare and the zoo agenda that we can work towards much more effectively. He writes that:

We can continue to debate issues such as freedom, or we can work to improve the lives of both captive and wild animals. One thing is certain, the vast numbers of animals adapted to zoo life are not going back to the wild. In many cases, the wild no longer exists for them.¹⁰

⁶ Tom Regan, *The Case for Animal Rights* (Berkeley, Los Angeles: University of California Press, 2004), 96–99.

⁷ Tom Regan, "Are Zoos Morally Defensible?," in *Ethics on the Ark: Zoos, Animal Welfare, and Wildlife Conservation*, ed. Bryan G. Norton et al. (Washington: Smithsonian Institution Press, 1995), 38.

⁸ Stephen St. C. Bostock, *Zoos and Animal Rights: The Ethics of Keeping Animals* (London; New York: Routledge, 2004), 1–2. Menageries were collections of captive, often exotic animals held by royal or aristocratic families. They are often seen as the predecessor of the nineteenth-century zoo, but, unlike those zoological gardens, they had no scientific or educational purpose. They were primarily intended to display wealth and power. The menagerie in Paris was founded by king Louis XIV in 1664.

⁹ Jozef Keulartz, "Ethics of the Zoo," *Oxford Research Encyclopedia of Environmental Science*, 2017, 9–11, doi:10.1093/acrefore/9780199389414.013.162.

¹⁰ Terry L. Maple, "Toward a Responsible Zoo Agenda," in *Ethics on the Ark: Zoos, Animal Welfare, and Wildlife Conservation*, ed. Bryan G. Norton et al. (Washington: Smithsonian Institution Press, 1995), 29.

Maple states that the debate about freedom and other issues between the zoo community and its critics has nonetheless already borne fruit. He proceeds to argue that "we must continue this dialogue as a challenge to old methods, a bridge to self-awareness, and a pathway to new ideas." In order to answer Maple's call and add depth to this dialogue, it might be fruitful to explore how, why and in what historical contexts those institutes that replaced the wild as a natural habitat for those vast numbers of animals, came into existence and developed into the modern zoo as we know it today. This is what this thesis will aim at.

The Amsterdam zoo Natura Artis Magistra will be the central case study of this thesis. Being one of the oldest zoos on the European continent, ¹² Artis, as the zoo was commonly called, was founded in 1838 as a cultural society which aimed primarily at the advancement of natural historical knowledge, and was exclusively accessible to members from the privileged middle class of Amsterdam. Nowadays, Artis participates as a member of the European Association of Zoos and Aquaria (EAZA) in campaigns to bring animal species that are threatened with extinction under the attention of the general public in order to raise money for protection projects. The Amsterdam zoo thus relates to most of the developments in the European zoo community from the early nineteenth century until now, which makes it a valuable case for studying how the modern zoo as we know it today came into existence.

Animal and Zoo History

The cultural turn and the linguistic turn in the 1970s and 1980s have given the humanities and the social sciences new concepts to work with and redefined their field of interest. Among many other new research subjects, animals have subsequently emerged as an increasingly more frequent focus of scholarship since the late 1980s. Researchers in the interdisciplinary field of animal studies usually tend to focus on the way humanity is defined in relation to animals. A key text in this field has been feminist philosopher Donna Haraway's *Primate Visions* (1989), in which she examines the discourses of primatology – the scientific study of primates – and points out how they tend to use concepts that have a certain meaning in human culture, such as politics, family, and sexuality, in order to describe the observed behaviour of the animals in the wild. While Haraway's main concern is with the limits of science and the

¹¹ Ibid.

¹² Tiergarten Schönbrunn in Vienna, founded as a menagerie in 1752, is technically the oldest zoo on the continent, as it is the only aristocratic menagerie in Europe that was not disbanded in the early nineteenth century, but turned into a zoological garden instead. The oldest scientifically oriented zoological society in the world is the London Zoo in Regent's Park, which was founded in 1828.

¹³ Donna Haraway, *Primate Visions: Gender, Race, and Nature in the World of Modern Science* (New York: Routledge, 1989); One of the examples Haraway points out, is biologist Frans de Waal's famous Chimpanzee

impossibility of its objectivity, her account is often employed by researchers in animal studies in order to point out how assertions about animals actually say more about the humans that bring them forth, than about the animals in question.

The way humanity is defined in relation to animals is further explored by philosopher Jacques Derrida. In *The Animal That Therefore I Am* (2006), Derrida points out how, in the history of western philosophy from Aristotle to Heidegger, a certain ontological difference between "that which we call human" and "that which we call animal" has been maintained. Throughout his work, Derrida deconstructs those conceptions of difference, that have been formulated on the basis of several different principle. Eventually, Derrida indicates how porous this discursively conceived boundary between man and animal actually is. He does not deny that there is a difference between, for example, a human and a horse, but, he argues, there is also a difference between two individual humans, as he points out that, for example, "of course, the animal doesn't eat like us, but neither does any one person eat in the same way; there are structural differences, even when one eats from the same plate." 14

Building on the work of Haraway and Derrida, historians have concerned themselves with animals as well, and the idea that assertions about animals actually say more about the humans that bring them forth, than about the animals in question, has been articulated in several historical studies too. As historian Erica Fudge argues, the history of animals is rather the history of human attitudes towards animals. There are, after all, no documents available that display the point of view of the animal, as they do not speak or write in manner that we can understand. One of the first to take animals as the subject of historical study, was historian Harriet Ritvo. In *The Animal Estate* (1987), Ritvo explored how animals have figured in Victorian culture, and how they served as metaphors for human psychological needs and socio-political aspirations throughout the nineteenth century. A Historian Kathleen Kete takes a comparable approach, as she examines how petkeeping in nineteenth-century Paris reveals the tensions that modernity created for its inhabitants, and a more recent example of such a study is historian Joanna Bourke's *What it Means to Be Human*

Politics (1982), which is not only acclaimed by primatologists, but also by politicians, business leaders, and social psychologists, as they believe it offers basic insights in the essence of humanity. Haraway calls it "a product of its time". See: Frans de Waal, *Chimpanzee Politics* (New York: Harper and Row, 1982).

¹⁴ Jacques Derrida, *The Animal That Therefore I Am* (New York: Fordham University Press, 2008), 159.

¹⁵ Erica Fudge, "A Left-Handed Blow: Writing the History of Animals," in *Representing Animals*, ed. Nigel Rothfels (Bloomington: Indiana University Press, 2002), 5.

¹⁶ Harriet Ritvo, *The Animal Estate: The English and Other Creatures in the Victorian Age* (Cambridge, Massachusetts: Harvard University Press, 1987).

¹⁷ Kathleen Kete, *The Beast in the Boudoir: Petkeeping in Nineteenth-Century Paris* (Berkeley: University of California Press, 1994).

(2011), in which she builds on Derrida's text and explores how, in the past two centuries, people have defined the concept of humanity in many different ways against animals, but also against non-Europeans, women, and the subaltern.¹⁸

The history of animals is rather the history of human attitudes towards animals. This has been the case in animal history since the late 1980s, and it has not been futile; it has delivered texts such as Ritvo's, Kete's, and Bourke's, that shed a valuable new light on concepts such as culture, modernity, and humanity in general. In the Netherlands, scholars in animal history have focused on human attitudes towards animals too, as historian Amanda Kluveld has studied the rise of the Dutch Anti-Vivisection Movement in the late nineteenth century, ¹⁹ historian Dirk-Jan Verdonk has explored vegetarianism in the Netherlands from the late nineteenth century on, ²⁰ and historian Raf de Bont has researched initiatives of nature protection in the early twentieth century. ²¹ They all focus on human initiatives that concern animals. As Fudge argues, researching the history of human attitudes towards animals "is a necessary part of our reconceptualization of ourselves as human." However, in order to fully realise this reconceptualization, Fudge argues, we should not only write about the symbolic meaning animals had for humans, but we should also focus on the practical function animals had in our society. She writes that:

By rethinking our past – reading it for the animals as well as the humans – we can begin a process that will only come to fruition when the meaning of "human" is no longer understood in *opposition* to "animal." Then "human" can be recognized as meaning something quite new: a being which only differentiates itself by being able to write and interpret its own history.²³

Fudge's proposal could also be applied to the history of zoos. In order to add depth to the debates surrounding the development of a responsible zoo agenda that seriously puts the interest of the animals first, the history of zoos needs to be read for people – as they founded and developed those institutes – but it needs to be read for animals as well – as

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¹⁸ Joanna Bourke, What It Means to Be Human: Reflections from 1791 to the Present (London: Virago, 2013).

¹⁹ Amanda Kluveld, *Reis door de hel der onschuldigen: De expressieve politiek van de Nederlandse antivivisectionisten, 1890-1940* (Amsterdam: Amsterdam University Press, 2000).

²⁰ Dirk-Jan Verdonk, *Het dierloze gerecht: Een vegetarische geschiedenis van Nederland* (Amsterdam: Boom, 2009).

²¹ Raf de Bont, "Borderless Nature: Experts and the Internationalization of Nature Protection, 1890-1940," in *Scientists' Expertise as Performance: Between State and Society, 1860-1960*, ed. Joris Vandendriessche, Evert Peeters, and Kaat Wils (London: Pickering & Chatto, 2015), 49–65.

²² Fudge, "A Left-Handed Blow: Writing the History of Animals," 5.

²³ Ibid.. 16.

they too played a crucial role in the development of zoos.

Artis has been the subject of several historical studies. In 1988, the history of the Amsterdam zoo has been described by historian Pieter Smit in honour of its one-hundred-and-fifty-years existence. Although Smit's work is highly informative, it tends to be rather descriptive. As historian Donna Mehos argues, such chronicles recount institutional developments, construction of zoo buildings and the acquisition of animals, but they rarely address significant historical issues. In her own work, *Science & Culture for Members Only. The Amsterdam Zoo Artis in the Nineteenth Century* (2006), Mehos addresses the nineteenth-century history of Artis more analytically. She explores how Artis functioned primarily as a cultural society that was accessible for paying members only, and aimed at scientific research and intellectual discussion throughout the nineteenth century. It served mainly as a meeting place for the higher social classes of Amsterdam. Mehos places the Amsterdam zoo in the nineteenth century in the context of a developing Dutch cultural identity, as she argues that:

Unlike the Rijksmuseum, Amsterdam's zoological society was not inspired by heroes from the Golden Age, and it did not invoke images of geniuses from Holland's past. Rather, *Artis* looked ahead as it developed into a new type of scientific institution that would be validated only when it earned a reputation in the international scientific arena.²⁶

With these aims, Artis stood in contrast to those Dutch cultural institutes that emphasised the glories of the Netherlands in the past in order to strengthen the idea of a Dutch national identity in their present. Instead, the zoo meant to aim at the future and represent the progressive aspects of the Dutch, as it aspired to create a place for the Netherlands in the international field of scientific zoological research.

The history of European zoos in general has been the subject of a number of academic volumes since the last two decades. Historians R.J. Hoage and William A. Deiss present a collection of essays that explore the history of modern zoos in Europe and in the United States during the nineteenth century. They focus on the origination of European zoos and their development from private menageries or closed cultural societies to sites of public recreation

²⁴ Pieter Smit, Artis, een Amsterdamse tuin (Amsterdam: Rodopi, 1988).

²⁵ Donna C. Mehos, *Science and Culture for Members Only: The Amsterdam Zoo Artis in the Nineteenth Century* (Amsterdam: Amsterdam University Press, 2006), 13; Another such example is journalist J.G. Nieuwendijk's chronicle. J.G. Nieuwendijk, "125 Jaar Natura Artis Magistra," *Ons Amsterdam* 15, no. 4 (1963): 97–128.

²⁶ Mehos, *Science and Culture for Members Only*, 125–26.

in the twentieth century.²⁷ Historian Oliver Hochadel further explores the practice of science in the nineteenth-century zoo and concludes that it contributed in different ways to the study of living animals in twentieth-century biology, ²⁸ while historian Patrick Wirtz takes a rather social and economic historical approach, as he analyses the zoo in the context of the nineteenth-century urbanisation, and characterises it as a "place of refuge", a site of nature in the midst of the mechanical world of the industrial city.²⁹ Historian Nigel Rothfells addresses the birth of the twentieth-century zoo, which aimed more at entertainment and education than at science. Rothfels focuses on the new zoo designs of the German animal trader Carl Hagenbeck (1844-1913) that, after he introduced them in Hamburg in 1907, became adapted in zoos all over Europe and significantly changed their outlook.³⁰ The history of the European zoo over a larger period of time, from seventeenth century menageries to the zoos as we know them today, is described by historians Éric Baratay and Élisabeth Hardouin-Fugier. They focus on a broad spectrum of aspects of European zoos, such as their architecture, their integration into processes of urban development, their founders and personnel, and their scientific or artistic relevance, in order to understand "why human beings keep wild species near them in enclosed spaces, and why these spaces are so attractive to the curious".³¹

Whereas historians such as Mehos, Hoage, Deiss, Wirtz, Rothfels, Baratay, and Hardouin-Fugier attempt to place zoos in European, national, or urban historical contexts, scholars from other disciplines tend to focus on their semiotic implications. Sociologist Bob Mullan and cultural anthropologist Gary Marvin study the variety of human mental constructs that are involved with zoos, ranging from "a sense of power and domination to negative feelings of guilt and disgust or positive ones of joy and aesthetic appreciation, and finally to beliefs about association with or separation from the animal world." Literary scholar Randy Malamud builds on the work of Mullan and Marvin, as he too primarily focuses on what zoos say about the way people see animals. Malamud's main concern is with power relations, oppression, and control. He emphasises the imprisonment and constraint of animals by people

²⁷ R.J. Hoage and William A. Deiss, eds., *New Worlds, New Animals: From Menagerie to Zoological Park in the Nineteenth Century* (Baltimore: Johns Hopkins University Press, 1996).

²⁸ Oliver Hochadel, "Science in the 19th-Century Zoo," *Endeavour* 29, no. 1 (March 2005): 38–42, doi:10.1016/j.endeavour.2004.11.002.

²⁹ Patrick H. Wirtz, "Zoo City: Bourgeois Values and Scientific Culture in the Industrial Landscape," *Journal of Urban Design* 2, no. 1 (February 1997): 61–82, doi:10.1080/13574809708724396.

³⁰ Nigel Rothfels, *Savages and Beasts: The Birth of the Modern Zoo* (Baltimore; London: Johns Hopkins University Press, 2002).

³¹ Éric Baratay and Élisabeth Hardouin-Fugier, *Zoo: A History of Zoological Gardens in the West* (London: Reaktion Books, 2002), 10.

³² Bob Mullan and Garry Marvin, *Zoo Culture*, Second edition (Urbana: University of Illinois Press, 1999), xix.

in zoos, which he subsequently extends into the argument that zoos are characterised by strong imperial connotations. He writes that:

The zoo itself acts as both a model of empire (where humanity holds dominion over lesser species arrayed for our pleasure, our betterment, our *use*) and simultaneously as a metaphor for the larger, more important imperial enterprises in the sociopolitical hierarchy amid which it flourishes.³³

Malamud's characterisation of the zoo as a model of empire is not unique. Most historians who concern themselves with zoos, point out that zoos and imperial ideas were in most cases connected. Historian Sally Gregory Kohlstedt writes that "zoos relied on and, in not so subtle ways, reinforced ideas of imperialism and authority", ³⁴ and Baraty and Hardouin-Fugier argue that "the story of this microcosm is thus linked to vast parallel histories of colonization, ethnocentrism and the discovery of the Other". ³⁵ By placing the nineteenth-century history of Artis, in the historical context of the development of a national identity, Mehos states that colonial pursuits were employed in Artis too. ³⁶ In short, the ways zoos relied on colonial networks, and represented imperial ideas in many different ways, have been addressed by multiple times, and they cannot be ignored when writing zoo history.

Representation, Dualisms, and Networks

Malamud describes the zoo as a place in which animals are being deprived of their freedom and are being dominated by humans. According to Malamud, zoos should therefore be seen as representations of imperialist power relations, and the consequences of this phenomenon even extend beyond the borders of the zoo itself, as they tend to reinforce the way people see animals in society in general.³⁷ As cultural theoretician Stuart Hall argues, a "representation" is made up of signs and symbols, such as sounds, written words, images, musical notes, and objects, that are used to "stand for or represent to other people our concepts, ideas and feelings." Hall continues that "in order to *communicate* these meanings to other people, the

³³ Randy Malamud, *Reading Zoos: Representations of Animals and Captivity* (Basingstoke: Macmillan, 1998), 59.

³⁴ Sally Gregory Kohlstedt, "Reflections on Zoo History," in *New Worlds, New Animals: From Menagerie to Zoological Park in the Nineteenth Century*, ed. R.J. Hoage and William A. Deiss (Baltimore: Johns Hopkins University Press, 1996), 6.

³⁵ Baratay and Hardouin-Fugier, *Zoo*, 13.

³⁶ Mehos, Science and Culture for Members Only, 15, 126.

³⁷ Malamud, *Reading Zoos*, 90.

³⁸ Stuart Hall, "Introduction," in *Representation: Cultural Representations and Signifying Practices*, ed. Stuart Hall, Culture, Media, and Identities (London; Thousand Oaks, Calif: Sage in association with the Open University, 1997), 1.

participants to any meaningful exchange must also be able to use the same linguistic codes — they must, in a very broad sense, 'speak the same language'."³⁹ According to this semiotic approach, ideas that are represented in zoos, can be communicated to its visitors and subsequently have an effect in the world outside of the zoo, too. The recurring idea that zoos emit, as Malamud argues, is the conception that humans have the power to surmount nature with culture. ⁴⁰ In short, Malamud employs the notion of a representation in order to trace how humans exercise and reproduce power over animals inside and outside the zoo. This study of representations is not problematic *an sich*, but the way Malamud employs it, obscures some essential factors of social reality.

The problem of studies such as Malamud's, is pointed out by philosophers Rik Dolphijn and Iris van der Tuin. They argue that (post)modern cultural theory tends to focus on what philosopher Henri Bergson called "ordinary dualisms". According to Bergman, ordinary dualisms are made up of two concepts that are tied together by a form of negative relationality. Bergson argues that this is problematic not because of the distinction that is being made between two concepts, but because the dualistic definition distracts from seeing how those negatively related concepts are actually grafted upon one another. As Dolphijn and Van der Tuin argue, (post)modern cultural theory holds these problems intact, as it "continues—implicitly or explicitly—the modernist framework of thought, accepting and thinking along the dominant lines of dualist distinctions of mind and matter, soul and body, and culture and nature." This is what Malamud does too, as he tries to explain how nature is being dominated by culture in zoos. By treating culture and nature as two distinct concepts that are, in the zoo, opposed to each other in the form of an oppressed phenomenon and an oppressive phenomenon respectively, he keeps the idea intact that those two concepts are negatively related to each other, and overlooks how they are actually connected to and entangled with each other. It is not necessarily problematic to speak of culture and nature as different concepts, but when they are exclusively opposed to each other, it would be overlooked how they actually overlap and rely upon each other.

This argument is also employed by Donna Haraway, who points out how the boundary between man and animal is actually much more diffuse than traditional dualist thought implies. Harraway employs the idea of a cyborg – a futuristic being with both organic

³⁹ Ibid., 4.

⁴⁰ Malamud, *Reading Zoos*, 57.

⁴¹ Rick Dolphijn and Iris van der Tuin, "Pushing Dualism to an Extreme: On the Philosophical Impetus of a New Materialism," *Continental Philosophy Review* 44, no. 4 (November 1, 2011): 391, doi:10.1007/s11007-011-9197-2.

and biomechatronic body parts – to make an argument for thinking in terms of hybrids rather than in terms of dualisms. ⁴² Social philosopher Bruno Latour further explores this idea of hybridity as he argues that definitions of culture are inherently dependent on definitions of nature. He argues that it is therefore better to speak of nature-culture. "The very notion of culture", Latour writes, "is an artefact created by bracketing Nature off. Cultures – different or universal – do not exist, any more than Nature does." Dolphijn and Van der Tuin point out that the act of making distinctions between concepts is not necessarily problematic *an sich*, but it is the treatment that those distinguished terms receive, i.e. being negatively related to each other, that makes modern cultural theory ambiguous. ⁴⁴

Latour states that he does not want to do away with semiotics in general, but instead, he wants to build on them in order to move beyond their problems. 45 He argues that "semiotic actors", i.e. the subject of meaning-attribution, should be granted activity too. According to Latour, non-human entities can, and should possess agency. They need to be seen as "actants"; that is, he explains "something that acts or to which activity is granted by others. It implies no special motivation of human individual actors, nor of humans in general."46 According to Latour, connections between different actants can be traced in order to "reassemble the social" and "recreate a network". This network is not social in the sense that it is made up of people, but it is social in the sense that there exists "a type of connection between things [i.e. actants] that are not themselves social". ⁴⁷ In other words, "the social" is not an ontological factor, but a set of connections. He describes this set of ideas as "actornetwork theory". Latour argues that actor-network theory aims not to achieve a postmodern deconstruction of grand narratives, but precisely to overcome this goal.⁴⁸ The recreation of an actor-network will not be the aim of this thesis, but Latour's conception of agency that is central to it, will be taken into account. The idea that agency is not something one either possesses or lacks, but as something that is granted by others to human and non-human entities alike, will provide a theoretical backbone to Erica Fudge's incentive to start reading

⁴² Donna Haraway, "A Cyborg Manifesto: Science, Technology and Socialist Feminism in the Late Twentieth Century," in *The Cybercultures Reader*, ed. David Bell and Barbara M. Kennedy (London; New York: Routledge, 2000), 293, 313.

⁴³ Bruno Latour, *We Have Never Been Modern* (Cambridge, Massachusetts: Harvard University Press, 1993), 104–9.

⁴⁴ Dolphijn and Van der Tuin, "Pushing Dualism to an Extreme," 391.

⁴⁵ Bruno Latour, "On Actor-Network Theory. A Few Clarifications," *Soziale Welt : Zeitschrift Für Wissenschaft Und Praxis Des Sozialen Lebens*, no. 4 (1996): 378.

⁴⁶ Ibid., 373.

⁴⁷ Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory* (Oxford; New York: Oxford University Press, 2007), 5.

⁴⁸ Ibid., 11.

the past for animals as well as for humans. Animals could, after all, be described as agents in texts written by humans, and therefore, they should be seen as such.

Although Haraway and Latour point out that dualistically defined concepts such as culture and nature actually overlap, and rely upon each other in social reality, it should also be recognised that people in the past did bracket those concepts off nonetheless. In *What It Means to Be Human*, Joanna Bourke explores how people have defined the difference between man and animal over the past two centuries, without recreating this difference. Instead, by presenting the many different ways in which this was done and highlighting how they were often in conflict with each other, she manages to point out how instable and ambiguous those conceptions were. She argues that "the boundaries of the human and the animal turn out to be as entwined and indistinguishable as the inner and outer sides of a Möbius strip" (see Figure 1). Subsequently, she writes that historical "agents are involved in determining what the Möbius strip of life actually means." She elaborates on this by

explaining how "humanism installed only *some* humans at the centre of the universe. It disparaged 'the woman', 'the subaltern' and 'the non-European' even more than 'the animal'."⁵⁰ By treating conceptions of the human and the animal as entwined and



Figure 1. A Möbius Strip

indistinguishable, Bourke, like Haraway and Latour, recognises that they are grafted upon one another, instead of diametrically opposed to each other, and by subsequently arguing that historical agents have made sense of those conceptions in relation to each other, she simultaneously manages to do justice to points of view from the past too.

The idea that dualistically defined concepts such as man and animal, and culture and nature tend to overlap and rely upon each other in many cases, but that historical agents tried to make sense of them as separate entities nonetheless, will be central to this thesis. The theoretical framework that will be used, will thus consist of Haraway and Latour's problematisation of dualistically defined concepts, which will be enhanced by Bourke's assertion that, in the past, people still might have bracketed off those concepts in many different ways. Subsequent to the idea that historical agents determined the way man, animal, culture, and nature were defined in the past, Latour's conception of agency as something that is ascribed by historical agents to human and non-human actors alike, will be taken into

⁴⁹ Bourke, What It Means to Be Human, 10.

⁵⁰ Ibid.. 3.

account. In short, the perspectives of the people from the past, will be the starting point. This way, it can be analysed how people not only confined animals, but, for example, also studied them, cared for them, and related to with them, while maintaining a sense of difference nonetheless. A perceived difference does not necessarily mean that the other was defined as a completely passive object.

Research Question, Sub-Questions, and Source Material

The founding of Artis and its developments as an exclusive cultural society throughout the nineteenth century have been studied and historically contextualised by Mehos, but the changes Artis underwent in the early twentieth century have not yet been researched. At the end of the nineteenth century, the social significance of cultural societies started to decline drastically, but instead of being disbanded, Artis took on an entirely different shape in this period. As Mehos writes, "Artis entered its second life." 51 It started to show the first characteristics of a zoo as we know it today. In 1902, Artis opened its doors to everyone who was willing and able to pay the entrance fee in the month of September every year, and from 1927 on, the zoo was opened to the general public every day in the year. Between 1927 and 1941, the animal exhibits were redesigned, and the zoo started to redefine its function altogether. Between 1902 and 1941, Artis changed from a closed society to an openly accessible zoo. As this transition did not only have consequences for the visiting public, but also for the animals that lived in the zoo, the research question that will be central to this thesis is: how did the change of Artis from a closed society to an openly accessible zoo between 1902 and 1941 reflect and influence the way people saw animals, and what consequences did this have for the animals in the zoo?

The first chapter will provide a historical exploration of ideas about man, animal, and the difference between them. The way people came to see and treat animals in Artis between 1902 and 1941 did not emerge in a historical vacuum, as debates about the difference between man and animal had been going on for a long time. Chapter one will therefore start with the European discovery of the chimpanzee and the orang-utan, and subsequently, it will be examined how their physical similarity to man started to blur the difference between man and animal from the eighteenth century until the early twentieth century in the Netherlands. This chapter will focus on the Dutch scientific tradition, but French, German, and English ideas will be employed too, as they had a considerable influence on ideas in the Netherlands. Eventually, those ideas influenced the way people thought about animals and related

⁵¹ Mehos, Science and Culture for Members Only, 129.

themselves to animals, as it was reflected in, for example, anti-vivisection movements and vegetarian associations. This chapter will serve as a background to the rest of this thesis, as it will place the way people came to see and treat animals in Artis, in a longer historical tradition.

In the second chapter, the opening of Artis to the general public will be explored. First, the external social, and economic factors that led to the decision to open the zoo to the general public every September from 1902 onwards, will be studied. Then, the purpose that Artis served around 1900 will be placed in the context of late-nineteenth and early twentieth-century bourgeois culture, and finally, it will be explored how this purpose of the zoo was readjusted to the new public in 1927. The main focus of this chapter will therefore be on the period between 1902 and 1927. This chapter will serve the purpose of explaining how the zoo accommodated the people that visited it. After all, this needs to be addressed first, in order to answer the question how the changes Artis underwent between 1902 and 1941 reflected the way people saw and treated animals.

In the third chapter, the way the animals were displayed, will be central. It will be studied how the animal exhibits reflected and realised the purpose of the zoo, and how the animal exhibits therefore changed when this purpose was re-evaluated. This chapter will be primarily concerned with the period between 1927 and 1941, as this was the time in which the purpose of Artis was re-evaluated and new animal exhibits were being built. Having studied the zoo's accommodation of its public in the second chapter, this chapter will focus on the way Artis accommodated its animals. It will therefore serve to explore how people came to see and treat animals after Artis had been developed into an openly accessible zoo.

As Malamud, Kohlsted, Baraty, Hardouin-Fugier, and others point out, European zoos cannot be separated from ideas of empire and colonialism, and as Mehos indicates, Artis was no exception to this rule. In the fourth chapter, I will therefore explore the imperial contexts in which Artis evaluated and realised its purpose, accommodated its visitors, and reevaluated its attitude towards animals. In this chapter, the creation of a Dutch national identity, the construction of Dutch bourgeois values in the Netherlands-Indies, and the way Dutch colonial power was displayed in Europe throughout the first half of the twentieth century, will be addressed and mirrored to the developments Artis went through between 1902 and 1941, in order to further contextualise them.

Scientific and intellectual texts that discussed the nature of man and animal, and the difference between them, make up the source material that will be used in the first chapter.

Using secondary literature, I will connect those sources to each other, in order to recreate a

tradition of discussing the boundary between man and animal. The source material that will be used in chapter two, chapter three, and chapter four, will mainly consist of the annual reports of *Het Konklijk Zoölogisch Genooschap Natura Artis Magistra* (The Royal Zoological Society of Natura Artis Magistra) from 1900 until 1941. Those annual reports were presented every year at the general meetings of the zoological society and they discussed financial matters, acquisition and gifts of animals, plants, and objects, visitors numbers, and other policy matters. The annual reports display in the first place, the point of view of the director and the board of Artis, as it was, in the end, the board and the director that determined the policy of the zoo and decided to make the structural changes that led to Artis becoming an openly accessible zoo after 1902.

There were, however, external factors, such as governmental pressure, competing institutes, and the interests of the visiting public, that influenced those changes too. The annual reports discussed those factors and displayed how the board and the director chose to respond or refused to respond to them, but sometimes, especially with regard to the interests of the visiting public, those external factors were misinterpreted. Those misinterpretations of the interests of the visiting public, that occurred especially between 1902 and 1927, were characteristic of the purpose Artis served, and will therefore be taken into account as considerable historical information, but in order to study how the changes Artis underwent between 1902 and 1941 reflected the way people saw and treated animals, it is necessary to look beyond those misinterpretations too. In order to do this, I will take the information that the annual reports provide into account, but I will disconnect it from the conclusions the directors drew from it, and instead connect it to the historical contexts that are described in the secondary literature. Occasionally, newspaper articles will be employed as primary sources too, to provide additional information to the annual reports. Although newspaper articles about Artis were often written on behalf of the Society, and therefore display a point of view comparable to the annual reports, they had a considerably different audience. Those articles will therefore be used in order to indicate how the Society communicated its point of view to the public.

The main aim of this thesis is to trace how the development of Artis from a closed society to an openly accessible zoo between 1902 and 1941, reflected the way people came to see and treat animals. In the end, this says more about a changing attitude of humans towards animals, than it says about animals *an sich*, but by employing a method of reading for the animals too, I will point out that those changes not only affected the animals, but also required a certain agency from them. I hope this thesis will therefore answer Fudge's call to start

reading the past for humans as well as for animals, and make a contribution to the field animal and zoo history. Other fields of historical research, such as the history of science in chapter one, social and economic history and the history of bourgeois culture in chapter two, and colonial history in chapter four, will be addressed too, and the conclusions drawn from them, have their own value, but eventually, they serve to contextualise the study of the changing attitude of humans towards animals in Artis between 1902 and 1941.

In order to explore how, in Bourke's words, people "made sense of the Möbius strip of life" surrounding Artis, the motivations of the Zoological Society Natura Artis Magistra will be the starting point of reading the annual reports of the Society and answering my research question. My line of argumentation will follow that of historian Sofia Åkerberg, who, in her study of the London Zoo at Regent's Park in the nineteenth century, argues that relationships between humans and animals, especially in zoos, can indeed be seen as an expression of "man's mastery of nature", but this was often more a side-effect than the primary purpose. "As I interpret it", she writes, "the Zoological Society's keeping of animals does not primarily stem from an explicit intent to demonstrate mastery over nature but that other reasons, for example scientific curiosity, are more fundamental." Åkerberg does not discard the semiotic implications of zoos, but her focus is on the primary motivations of historical agents. This will be my focus too. Semiotics will not be discarded in this thesis, but the way certain ideas were communicated in the zoo, was the effect, rather than the cause of what I want to find out. After all, in order to study the way people came to see and treat animals in Artis between 1902 and 1941, their perspective has to be the starting point.

⁵² Sofia Åkerberg, "Knowledge and Pleasure at Regent's Park: The Gardens of the Zoological Society of London during the Nineteenth Century" (PhD dissertation, Department of Historical Studies, Umeå University, 2001), 19.

Chapter 1. The Ape Debate

In 1849, two Dutch anatomists, Willem Vrolik (1801-1863) and Jacobus Schroeder van der Kolk (1797-1862), dissected the brain of a deceased chimpanzee in Artis and concluded that it very much resembled the brain of a human being. Judging from the research, the developmental capacities of the chimpanzee appeared to be very strong, but Vrolik and Schroeder van der Kolk argued that it would never be able to reach the stadium of anthropomorphic perfection in mental terms.⁵³ Their conclusion stood in a tradition of debate about the nature of man, the nature of animals, and the difference between them, that had been going on since the late seventeenth century. Nowadays, as Harriet Ritvo argues, scholars who specialise in the biological study of animals believe that humans fall within that category too,⁵⁴ but this has not always been the case. Debates about the difference between man and animal had, at the time of Vrolik and Schroeder van der Kolk's dissection, been going on for centuries and would continue to do so for a long time thereafter.

Vrolik, Schroeder van der Kolk, and others did their zoological dissections in Artis, which was meant to be an institute of zoological scientific research like most zoos in nineteenth-century Europe. Oliver Hochadel points out that, because most zoologists were only interested in comparative anatomy and morphology, animals in research institutes were often seen as scientific objects rather than as living animals. Many scientists valued animals more when they were dead than when they were alive. This changed in the late nineteenth century. After Charles Darwin (1809-1882) published *On the Origin of Species* in 1859, public debates about his evolution theory broke out that stretched beyond the domains of science, and people started to turn to zoos with great interest in order to see their ancestors move around. The hypothesis that will be central to this chapter, is therefore that when ideas that blurred the boundary between man and animal, such as Darwin's evolution theory, started to circulate in society, people came to see and treat animals differently.

In this chapter, I will explore how European scientists linked their concept of man to their concept of animals from the eighteenth century until the early twentieth century. The scientific conceptions of the difference between man and animal, such as Darwin's, that circulated in society and influenced the popular perception of animals, after all also left their traces in the way people came to see and treat animals in the zoo. In order to answer the

⁵³ Janneke van der Heide, *Darwin en de strijd om de beschaving in Nederland, 1859-1909* (Amsterdam: Wereldbibliotheek, 2009), 45.

⁵⁴ Harriet Ritvo, "On the Animal Turn," *Daedalus* 136, no. 4 (2007): 119, doi:10.1162/daed.2007.136.4.118.

⁵⁵ Hochadel, "Science in the 19th-Century Zoo," 39–41.

question how the change of Artis from a closed society to an openly accessible zoo between 1902 and 1941 reflected the way people saw and treated animals, which is central to this thesis, it first needs to be studied how people conceived of their relation to animals. This chapter will therefore provide a history of ideas surrounding the difference between man and animal in the eighteenth, nineteenth, and early twentieth century, and it will serve as a background chapter to the rest of this thesis. The question how the difference between humans and animals was defined in the Netherlands from the eighteenth century until the early twentieth century, will be central here. The focus will lie on science in the Netherlands, but the influence from and exchange with traditions from other countries will be taken into account as well. The principles of what historians Michael Werner and Bénédicte Zimmermann called *histoire croisée* will form the theoretical background of this chapter. With this method, Werner and Zimmermann invited social scientists and historians to reconsider interactions between different societies, cultures, or disciplines. They stated that crossings between these different social constructions create "a point of intersection where events may occur that are capable of affecting to various degrees the elements present depending on their resistance, permeability or malleability and on their environment."56

Similar, Yet Distinct

Historian Angelie Sens characterises the debates about the nature of man and the nature of animals in the eighteenth and nineteenth century as "the ape debate". ⁵⁷ Although it was not about primates *an sich*, it was thought that anthropoid apes were occupying the border region between man and animal, and it was often by means of studying those apes, that the difference between man and animal was explored. In the early seventeenth century, René Descartes (1596-1650) characterised animals as non-sentient automata, the senseless machines of nature, ⁵⁸ but around the same time, the discoveries of the orang-utan, literally "man of the woods", and the chimpanzee, literally "Indian satyr", named by Dutch physicians Jacobus Bontius (1592-1631) and Nicolaes Tulp (1593-1674) respectively, started to complicate the idea of an absolute difference between man and animal. The first to include

⁵⁶ Michael Werner and Bénédicte Zimmermann, "Beyond Comparison: Histoire Croisée and the Challenge of Reflexivity," *History and Theory* 45, no. 1 (February 1, 2006): 37, doi:10.1111/j.1468-2303.2006.00347.x. ⁵⁷ Angelie Sens, "Dutch Debates on Overseas Man and His World, 1770-1820," in *Colonial Empires Compared: Britain and the Netherlands, 1750-1850; Papers Delivered to the Fourteenth Anglo-Dutch Historical Conference, 2000, ed.* Bob Moore and Henk F. K. van Nierop, 2003, 80–83.

⁵⁸ Descartes has often been vilified for this assertion. According to historian Peter Harrison, this is the conseuqence of a misreading and misinterpretation of his work. Peter Harrison, "Descartes on Animals," *The Philosophical Quarterly* 42, no. 167 (April 1992): 219, doi:10.2307/2220217.

man and ape in the same classificatory order – that of "anthropomorfa" – was the Swedish botanist, zoologist and physician Carolus Linnaeus (1707-1778). In his *Systema Naturae* (1735), Linnaeus introduced a taxonomic system that classified organisms based on their anatomical composition.⁵⁹ Historian Robert Cribb argues, that after the Linnaean system took hold,

It became immensely important that there be a means of distinguishing humans from animals. The vast majority of people – scientists and non-scientists – were reluctant to see humans simply as the first-ranked among animals. They wanted a clear and qualitative distinction between humankind and the animal world.⁶⁰

Linnaeus was not only the first to include man and ape in the same order, he was also one of the first to taxonomically divide the species "homo" (man) into four different varieties; homo europaeus, homo americanus, homo asiaticus, and homo africanus.⁶¹ Linnaeus classified man as part of the natural system, but he did maintain the notion that the four varieties of man were of the same species. Homo sapiens was still clearly distinct from other animal species.⁶² Others, however, were convinced that non-European varieties of man stood, in biological terms, closer to primates than to white people.

One of the most prominent voices in the eighteenth-century ape-debate was the internationally renowned Dutch homo universalis Petrus Camper (1722-1789). In 1764, Camper held a lecture of the University of Groningen entitled "Redevoering over den oorsprong en de kleur der zwarten" ("Lecture on the Origin and Colour of Blacks"), which he published in 1772. In this lecture, Camper discussed the results of his dissection of an Angolan boy and compared them with descriptions of an orang-utan – he was not able to dissect an orang-utan himself until 1770.⁶³ Camper concluded that he found "nothing that had more in common with this animal than with a white man; on the contrary, everything was the

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⁵⁹ Carolus Linnaeus, *Systema Naturae* (Leiden: Apud Theodore Haak: Ex Typographia Joannis Wilhelmi de Groot, 1735), 10.

⁶⁰ Robert Cribb, Helen Gilbert, and Helen Tiffin, *Wild Man from Borneo: A Cultural History of the Orangutan* (Honolulu: University of Hawai'i Press, 2014), 20.

⁶¹ Linnaeus, Systema naturae, 10.

⁶² Nicholas Hudson, "From 'Nation' to 'Race': The Origin of Racial Classification in Eighteenth-Century Thought," *Eighteenth-Century Studies* 29, no. 3 (1996): 253, doi:10.1353/ecs.1996.0027.

⁶³ Miriam Claude Meijer, *Race and Aesthetics in the Anthropology of Petrus Camper (1722-1789)*, Studies in the History of Ideas in the Low Countries, nr. 4 (Amsterdam; Atlanta, GA: Rodopi, 1999), 107.

same."⁶⁴ According to Camper, the difference in skin colour was therefore due to external and environmental influences. He stated that:

Whether Adam was created black, brown, tanned or white, his descendants, as soon as they spread out over the wide surface of the earth, necessarily had to change in colour and shape according to how the country, the particular foods and illnesses differed. An accidental variation was passed on through heredity to many as we still see it happen daily.⁶⁵

Both Linnaeus and Camper thus considered different varieties of man to be essentially of the same species and subsequently considered the species "man" to be essentially distinct from other animal species.

Unlike Camper, the German natural scientist Johann Friedrich Blumenbach (1752-1840) did propose a hierarchy between the different varieties of man. In *De Generis Humani Varietate Nativa* (1775), Blumenbach used Linnaeus' term "varietate" in order to conceive five different races of mankind. Four of them resembled Linnaeus' varieties of the species homo; the Caucasian, the Mongolian, the Ethiopian, and the American variety, and, due to the European discovery of eastern Australia and Oceania in 1771, a fifth variety, the Malay, was added too. ⁶⁶ According to Blumenbach, the Mongolian, Ethiopian, American, and Malay varieties were all degenerated from the Caucasian one, which he considered to be the most beautiful variety, and therefore the archetype of man. ⁶⁷

In November 1791, Blumenbach visited the Dutch city of Haarlem and met Martinus van Marum (1750-1837), a student of Petrus Camper. They started to maintain a correspondence, and in a letter from November 2, 1795, Blumenbach asked Van Marum whether he could provide him with the skull of an orang-utan.⁶⁸ Three years later, on June 12 1798, Van Marum visited Blumenbach and gave him the requested object.⁶⁹ In 1810

⁶⁴ Petrus Camper, "Redevoering over den oorsprong en kleur der zwarten," *De Rhapsodist* 2 (1773): 381. My translation from Dutch.

⁶⁵ Ibid., 393. My translation from Dutch.

⁶⁶ Hudson, "From 'Nation to 'Race"," 225.

⁶⁷ Meijer, Race and Aesthetics in the Anthropology of Petrus Camper (1722-1789), 169.

⁶⁸ Johann Friedrich Blumenbach, *The correspondence of Johann Friedrich Blumenbach. Volume IV: 1791-1795, letters 645-965*, ed. Frank William Peter Dougherty and Norbert Klatt (Göttingen: Norbert Klatt Verlag, 2012), 469.

⁶⁹ Robert Jacobus Forbes, *Martinus van Marum. Life and Work. Volume II* (Haarlem: H.D. Tjeenk Willink, 1970), 288–89.

Blumenbach published his Abbildungen naturhistorischer Gegenstände, in which he included a picture and a description of this skull (see Figure 2). In the description, Blumenbach explicitly thanked "the goodness of the famous Natural Scientist Dr. Van Marum in Haarlem". 70 Subsequently, he gave five arguments that explained why the skull of an orang-utan was definitely different from that of a human being.⁷¹ In 1793, Van Marum had published an article about the orang-utan as well. He dedicated two pages to the description of the behaviour of this species, and in the last sentence, he concluded that this perhaps very much resembled the behaviour of a human being, but that the orang-utan and man could impossibly be of the same species.⁷²

Camper, Van Marum, and Blumenbach all studied



Figure 2. The Orang-Utan Skull Van Marum gave to Blumenbach. From: Johann Friedrich Blumenbach, Abbildungen naturhistorischer Gegenstände (Göttingen: Heinrich Dieterich, 1810), 226.

the physical state of orang-utans in order to conclude that those animals could never be of the same nature as man. However, there were others that claimed the opposite. The English anatomist Edward Tyson (1650-1708) was one of the first to speculate of a bridge over the gap between ape and man, by suggesting that the chimpanzee showed similarities both to monkeys and to humans. In the end, however, Tyson denied the animal a human status, because he never heard it speak like a human being. However, the Scottish judge and philosopher James Burnett, Lord Monboddo (1714-1799) argued that this could not be a criterion for defining human nature. If that would be the case, young children could no longer be considered as human beings either. According to Monboddo, the problem was that the definition of human nature was too often based on knowledge about modern man. Instead, he argued, one needs to look at man in his natural state, where he used to live peacefully alone, enjoying the fruits of the earth and not needing any language. Monboddo built on the Aristotelian principle of potentiality and argued that the essence of man should be defined by capacities instead of by properties. According to Monboddo, the orang-utan was, therefore, in

⁷⁰ Johann Friedrich Blumenbach, *Abbildungen naturhistorischer Gegenstände* (Göttingen: Heinrich Dieterich, 1810), 227. My translation from German.

⁷¹ Ibid., 227–29.

⁷² Martinus van Marum, "Brief van Dr. van Marum aan den Schrijver van dit Weekblad over eene Orang-Outang," Algemeene Konst- en Letterbode 281 (November 15, 1793).

fact a representation of man in its natural state.⁷³

Monboddo was not the only one who held such views. In a footnote to his *Discours Sur l'Origine et les Fondements de l'Inégalité parmi les Hommes* (1755), Jean-Jacques Rousseau (1712-1778) claimed that man's predecessor was still around as well. It was living primitively in a natural state, and was characterised as the animal commonly known as the orang-utan. The impact of Rousseau's statement was huge. As historian Carl Niekerk, argues, it "was not seen by his contemporaries as an issue for specialists, as something of relevance only to the practitioners of the sub-discipline 'natural history,' but as a matter of great importance to the general public." However, as historian Frank Dougherty claims, those who were not specialised in the scientific study of natural history, were more likely to argue that man was related to the orang-utan than those who occupied themselves with this subject more professionally. It is therefore very likely that the circulation of ideas such as Monboddo's and Rousseau's were the instigation for "specialists" such as Camper and Blumenbach to develop their ideas. Cribb describes the difference between these arguments in the ape debate as follows:

Whereas Rousseau and Monboddo had imagined shifting the human-animal boundary so that orangutans would be located on the human side of the divide, the issue underlying Camper's concern was the extent to which orangutan behaviour might push humans themselves into the animal category.⁷⁷

In the end, neither of these scholars eventually pushed humans into the animal category. Monboddo and Rousseau complicated the conception of the nature of man and thereby moved the boundary between man and animal, but in essence, it remained in existence. Camper, who feared that such ideas might remove the boundary altogether, based himself on physical evidence which he acquired by means of dissection, and subsequently reaffirmed the

⁷³ It may be clear that Monboddo's notion of the "natural state" was different from the more famous conception of Thomas Hobbes . Stefaan Blancke, "Lord Monboddo's Ourang-Outang and the Origin and Progress of Language," in *The Evolution of Social Communication in Primates*, ed. Marco Pina and Nathalie Gontier (Cham: Springer International Publishing, 2014), 36–39, doi:10.1007/978-3-319-02669-5 2.

⁷⁴ Jean-Jacques Rousseau, *Du contrat social | Discours sur les sciences et les arts | Discours sur l'origine de l'inégalité parmi les hommes* (Paris: Union Générale d'Éditions, 1963), 349–50.

⁷⁵ Carl Niekerk, "Man and Orangutan in Eighteenth-Century Thinking: Retracing the Early History of Dutch and German Anthropology," *Monatshefte* 96, no. 4 (2004): 489, doi:0026-9271/2004/0004/477.

⁷⁶ Frank William Peter Dougherty, *Gesammelte Aufsätze zu Themen der klassischen Periode der Naturgeschichte / Collected essays on themes from the classical period of natural history* (Göttingen: Klatt, 1996). 93.

⁷⁷ Cribb, Gilbert, and Tiffin, *Wild Man from Borneo*, 43.

boundary. At the end of the eighteenth century, man and animal were considered to be comparable species, but in the end, they occupied different domains.

A Diffuse Boundary

Dougherty's claim that those natural historians usually argued that man and ape were of a different category, whereas those whose specialty lay elsewhere were more likely to doubt this difference, might indeed hold true for the ape debate in the eighteenth century, but this changed over the course of the nineteenth century. In 1808, Dutch physician Jacobus Elisa Doornik (1777-1837) picked up the idea that the orang-utan represented an earlier stage of man. He argued that man had gone from a point of being fully animal through several different stages of "becoming human" in order to reach the stage man was in in modern Europe. ⁷⁸ Following this logic, he continued his argument by writing that the orang-utan had, due to its skull size and brain volume, the potential to go through this same development. According to Doornik, those who were at the stages between man and ape, were still present too. He thought that they could be found in the interior of Africa and America. He argued that the people who lived there, showed signs of "nothing more" than the first steps in a process towards becoming human and civilization.⁷⁹ Those are the kind of ideas Joanna Bourke refers to when asserting that humanism disparaged non-Europeans just as much as animals.⁸⁰ Whereas Monboddo and Rousseau philosophically redefined the essence of man in order to equate him with the orang-utan, Doornik equated them on the basis of anatomical examinations.

Although it is tempting to characterise Doornik's ideas as prefiguring a Darwinian tradition, this would be an anachronistic assumption. His arguments for a physical equalisation of man and orang-utan were rather uncommon in the Netherlands at the time. Two years after he published them, his argument was met with objections by Gerbrand Bakker (1771-1828), another Dutch physician. Bakker wrote that even if the African skulls Doornik described, resembled those of primates, Africans and orang-utans could not be of the same species. In contrast to orang-utans, Bakker argued, Africans did possess reason and the ability to enhance themselves.⁸¹ Later in the nineteenth century, the focus of the ape debate

⁷⁸ Jacobus Elisa Doornik, *Wijsgeerig-natuurkundig onderzoek aangaande den oorspronglijken mensch, en de oorspronglijke stammen van dezelfs geslacht* (Amsterdam: J.S. van Esveldt-Holtrop, Koninglijk boekhandlaar, 1808), 156–57.

⁷⁹ Ibid., 15.

⁸⁰ Bourke, What It Means to Be Human, 3.

⁸¹ Gerbrand Bakker, *Natuur- en geschiedkundig onderzoek aangaande den oorspronkelijken stam van het menselijk geslacht* (Haarlem: Francois Bohn, 1810), 173.

shifted from the orang-utan to the chimpanzee, partly because chimpanzees were eventually seen as the animals that stood, in anatomical terms, closest to humans, and partly because they were more convenient laboratory subjects. 82 However, when Vrolik and Schroeder van der Kolk dissected their chimpanzee in Artis in 1849, they came to the same conclusion as Camper, Bakker, and other Dutch scientists about the orang-utan; the chimpanzee resembled man physically very much, but it was in the end essentially different because of its mental capacities.

Although Doornik's theories about the transmutation of species and the ape origin of man was the exception rather than the rule in the Netherlands, the possibilities of these ideas were heavily debated in Britain. After Darwin published On the Origin of Species in 1859, a scientific dispute broke out between two British anatomists, Thomas Henry Huxley (1825-1894), and Richard Owen (1804-1892), which eventually became central to the debate about human evolution in general. In this debate, Owen, who was Britain's leading palaeontologist and anatomist at the time, argued that the uniqueness of man was situated in what he called the "hippocampus minor", a part of the brain which, he thought, only humans possessed. Huxley on the other hand, argued that primates had this hippocampus minor too. Whereas Owen distinguished man from ape, Huxley was convinced that evolutionary development could occur across species, which made them more permeable. Both Owen and Huxley based their arguments on Vrolik and Schroeder van der Kolk's illustration of the dissected chimpanzee brain, but they interpreted it differently, which led to their opposite conclusions. Owen used the illustration to prove that the chimpanzee brain had no hippocampus minor, whereas Huxley argued that the image was distorted due to the way the brain was removed from the skull.⁸³

After Vrolik and Schroeder van der Kolk discovered that their illustration was the subject of heavy debate in Britain, they became involved into the discussion. They dissected the brain of an orang-utan that had just died in Artis, and, at a meeting of the *Koninklijke Nederlandsche Akademie van Wetenschappen* (Dutch Royal Academy of Science) in 1862, they reported that like man, this animal too had a hippocampus minor. They confirmed Huxley's claims and stated that Owen had gotten lost in his desire to combat Darwin. The events described above could be seen as what Werner and Zimmermann would call "a point of intersection". Although it did not raise much controversy in the Netherlands, Vrolik and

⁸² Cribb, Gilbert, and Tiffin, Wild Man from Borneo, 6.

⁸³ Charles G. Gross, "Hippocampus Minor and Man's Place in Nature: A Case Study in the Social Construction of Neuroanatomy," *Hippocampus* 3, no. 4 (October 1993): 408, doi:10.1002/hipo.450030403.

Schroeder van der Kolk's illustration found its way into the British hippocampus minor debate, and became the subject of a discussion that left its traces even outside the academic world. Darwin's theories and the debate between Owen and Huxley were often subject of satire, cartoons, and poems in the popular press in Britain. The public was highly involved with questions about the difference between man and animal.⁸⁴

As historian David Turnbull argues, all knowledge is constructed at specific sites, which makes it thoroughly social and contingent. However, when knowledge travels from one site to another, the challenge is to integrate it into this new site. It is necessary "to establish ways of telling which tales and narrators to trust, how to integrate the local and specific into the general, which in turn means finding commonalities between the stories so that in their retelling they appear cohesive."85 This is what happened in this case too. Vrolik and Schroeder van der Kolk's illustration became involved in the Owen-Huxley debate, after which it received much more attention than it did in the Netherlands, and its unclarity was pointed out. Subsequently, for knowledge to travel, to cross borders, is, according to Werner and Zimmermann, also to crisscross, to cross over several times. It circulates. 86 When Vrolik and Schroeder van der Kolk's conclusions were integrated into a new context, in Britain, it acquired new connotations due to the debate there, and in turn travelled back to the Netherlands where these new connotations were in turn integrated again as well. These events were capable of affecting the elements present to such a degree that Vrolik and Schroeder van der Kolk felt the need to conduct a new dissection, after which they came to a conclusion that confirmed Huxley's point.

As this case illustrates, debates about the difference between man and animal were not waged in a national vacuum. Nevertheless, each area did have its own contextual differences with regard to its scientific tradition. In Britain, in the first half of the nineteenth century, the conception of physical equality of Europeans and non-Europeans became more and more displaced by one of hereditarian racialism. Historian George Stocking states that this was the result of the development, and ultimately, after 1860, the bringing together of two separate results:

⁸⁴ Ibid., 410–12.

⁸⁵ David Turnbull, "Travelling Knowledge: Narratives, Assemblage and Encounters," in *Instruments, Travel, and Science: Itineraries of Precision from the Seventeenth to the Twentieth Century*, ed. Marie-Noëlle Bourguet, Christian Licoppe, and Heinz Otto Sibum, Routledge Studies in the History of Science, Technology, and Medicine (London; New York: Routledge, 2002), 287–88.

⁸⁶ Werner and Zimmermann, "Beyond Comparison," 38.

On the one hand, a study of the variety of mankind that had yet to free itself completely from the constraints of biblical assumption; and on the other, a study of the progress of civilization for which a positivistic program was already well established.⁸⁷

Stocking argues that whereas philology was typically German, and comparative anatomy was typically French, this positivistic program of studying political economy, i.e. the study of the progress of civilization, was typically British. He subsequently points out that after 1860, when the study of the variety of mankind and the study of the progress of civilization were brought together, a paradigm shift had occurred that led to a dominance of sociocultural evolutionism in the British tradition of natural sciences. The newly emerged institutionalised physical anthropology was its most prominent example. In this field of study, anthropologists did not study non-European peoples for themselves, but rather "in order to cast light on the processes by which the ape had developed into the British gentleman."88

If it is possible to speak of a paradigm shift, it can be argued that the conception of an essential physical difference between man and animal as it was conceived in the eighteenth century, had been blurred in the second half of the nineteenth century. Stocking repeatedly emphasises that this paradigm shift did not occur immediately after Darwin's publication of *On the Origin of Species* in 1859. As it goes with paradigm shifts, he argues, ideas about the transmutation of species, started to make more and more sense with regard to the available data in several different contexts. In the end, they became accepted more generally and resonated in the creation of new scientific disciplines.⁸⁹

Darwinism in the Netherlands

In the Netherlands, *On the Origin of Species* was translated into Dutch and published in 1860 by the physician Tiberius Winkler (1822-1897). ⁹⁰ In contrast to its reception history in Britain, as historian Janneke van der Heide points out, Darwin's work did initially not stand out very much in the Netherlands. His book sold rather poorly, and, in order to keep the consequences for the position of man in God's creation from reaching a wider audience it was discussed mostly in small, academic circles and deliberately kept away from the public, until a consensus was reached. Within those academic circles, Dutch scientists laboured to

⁸⁷ George W. Stocking, Victorian Anthropology (New York; London: Fee Press, 1987), 45.

⁸⁸ Ibid., 185.

⁸⁹ Ibid., 135.

⁹⁰ Winkler also published in the yearbooks of Artis. Mehos, *Science and Culture for Members Only*, 109.

maintain man's unique position in God's creation too. In 1864, Winkler argued that characteristics that were deemed specifically human, such as reason and morality, were not acquired through evolution, but rather given by God. According to this argument, God's creation that the essential difference between man and animal, and therefore it was considered as an absolute difference.⁹¹

The reception of Darwin in the Netherlands started to change in the 1870s. Darwin explicitly incorporated man into the evolutionary process in *The Descent of Man* (1871) and in *The Expression of the Emotions in Man and Animals* (1872), and German scientists such as Karl Vogt (1817-1895) and Ernst Haeckel (1835-1919) further spread and popularised Darwin's ideas throughout Europe. It was Haeckel, whose work started to appear in translation in the Netherlands from 1872 on, who had a particularly influential role in the spread of Darwin's thought in the Netherlands. He was determined to popularise scientific thought in order to make the public familiar with Darwinism. Although his critics argued that he spread mere hypotheses as scientific truths among a public that was not able to realise this, Haeckel was highly popular among freethinkers, scientists, and fellow proponents of the spread of popular scientific thought in the Netherlands.⁹² In academic circles, the objections to Darwin's theories were, for a large part, abandoned, and the discussions focused more on its social and ethical consequences, rather than on its theological implications. The religious doubts that Darwinism could cause, had become well known in the meantime.⁹³

Once Darwinist evolutionism started to become more and more accepted as a credible theory, numerous scientists wanted to apply the concept of natural selection to human society too. This tendency has become known as social Darwinism, and one of its social consequences has been the study and practice of eugenics. The term "eugenics" was coined in 1869 by Darwin's half-cousin Francis Galton (1822-1911). Although Darwin had argued that the principles of natural selection and survival of the fittest were just as much applicable to humans as they were to animals, he also wrote that compassion and care of the less fortunate were social instincts acquired through evolution, and should therefore not be overlooked. As much as Galton was inspired by Darwin's evolution theories, he was not convinced by this argument. From his point of view, individuals with high mental capacities stood at the top of the social hierarchy, and the relative quantitative extension of this group should therefore be

⁹¹ Van der Heide, *Darwin En de Strijd Om de Beschaving in Nederland*, 1859-1909, 92–93.

⁹² Janneke van der Heide, "Haeckel in Holland. Nederlandse correspondentie aan een Duits darwinist en monist," *Gewina* 25, no. 2 (2002): 99.

⁹³ Van der Heide, Darwin En de Strijd Om de Beschaving in Nederland, 1859-1909, 160-61.

effectuated. This should, according to Galton, on the one hand be achieved by means of what he called "positive eugenics" – the promotion of the reproduction of the most valuable individuals – and on the other hand by means of "negative eugenics" – the prevention of the reproduction of the least valuable individuals. Galton's ideas were picked up in many different countries, and they led to sterilisation and marriage laws in the United States, Denmark, Norway, Sweden, and Switzerland. One of the most infamously extreme practical applications of eugenics was reached in Nazi Germany's euthanasia policies in the 1930s and 1940s. 94

In the Netherlands, a eugenics movement was developed in similar fashion. It was led by Marie Anne van Herwerden (1874-1934) who used to occupy herself with the study of primates before, and became interested in eugenics after meeting the director and the subdirector of the Eugenics Record Office in the United States. Although Darwinist evolutionism became more and more accepted in early twentieth century, actual social Darwinist thought has never been very popular in the Netherlands. This subsequently led to a rather moderate eugenics movement that, whereas eugenics in other countries tended to focus primarily on heredity, paid just as much attention to "nature" as it did to "nurture". He acceptance of social Darwinism and its application in politics, indicates that man was seen by its advocates as being subject to the same natural principles as animals were. It is telling that, Van Herwerden, was not the only zoologist turned eugenicists. As an article from the English medical journal *The Lancet* mentioned in 1924, the majority of those who started to take interest in eugenics, used to occupy themselves with zoology before. They wanted to study and apply their insights to man the same way as they used to do with animals.

The rise of the eugenics movements in the late nineteenth and early twentieth century signifies that scientists and subsequently politicians started to believe that the zoological principles that applied to animals, were applicable to man too. This natural scientific equation of man and animal was, however, not the only consequence of the Darwinian insights in the field of biology. For many people, the gradual acceptance of Darwin's theories in the Netherlands in the late nineteenth century led to a closer association between man and animal. This led to the establishment of an anti-vivisection movement in 1890 and a vegetarian

⁹⁴ Huub Schellekens and Rob. P. W Visser, *De Genetische manipulatie* (Amsterdam: Meulenhoff informatief, 1987), 11, 16–22.

⁹⁵ Ibid., 76–77.

⁹⁶ Jan Noordman, *Om de kwaliteit van het nageslacht: eugenetica in Nederland 1900-1950* (Nijmegen: Sun, 1989), 27, 32.

⁹⁷ "Zoology and Eugenics," *The Lancet* 203, no. 5247 (March 1924): 610–11.

association in 1894. Britain was the first country to legislate the use of animals in science and in education. In 1876, the parliament issued the Cruelty to Animals Act, which set limits on the use of animals for demonstrations and teaching, and issued that licenses were required before research involving living animals was permitted. Following this example, a Dutch anti-vivisection movement was established in 1890 and it found support among activists, politicians, scientists, and physicians. Several anti-vivisectionists based their arguments on the theories of Darwin. By referring to evolutionist thought, they disputed the boundary between man and animal and argued that to cut into an animal, was essentially the same as cutting into a human being.

In 1894, the Dutch Vegetarian Association was founded, and within a year, the prominent Dutch socialist Ferdinand Domela Nieuwenhuis (1846-1919) became one of its members. Being an admirer of Darwin, Domela argued that the interests of man could impossibly be held in higher regard, than the interests of animals. Animals deserved just as much a place in his conception of a righteous world as the working class did. 100 There were, however groups that had entirely different motivations to concern themselves with the wellbeing animals. Inspired by the ideas of Russian author Leo Tolstoy (1828-1910), a group of Dutch Christian anarchists founded the *Internationale Broederschap* (International Fraternity) in 1899, and a year later they started to live in their self-sufficient "colony" in the Dutch countryside. Civil engineer Felix Ortt (1866-1959), who was also one of the most prominent anti-vivisectionists in the Netherlands, became their most prominent spokesperson, as he managed to bring together spiritism, natural medicine, abstinence, antimilitarism, proper life, and, most importantly, vegetarianism and the protection of animals in a coherent philosophy of life. Like Domela Nieuwenhuis, Ortt, would rely on Darwins ideas, as he argued in 1922 that the evolution theory delivered a part of the truth, about man and animal, whereas the existence of an "Ordering Power" would explain the holy purpose of the Creation. 101

Marxist historian Jan Romein characterises anti-vivisection, vegetarianism, and other late-nineteenth and early-twentieth-century ideas as *petites religions*, naïve idealisms to which people turned after the established religions were increasingly considered to be futile. Romein sees them as the expression of the bad conscience of the ruling class that was no longer convinced of the legitimacy of its own rule, while it was still not being threatened enough in

⁹⁸ William Frederick Bynum, *Science and the Practice of Medicine in the Nineteenth Century* (Cambridge: Cambridge University Press, 1995), 170.

⁹⁹ Kluveld, *Reis door de hel der onschuldigen*, 94–95.

¹⁰⁰ Verdonk, Het dierloze gerecht, 52–54.

¹⁰¹ Ibid., 77, 93.

its position of power to recognise its own deficiencies.¹⁰² Amanda Kluveld argues, however, that the anti-vivisection movement was much more than just a reaction to a declining social prestige, as she points out how people from all kinds of different social backgrounds and with all kinds of different motivations felt attracted to the movement.¹⁰³ Dirk-Jan Verdonk subsequently points out that vegetarianism did not fade away after the social relations that Romein describes, changed, instead it even grew overtime.¹⁰⁴ The same could, as Kluveld indicates, be said for the anti-vivisectionist movement.¹⁰⁵ Although anti-vivisectionism and vegetarianism were indeed not particularly dominant political ideologies, their diversely motivated group of proponents, and their long-time subsistence indicated that a certain association of humans with animals and a concern for their well-being was growing in the first decades of the twentieth century.

Conclusion

How was the difference between humans and animals defined in the Netherlands from the eighteenth century until the early twentieth century? When Europeans discovered the orangutan and the chimpanzee in the seventeenth century, people noticed striking similarities between those apes on the one hand and human beings on the other hand. Throughout the eighteenth and early nineteenth century, scientists researched their anatomical characteristics, and almost always concluded that man and ape might look very similar, but that they were, in the end, essentially different. Philosophers such as Monboddo and Rousseau did not focus on anatomy, but used mental qualifications to distinguish man from animal, and they subsequently, proposed that it could be considered that humans and anthropoid apes were indeed of the same species. In the end, however, they did not blur the boundary between man and animal, but shifted it to include the orang-utan on the human side instead of on the animal side of the divide.

Darwin's evolution theory, published in 1859, and especially its popularisation by scholars such as Vogt and Haeckel that caused it to circulate among a wider audience, had significant consequences for the hitherto maintained boundary between man and animal. In the eugenics movements, for example, zoological theories were applied to human individuals and populations, which implied that man and animal could be subject to the same natural laws of procreation. Furthermore, the circulation of Darwinist evolution theories led to a closer

¹⁰² Jan Romein, *Op het breukvlak van twee eeuwen* (Amsterdam: Querido, 1976), 650–51.

¹⁰³ Kluveld, *Reis door de hel der onschuldigen*, 25.

¹⁰⁴ Verdonk, Het dierloze gerecht, 16–17.

¹⁰⁵ Kluveld, *Reis door de hel der onschuldigen*, 218.

association between humans and animals. The blurring of the boundary between man and animal gave incentive to the idea that ethical principles that applied to humans, could also apply to animals. This led, for example, to the rise of an anti-vivisectionist movement and a vegetarian association in the Netherlands. In short, the perception of animals in relation to humans, started to change in the late nineteenth and early twentieth century, and as will be shown in the next three chapters, the increasing association with animals and the concern with their well-being also started to resonate in the early-twentieth-century zoo.

Chapter 2. The General Public Enters the Zoo. 1902-1927

It is September, the month in which Artis opens its gates to those who cannot afford the wealth to be a member of the society "Natura Artis Magistra". "Tickets for workers and domestic servants for 25 cents, available here", we read at every kiosk, but we dare to doubt whether only workers and special servants use this special occasion, and we would like to ascribe this little deception committed by non-workers and domestic servants, eagerly to their great interest in our world famous zoo. ¹⁰⁶

Natura Artis Magistra was, when it was founded in 1838, a closed society, exclusively accessible to its members. However, after twelve years of negotiations with the municipal government of Amsterdam, the annual *goedkope maand* (inexpensive month) was introduced in 1852. In the month of September every year, the Society allowed workers and domestic servants from Amsterdam to enter the zoo for a reduced entrance fee, which was still high enough to keep out the poorest inhabitants of the city. However, as this section from the Dutch newspaper *Het Volksblad* from the 15 September 1901 indicates, many others that were neither members of the Society, nor workers or domestic servants, were also interested in visiting the Amsterdam zoo. A year later, in September 1902, they were allowed entrance as well.

This chapter will focus on the changes Artis underwent in the early twentieth century with regard to its visiting public. First, the social, and economic factors that led to the decision to open the zoo to the general public every September from 1902 onwards, will be studied. Then, the purpose that Artis served in the late nineteenth and early twentieth century will be placed in the context of the bourgeois culture that found itself in a position of political and cultural hegemony at this time, and finally, it will be explored how this purpose of the zoo was readjusted to the new public in 1927. This chapter will therefore primarily describe the developments Artis went through in the period between 1902 and 1927. The question that will be central to this chapter is: how did the opening of Artis to the general public lead to a reevaluation of the function of Artis in the early twentieth century? The social and economic aspects and the history of bourgeois culture that will be addressed here respectively, serve as a background to the answer of this question. In this chapter n the structural changes that led to

¹⁰⁶ "September in Artis," *Geïllustreerd zondagsblad van Het volksblad*, September 15, 1901, 1. My translation from Dutch.

¹⁰⁷ Mehos, Science and Culture for Members Only, 24.

the development of Artis from a closed society to an openly accessible zoo in the early twentieth century, will be explored, which will, in turn, help to explain how the way people saw and treated animals was reflected in Artis.

External Pressures and Financial Difficulties

In 1838, Artis was the first zoo to open in the Netherlands, but in less than two decades, others followed. In 1857, a zoological garden opened in Rotterdam, and in 1863, one opened in The Hague. Like Artis, the zoo in Rotterdam was initially accessible for members only, but it was soon opened to non-members for a few days in August every year. The zoo in the Hague was immediately opened to anyone who was willing and able to pay the entrance fee, but a ticket was still only affordable for the higher and the middle classes. As historian Jan Hein Furnée argues, the zoo in The Hague was a milestone in the social emancipation of the middle class. Here, for the first time, they could share their recreational experience with the higher class of Dutch society. However, Furnée points out, this does not mean that class differences were eliminated in the zoo entirely. Due to the spatial wideness of the terrain on which the zoo was built, only limited actual interaction between different social classes occurred. On this could also be said for Artis. The Dutch zoos were not unique in this process of democratization, as the London Zoo in Regent's Park, which played an exemplary role among zoos in Europe, already started to allow non-members on regulated terms from 1840 on.

Due to the industrialisation of Amsterdam, the purchasing power of its citizens started to rise in the second half of the nineteenth century. In the 1880s and 1890s, this accelerated even further due to a falling price level which was caused by an agrarian depression. ¹¹² In other words, the population of Amsterdam had more money to spend. There were thousands of people that wanted to visit the zoological garden and its museums – Artis not only displayed living animals, but also had a zoological museum and an ethnographic museum – but could not afford a membership, and did not belong to the group of workers and domestic servants either. Several newspapers and letters to the Society kept asking to admit those people to Artis, and in 1902, the board of directors decided to allow all the inhabitants of

¹⁰⁸ Cornelis van Doorn, *125 Jaar Diergaarde: 1857 - mei - 1982* (Rotterdam: Stichting Koninklijke Rotterdamse Diergaarde, 1982), 7.

¹⁰⁹ Jan Hein Furnée, *Plaatsen van beschaafd vertier: Standsbesef en stedelijk cultuur in Den Haag, 1850-1890* (Amsterdam: Uitgeverij Bert Bakker, 2012), 318.

¹¹⁰ Ibid., 407.

¹¹¹ Baratay and Hardouin-Fugier, *Zoo*, 201.

¹¹² Jan Luiten van Zanden, *De industrialisatie in Amsterdam, 1825-1914* (Bergen: Octavo, 1987), 112.

Amsterdam to enter the zoo in the month of September every year. ¹¹³ Coenraad Kerbert (1849-1927), who was director of Artis from 1890 till 1927, pointed out in the annual report of 1902-1903 that the newspapers enthusiastically applauded the decision of the board. They cordially wrote that Artis proved to have understood the spirit of the age, and that the visitors numbers would rise beyond any expectations. Initially, the visiting number in 1902 was, however, even lower than it was in 1901. In this year, when Artis was still open to members, workers and domestic servants only, the visitors number was 52.684, while it was only 49.601 in 1902. ¹¹⁴ The years thereafter, the newspapers proved to have been right nonetheless, as the visitors numbers increased significantly. In 1904, it rose to 61.562, ¹¹⁵ and it rose to 60.460 in 1905. ¹¹⁶

The board of the Society saw two possible explanations for the disappointing first year of the opening of Artis to the general public. The first was that people did not visit the Amsterdam zoo simply because they did not have any free time on working days. In order to compensate for this, it was decided to open Artis also for the general public on Queens Day and on Ascension Day, as both were public holidays in the Netherlands. This proved to be a success, as the zoo counted 14.000 visitors on Ascension Day in 1903 alone. The second explanation for the disappointing visitors number, the Society thought, was that people might have been afraid that the Amsterdam Zoo would become too crowded and too noisy in the September months, and would therefore rather stay away. Kerbert, however, disclaimed this fear, as he wrote that the zoo's grounds were big enough to receive a few thousands and that, the social order in September 1903 left nothing to be desired.

In the annual report of 1903-1904, Kerbert repeated that the social order in Artis in September was excellent. He added to this that the collections of the zoo were viewed with the greatest attention and the most vivid interest, and concluded from this that the enthusiasm for Artis was ameliorating among the non-member inhabitants of Amsterdam. However, in the years thereafter, it appeared that, while the interest in the zoo of the non-member

¹¹³ Coenraad Kerbert, "60: Jaarverslag 1902-1903," 1903, 3–4, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive.

¹¹⁴ Ibid.

¹¹⁵ Coenraad Kerbert, "61: Jaarverslag 1903-1904," 1904, 3, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive.

¹¹⁶ Coenraad Kerbert, "62: Jaarverslag 1904-1905," 1905, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive.

¹¹⁷ Kerbert, "60: Jaarverslag 1902-1903," 7.

¹¹⁸ Ibid., 6.

¹¹⁹ Kerbert, "61: Jaarverslag 1903-1904," 3.

inhabitants of Amsterdam rose, the amount of paying members of the Society started to decrease. In 1909, Kerbert wrote that:

Nothing is left unattempted to make it as pleasant as possible for the members and the visitors of the zoo, without scathing the goal and the nature of the Society. However, despite these facts, the number of paying members is diminishing, and our revenues are decreasing sensitively. 120

It became clear that the opening of Artis to the general public in the annual inexpensive month has led to significant financial problems. In the annual report of 1909-1910, it was written that "the decreasing amount of contributions is compensated by the incomes of the outsider visits, but those revenues are volatile, while the membership contributions are a fixed income." By then, the ticket sales to the general public in the September months had become the most important source of income for the Society, and this source was capricious.

When the First World War broke out, people on holiday in the Netherlands cut short their vacations, and popular tourist spots quickly became deserted. Although the Netherlands stayed neutral during the war, queen Wilhelmina (1880-1948) issued mobilisation orders nonetheless. Train travel was henceforth prioritised to military transports, and tourism in the Netherlands declined heavily. Dutch citizens were not unaffected by the war either. Because the government desired to stay neutral, it had to accept considerable reduction in the standard of living of its citizens, which struck many households economically. ¹²² Due to those two factors, the number of non-member visitors of Artis decreased significantly, and, because those visits had become the most important source of income for the Society, Artis suffered heavily during the First World War. In order to compensate for the losses, the Society decided to open the zoo to the general public in the month of August in 1915, too. This led to a visitors number of 18.454 in this month, but, with the poor visitors number of 35.932 in September, it still proved to be insufficient. ¹²³

More and more paying members discovered that their interest in Artis was sufficiently met when they visited the zoo only on the inexpensive days in September, and they

¹²⁰ Coenraad Kerbert, "66: Jaarverslag 1908-1909," 1909, 21–22, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive. My translation from Dutch.

¹²¹ Coenraad Kerbert, "67: Jaarverslag 1909-1910," 1910, 27, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive. My translation from Dutch.

¹²² Maartje M. Abbenhuis, *The Art of Staying Neutral: The Netherlands in the First World War, 1914-1918* (Amsterdam: Amsterdam University Press, 2006), 15, 67.

¹²³ Coenraad Kerbert, "72: Jaarverslag 1914-1915," 1915, 2, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive.

discontinued their membership. ¹²⁴ Furthermore, due to the industrialisation in the Netherlands, the Dutch countryside, which was hitherto been relatively underdeveloped, started to make economic developments. ¹²⁵ This led numerous higher and middle classes citizens of Amsterdam to leave the city, and they discontinued their membership of Artis as well. ¹²⁶ The revenues via memberships declined thus even further, and the Society felt obliged to resort to other measures to secure the survival of the zoo. On 25 May 1919, Kerbert and the board of Artis agreed with the municipal government of Amsterdam that the zoo would receive a yearly subsidy of 10.000 guilders if it would contribute more to the development and recreation of the entire population of the city. In order to meet this demand, Artis was not only opened to the general public in September, but on every Saturday in May, June, July, and August as well. ¹²⁷

In 1924, Kerbert became sick, and he died in 1927. He was succeeded by Armand Louis Jean Sunier (1886-1974) who would be director of Artis from 1927 till 1953. Sunier used his organisational talent to restore the Amsterdam zoo financially, and to make it profit more from the cooperation with the municipal government of Amsterdam. ¹²⁸ In the annual report of 1927-1928, Sunier wrote that the entrance fee of 0.25 guilders in September, on the public holidays, and on all Saturdays during the summer, had weakened the attractiveness of a membership so much, that the subsidy of the municipal government did not suffice to meet the losses it caused. In order to correct this, he opened the zoo to everyone on all working days and Sunday afternoons throughout the entire year, for an entrance fee of 1 guilder per person. Subsequently, Sunier devised building plans for new animal exhibits, and conducted an assertive promotion policy in order to raise the number of visitors. ¹²⁹ Sunier recognised the interests of the new public of the zoo, and, unlike Kerbert, he started to adjust his policy to the visitors, instead of to the members of the Society.

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¹²⁴ Coenraad Kerbert, "73: Jaarverslag 1915-1916," 1916, 3–4, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive.

¹²⁵ Yme Kuiper, "Aristocraten contra burgers. Couperus' Boeken der kleine zielen en het beschavingsdefensief rond 1900," in *De stijl van de burger: Over Nederlandse burgerlijke cultuur vanaf de middeleeuwen*, ed. Remieg Aerts and Henk te Velde (Kampen: Kok Agora, 1998), 193.

¹²⁶ Kerbert, "73: Jaarverslag 1915-1916," 3-4.

¹²⁷ Coenraad Kerbert, "77: Jaarverslag 1919-1920," 1920, 3, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive.

¹²⁸ Pieter Smit, "Sunier, Armand Louis Jean (1886-1974)," *Biografisch Woordenboek van Nederland*, December 11, 2013, URL:http://resources.huygens.knaw.nl/bwn1880-2000/lemmata/bwn2/sunier.

¹²⁹ Armand Louis Jean Sunier, "85: Jaarverslag 1927-1928," 1928, 4–5, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive.

Science, Music, and a Pleasant Walk through the Park

According to the prospectus of Artis from 1838, the principal purpose of the Society was "the advancement of the knowledge about Natural History." ¹³⁰ It was intended primarily to be a scientific institute. Artis was, in the nineteenth century, however more than an institute of research. The terrain of the zoological garden was ten hectares big, and it provided a scenic background for a pleasant walk. The members of the Society came together in the zoo for an intellectual discussion, and to listen to the regularly scheduled music performances. As Donna Mehos writes, Artis was, in the nineteenth century, primarily a private social club that quickly grew to be the cultural centre of Amsterdam within a decade of its founding. ¹³¹

Since the eighteenth century, intellectual life in the Netherlands had been dominated by all kinds of cultural societies that pursued the ideals of the European Enlightenment. 132 The Zoological Society of Natura Artis Magistra, which was founded in 1838 partly built on this tradition of Enlightenment societies, but it also devised a new organisational structure that reflected the social and intellectual environment of the nineteenth-century. Mehos argues that Artis should therefore be seen as the first of a new generation of Dutch cultural institutions. Whereas the eighteenth-century Enlightenment societies were dominated by homogeneous groups of Dutch patricians, Artis was open to a much broader section of Dutch society. It had members from the traditional higher class, but the majority of its members was made up of people from the economically rising middle class. Furthermore, unlike Felix Meritis, another prominent nineteenth-century intellectual society in Amsterdam, Jews, Catholics, Anabaptists, and Calvinists all had the same privileges in Artis, and all were admitted to the board, as long as they paid their memberships fees. Although Artis was, in the nineteenth century, still a closed, exclusive society, it was much more inclusionary than the older intellectual societies; it was unusually liberal for its time. 133 Furnée's argument that the zoo in The Hague was a milestone in the social emancipation of the middle class, as its members were able to share their recreational experience with the higher class, ¹³⁴ would therefore apply just as much to Artis in Amsterdam.

Artis's rise and its quickly acquired function as the cultural centre of Amsterdam is a typically bourgeois phenomenon. Throughout the nineteenth century, the middle class started

¹³⁰ "84: Prospectus Natura Artis Magistra," 1838, 399: Archief van de Familie Westerman en Aanverwante Families, Amsterdam City Archive. My translation from Dutch.

¹³¹ Mehos, Science and Culture for Members Only, 23-26.

¹³² For a comprehensive study of those eighteenth-century societies, see: Wijnandus W. Mijnhardt, *Tot heil van 't menschdom: culturele genootschappen in Nederland, 1750-1815* (Amsterdam: Rodopi, 1988).

¹³³ Mehos, Science and Culture for Members Only, 28–29, 93.

¹³⁴ Furnée, *Plaatsen van beschaafd vertier*, 318.

to rise economically and it began to spread its values. A strong emphasis was laid on discipline, self-restraint and political freedom. Good citizens exhibited and cultivated those values, which enabled them to play their role in society. It was expected of the middle class citizens to lead a productive life. They had to be financially independent in order to be able to make a valuable contribution to society. In the eighteenth century, those bourgeois values were mostly developed in closed circles, but, when the middle class culture came to full fruition later in the nineteenth century, the spread of bourgeois values among the public became more and more important. At the same time, a culture of domesticity was highly valued, as the security of a private environment guaranteed the feasibility of a free debate. 135 Throughout the nineteenth century, Artis provided the perfect place to cultivate those bourgeois values. Historian Siep Stuurman argues that, although the nineteenth century is often characterised as "the age of bourgeoisie", the Dutch middle class did not have a particularly great influence on the state institutions before the rise of a constitutional democracy in 1848, and it was not before the second half of the late nineteenth century until it found itself in a position of political and cultural hegemony. ¹³⁶ In 1902, when it had acquired this position of cultural influence, the opening of Artis to the general public provided ample opportunities for the privileged middle class to spread its values.

Sociologist Tony Bennett argues that middle class power was rendered through museums and exhibitions in the form of what he calls "the exhibitionary complex". He argues that the exhibitionary complex was a response to the problem of social order, as it sought to "transform that problem into one of culture – a question of winning hearts and minds as well as disciplining and training of bodies." Bennett argues that, by allowing the crowd to enter a bourgeois institute such as a museum, where certain values such as discipline and self-restraint were cultivated, "the crowd comes to commune with and regulate itself through interiorizing the ideal and ordered view of itself as seen from the controlling vision of power – a site of sight accessible to all." Although his theory focuses on museums and exhibitions, it could also be applied to Artis, which was a bourgeois institute too. In the first years after the opening of Artis to the general public, this indeed appeared to have occurred, as Kerbert wrote in the annual report of 1902-1903 that:

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¹³⁵ Henk te Velde and Remieg Aerts, "Inleiding," in *De stijl van de burger: Over Nederlandse burgerlijke cultuur vanaf de middeleeuwen*, ed. Remieg Aerts and Henk te Velde (Kampen: Kok Agora, 1998), 187–19.

¹³⁶ Siep Stuurman, Wacht op onze daden: Het liberalisme en de vernieuwing van de Nederlandse staat (Amsterdam: Uitgeverij Bert Bakker, 1992), 13–14.

¹³⁷ Tony Bennett, "The Exhibitionary Complex," New Formations 4 (1987): 76.

¹³⁸ Ibid., 82.

The zoo's grounds are big enough to receive a few thousands, and experience from recent years fortunately thought us that the order among the ordinary visitors in September, does not leave anything to be desired whatsoever. No foot is put outside the paths, not a single flower bed is trampled, not a flower is picked, no animal is hurt – the order is exemplary, there are no signs of boundless behaviour at all.¹³⁹

This internalisation of social order appeared in all kinds of aspects of Dutch society around the turn of the century. While the discourse of the Dutch socialist movement in the 1870s and 1880s, for example, exhibited, a strong anti-bourgeois mentality, and highly valued nonconformist behaviour, it started to focus more and more on cooperation, consensus and peaceful conflict solution in the 1890s and the decades thereafter. ¹⁴⁰

A New Purpose

"Without scathing the goal and the nature of the Society", Kerbert wrote in 1909, "nothing is left unattempted to make it as pleasant as possible for the members and the visitors of the zoo." Nevertheless, despite those efforts, the revenues of Artis were decreasing noticeably after it opened to the general public in 1902. The number of paying members started to decline due to the low entrance fees in the inexpensive months and the migration of the higher and middle classes to the countryside. Although Artis was, in the first years after its opening to the general public, successful in cultivating order and self-restraint among the crowd, it became, ironically, increasingly less relevant as a meeting place for the middle class of the city. The members that had not left Amsterdam, only visited to meet other members and to listen to the musical performances, and in this field, Artis started to suffer heavy competition. The *Concertgebouw* (Concert Hall), which was built in 1888, and the *Stadsschouwburg* (Municipal Theatre), which was rebuilt in 1894, provided attractive alternatives with a much better intellectual ambiance to listen to musical performances and to

¹³⁹ Kerbert, "60: Jaarverslag 1902-1903," 6. My translation from Dutch.

¹⁴⁰ Dennis Bos, "Oproer en overleg: Socialisten tussen conflict en consensus," in *Harmonie in Holland: Het poldermodel van 1500 tot nu*, ed. Maurits Ebben and Henk te Velde (Amsterdam: Uitgeverij Bert Bakker, 2007), 161, 174.

¹⁴¹ Kerbert, "66: Jaarverslag 1908-1909," 21–22. My translation from Dutch.

¹⁴² The social order in Artis did not disappear along with its middle class implications. In 1955, Dutch poet Willem van lependaal wrote the poem *Kwartjesdag in Artis* (*Quarter Day in Artis*), which is, today, displayed in four parts on the walls of the building *De Volharding* (The Perseverence) in the zoo. It contains lines such as "Netjes naas mekander lopen" ("walk properly side by side"), "Loop me niet zo te vervele" ("stop bothering me"), and "Niet zo schreeuwe!" ("don't scream so much!").

¹⁴³ Nieuwendijk, "125 Jaar Natura Artis Magistra," 121.

have conversations with like-minded individuals, than the zoo did. 144 Due to the competition of other, more specified institutes, Artis started to lose its function as the cultural centre of Amsterdam.

Due to those factors, Kerbert believed that the severe decline of paying members was not directly related to the scientific purpose of the Society, ¹⁴⁵ and during his time as a director of Artis, he kept trying to preserve its relevance in this field. In 1908, he emphasised that the improvement of our knowledge of the animal world, was still the primary goal of the Society, ¹⁴⁶ in 1913, a scientific bundle was issued to honour of the seventy-fifth anniversary of the zoo, ¹⁴⁷ and in 1923, he wrote that:

An educational institute such as the Society is, as its nature dictates, simply not a form of "amusement" – just as little as the "Hortus botanicus", which has the same character in the field of "botany" as the Society has in the field of "zoology"! 148

It might have been true that those who discontinued their membership, did not do this because of the purpose of the Society, but the financial difficulties in which Artis found itself in general were not entirely unrelated to the scientific function that Kerbert tried to keep up, either. Zoos all over Europe started to open their doors to the general public and re-evaluated the purposes they had served in the nineteenth century, ¹⁴⁹ but Kerbert refused to follow this trend. He noticed this difference himself too, as it is pointed out in several of his annual reports that the zoos in Antwerp and Rotterdam counted much higher visitor numbers than Artis did. ¹⁵⁰

In 1877, the Municipal University of Amsterdam, which is known today as the University of Amsterdam, became a degree-granting university and started to cooperate with Artis. A chair in zoology was created at the University and students of anatomy received their

¹⁴⁵ Coenraad Kerbert, "83: Jaarverslag 1925-1926," 1926, 3, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive.

¹⁴⁴ Smit, *Artis, een Amsterdamse tuin,* 6.

¹⁴⁶ Coenraad Kerbert, "65: Jaarverslag 1907-1908," 1908, 18–19, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive.

¹⁴⁷ Coenraad Kerbert, "71: Jaarverslag 1913-1914," 1914, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive.

¹⁴⁸ Coenraad Kerbert, "80: Jaarverslag 1922-1923," 1923, 3, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive. My translation from Dutch.

¹⁴⁹ Baratay and Hardouin-Fugier, *Zoo*, 201.

¹⁵⁰ Kerbert, "66: Jaarverslag 1908-1909," 22; Coenraad Kerbert, "78: Jaarverslag 1920-1921," 1921, 2, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive.

lessons in Artis.¹⁵¹ It was around this time that the Municipal University of Amsterdam, like many other universities in the Netherlands, increasingly started to focus on science and research. It was strongly supported by the municipal government of Amsterdam, which recognised the university's growing prestige, and decided that it should not be deprived of anything it needed. University professors were more and more selected because of their scientific qualities instead of their pedagogical qualities, and they demonstrated their capacities more and more to fellow scientists only in the specialised academic journals that started to appear at the time. Around the turn of the century, as historian Peter Jan Knegtmans writes, the Municipal University of Amsterdam, had become a fully recognised scientific research institute. Science had become a concern for specialists only, and it became more and more practiced exclusively at universities. Artis became irrelevant in the world of scientific research, but because Kerbert refused to admit this, a discrepancy between the purpose of the zoo on the one hand, and the interest of its public on the other hand, arose.

When Sunier became director, things started to change. He started to focus on the non-member visitors of the zoo, as they had, in the past two and a half decades, become the most important source of income for the Society. Sunier suggested to stop organising the musical performances in 1930 and they disappeared in 1936,¹⁵³ and, according to his views on what a "modern zoo" was supposed to look like, the focus of Artis came to lie exclusively on the display of animals. He opened the zoo to the general public every day in the year, but raised the entrance fee to generate a higher income and secure the survival of the Society. He managed to borrow a considerable sum of money, devised building plans for new animal exhibits, and conducted an assertive promotion policy in order to raise the number of visitors. Sunier did not discard the scientific relevance of Artis altogether, but he did not close his eyes to additional purposes either, as he wrote that:

It is a determined fact that the significance, and, in association with this, the interest in the Zoological garden increases. The scientific, aesthetic, and pedagogical importance of zoos increases exactly where the conversion of wilderness into cultured land on all continents tends to take place on an increasingly larger scale, which causes areas where large animals, and large

¹⁵¹ Mehos, *Science and Culture for Members Only*, 59–60.

¹⁵² Peter Jan Knegtmans, *Professoren van de Stad: Het Athenaeum Illustre En de Universiteit van Amsterdam,* 1632-1960 (Amsterdam: Amsterdam University Press, 2007), 302, 312.

¹⁵³ Smit, *Artis, een Amsterdamse tuin,* 24. This was the last time money was spent on a musical performance in Artis. The music tent was deconstructed in 1939 without any protest.

¹⁵⁴ Sunier, "85: Jaarverslag 1927-1928," 4–5.

mammals especially, see their living conditions realised, to become more and more scarce. 155

This newly defined threefold purpose of Artis was not unique, as the idea that the public could be educated about nature at the zoo became commonplace all over Europe between the two world wars.¹⁵⁶

Conclusion

How did the opening of Artis to the general public lead to a re-evaluation of the function of Artis in the early twentieth century? When institutionalised university science came to replace the scientific relevance of the zoo, "Artis entered its second life", as Mehos writes. 157 This second life was initially, however, not unambiguous. While the Society tried to uphold the purposes it had served in its "first life", its public had other interests. Between 1902 and 1927, the general public was admitted to the zoo, but it did not serve the purpose of meeting the interests of that public. The period between 1902 and 1927 could therefore be seen as a transition period. When Sunier became director in 1927, he adjusted the purpose of the zoo to those interests of the public. Artis was no longer an institute of scientific research; it had become an institute that displayed animals to a public that was interested in them for scientific reasons, but also for aesthetic and pedagogical reasons. The relevance of such a zoo, it was thought, was increasing due to the "conversion of wilderness into cultured land". In other words, the animals in the wild started to disappear, but they could still be seen in the zoo. This was newly defined purpose of Artis.

In the transition period between 1902 and 1927, the structural changes were made that led to the development of Artis from a closed society to an openly accessible zoo in the early twentieth century; a public was admitted that was not only interested in animals for scientific reasons, and after twenty-five years, the function of the zoo was adjusted to this public too. This chapter has therefore clarified the first part of the research question of this thesis, as it explained how Artis changed from a closed society to an openly accessible zoo. In the next chapter, an answer to the second part of my research question will be formulated, as it will be explained how this change reflected the way people saw and treated animals in Artis between 1902 and 1941.

¹⁵⁵ Ibid., 7. My translation from Dutch.

¹⁵⁶ Baratay and Hardouin-Fugier, *Zoo*, 208.

¹⁵⁷ Mehos, Science and Culture for Members Only, 129.

Chapter 3. New Exhibits for a New Public. 1927-1941

In chapter two, the structural changes that led to the development of Artis from a closed society to an openly accessible zoo have been explained. Subsequently, this chapter will explore the consequences those developments had for the animals on display. When Sunier was appointed as the director of Artis in 1927, he immediately used the money he borrowed to

rebuild the zoo. Within two
years of his appointment, a
rocky terrace was built on
which several lions and tigers
were supposed to live. The
terrace was separated from
the zoo visitors by a moat
instead of by a fence, and,
unlike most of the exhibits in
Artis, it was littered with



Figure 3. The Kerbert Terrace. Picture taken in 1928. From: "Kerbertterras," accessed July 23, 2017, https://www.artis.nl/nl/ontdek/colletie/kerbertterras/.

rocks, bushes and other natural objects. In honour of the recently deceased director, the new exhibit was named "The Kerbert Terrace" (see Figure 3). Today, the Kerbert Terrace is a national monument. In the year the Kerbert Terrace was built, several other exhibits, such as a "bear rock", a "badger garden" and an "aardvark garden" were realised as well. 158

The new exhibits in Artis were built in the architectural style of the German animal trader Carl Hagenbeck (1844-1913). In 1907, Hagenbeck opened his own *Tierpark* in Stellingen, near Hamburg, where he created what he called *Freianlagen*, literally "free enclosures", panorama-like animal exhibits that aimed to displayed animals in their natural environments and avoided the use of bars. Initially, Hagenbeck's ideas were not received with much enthusiasm by other zoo directors, and when his designs were adopted, this was, as David Hancocks writes, generally done "amateurishly and without conviction", but within a few years, this started to change. While the London Zoo in Regent's Park had played an exemplary role in Europe throughout the nineteenth century, this position was more and more challenged by Hagenbeck's *Tierpark* in the mid-1920s and 1930s. Hen the Kerbert

¹⁵⁹ David Hancocks, "The Design and Use of Moats and Barriers," in *Wild Mammals in Captivity: Principles and Techniques*, ed. Devra G. Kleiman et al. (Chicago: University of Chicago Press, 1996), 192.

¹⁵⁸ Sunier, "85: Jaarverslag 1927-1928," 6.

¹⁶⁰ David Hancocks, "The History and Principles of Zoo Exhibition," in *Wild Mammals in Captivity: Principles and Techniques for Zoo Management*, ed. Devra G. Kleiman, Katerina V. Thompson, and Charlotte Kirk Baer, Second edition (Chicago: University of Chicago Press, 2010), 124.

Terrace was built in in Artis, it became highly popular. The zoo drew numerous visitors, and even started to make financial profits for the first time in decades. ¹⁶¹

In this chapter, the new exhibits that were built in the Hagenbeck style in the Amsterdam zoo after 1927 will be central. In chapter two, the question how the opening of Artis to the general public led to a re-evaluation of the function of Artis in the early twentieth century, was answered. This chapter will follow up on that answer, as the question that will be central here is: how did the exhibits that were built in Artis after 1927 reflect the new purpose of the zoo? In chapter one, it was explained how the circulation of scientific ideas that blurred the boundary between man and animal in society, led for a number of people to a concern for the well-being of animals, as it was figured that ethical principles that applied to humans, could apply to animals as well. As explained in chapter two, Artis was primarily an institute of science until 1927. Although the zoo was opened to the general public in 1902, the interests and considerations of the new visitors were not yet taken into account. This changed in 1927, when Sunier became director and re-evaluated the purpose of the zoo in order to adjust it to a more general public. The hypothesis that will be central to this chapter, is therefore that concerns for the well-being of animals that circulated in society, were adopted in Artis after 1927 too. First, I will address the background and motivations of Carl Hagenbeck, in order to explain how the new animal exhibits that eventually came to be characteristic of the twentieth-century zoo in general, came into existence, then, I will further explore how his designs became adopted in Artis, and what they meant for the way people came to see zoo animals, and finally, I will explore the consequences those new exhibits had for the animals in Artis.

From Shows to Zoo

Carl Hagenbeck followed in his father's footsteps as an animal trader at a very young age. He had already sealed contracts with the directors of zoos in Cologne, Dresden, Paris, Rotterdam, and Amsterdam when he was eighteen years old. At this time he was, however, still relatively unknown, as it was not his animal business, but his exhibitions of non-European peoples that really made him famous outside of Hamburg. By the mid-1870s, his animal trade began to suffer from heavy competition, and in 1875 he decided to accompany a herd of reindeer he imported, with a group of Sami people. The Sami brought all their belongings

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¹⁶¹ Nieuwendijk, "125 Jaar Natura Artis Magistra," 125.

¹⁶² Artis bought animals from Hagenbeck as well. Coenraad Kerbert, "57: Jaarverslag 1899-1900," 1900, 4, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive.

with them to Hamburg and they set up their tents in the back court of the Hagenbeck property. According to their instructions, they proceeded "to go on with their lives", while Hagenbeck let people watch them do this. This "show" became such a success that Hagenbeck immediately planned a tour through Europe. He started to import people from other regions in the world as well, and he created panoramic decors that resembled natural environments and served as a background for the acts. ¹⁶³ Hagenbeck himself maintained that the ethnographic exhibitions were so successful because his "guests from the high north" did not know they were performing a show and did not understand what it meant they were doing. He wrote in his memoir that "here, a picture was presented that was, on a small scale, truly a copy of life in nature."

Due to the increasing popularity of photography and a diminishing optimism in Germany about the idea of empire in the 1890s, the exhibition of living people became less popular, which incited Hagenbeck again to look for other ways to keep his business running. He started experimenting in putting together circus acts, and they became an enormous success. Instead of relying on force and violence to train his animals, he acknowledged the animals' aptitudes, and developed methods of training based on kindness and patience. ¹⁶⁵ Due to the successes of his expanding circus business, Hagenbeck needed more space to house his collection of animals, and in 1902 he purchased fourteen hectares of land in Stellingen, near Hamburg. Five years later, in 1907, his *Tierpark* opened there. The enclosures in his zoo accommodated multiple species at once, were relatively large, contained rocks, trees, and other natural objects, and they were separated from each other and from the public by moats or by natural obstacles such as rock formations, instead of by sets of bars. ¹⁶⁶ It could be argued that it was Hagenbeck's experience with the panoramas from his people exhibitions, and with the aptitudes of different animals from his circus acts, that led him to build his zoo the way he built it.

Nigel Rothfels explains the unique success of Hagenbeck's *Tierpark* in Stellingen as follows:

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¹⁶³ Rothfels, Savages and Beasts, 47, 81–83.

¹⁶⁴ Carl Hagenbeck, *Von Tieren und Menschen. Erlebnisse und Erfahrungen* (Berlin: Vita Deutsches Verlagshaus, 1909), 81. My translation from German.

¹⁶⁵ Rothfels, Savages and Beasts, 144–45, 155–57.

¹⁶⁶ Herman Reichenbach, "A Tale of Two Zoos. The Hamburg Zoological Garden and Carl Hagenbeck's Tierpark," in *New Worlds, New Animals: From Menagerie to Zoological Park in the Nineteenth Century*, ed. R. J. Hoage and William A. Deiss (Baltimore: Johns Hopkins University Press, 1996), 61.

Hagenbeck's vision of an *entire* zoological garden in which animals appeared to move unconstrained by imposing bars clearly represented a radical departure, and regardless of how scientifically unsatisfactory the confused jumble of animals may have been or how uneducated the eyes of the "great public" were to the higher purposes of the zoological gardens, this paying public, in fact, stood astounded before the main panorama of the park and was thoroughly won over by the innovative method by which ferocious beasts were displayed.¹⁶⁷

In Rothfells' view, all the enterprises with which Hagenbeck had occupied himself before, the animal trade, the people shows, and the circuses, would not have taken on such enormous proportions if they had not been financially profitable. The same goes for Hagenbeck's *Tierpark* in Stellingen, he argues; the underlying impulses were always ultimately economic. ¹⁶⁸

According to Rothfels, Hagenbeck's interests were deeply embedded within the modern zoo in general, and understanding them "should bring into clearer focus the basic problems inherent in the modern zoo project." This might be true for Hagenbeck's *Tierpark* in particular, but other zoo directors, might have had different motives. For example, as Eric Baratay and Elisabeth Hardouin-Fugier point out, several exhibits in Hagenbeck's *Tierpark* had safety risks and it was difficult to keep them clean. In order not to harm their animals, many zoo directors thus only adopted the designs when they knew how to solve those issues. When Hagenbeck's designs were employed in Artis, it does therefore not mean that Sunier only had financial profits in mind. After all, as David Turnbull argues, when ideas travel, it is necessary to integrate the local and the specific into the general "which in turn means finding commonalities between the stories so that in their retelling they appear cohesive." In order to trace how the local and the specific were integrated into the general here, it is necessary to take Sunier's interpretation of what he called "the modern animal exhibit" into account.

Redesigning Artis

Although the majority of the public between 1902 and 1927 was not necessarily interested in science, Kerbert tried to maintain the original prospectus of the Society from 1838 throughout

¹⁶⁷ Rothfels, Savages and Beasts, 173.

¹⁶⁸ Ibid., 182–83.

¹⁶⁹ Ibid., 10.

¹⁷⁰ Baratay and Hardouin-Fugier, *Zoo*, 242–43.

¹⁷¹ Turnbull, "Travelling Knowledge," 287–88.

these years. The purpose of Artis that Kerbert envisioned, was also reflected in the way the animals were displayed in the zoo, as he rearranged the animal exhibits according to Linnaeus' taxonomic system, in order to emphasise the zoo's scientific relevance. 172 When Sunier became the director of Artis in 1927, he recognised that the Amsterdam zoo no longer appealed to a scientifically interested audience only, and he figured that the zoo animals could be valuable to the visitors for other reasons too. After all, as the diverse motivations of the supporters of the Anti-Vivisection Movement and the Vegetarian Association in the Netherlands that have been discussed in chapter one, indicates, the general public in the early twentieth century did not see animals as merely scientific objects, but related to them in many different ways. Sunier opened the zoo to this public entirely, he managed to borrow a considerable sum of money, and with it, he gave the incentive to build the Kerbert Terrace for the lions and the tigers, as well as new exhibits for the wolves, the hyenas, the bears, the badgers, and the aardvarks. The way those animals were since then displayed, in turn reflected the purpose of Artis that Sunier conceived.

Due to Sunier's new policy, Artis started to make profits for the first time in decades. The financial successes would, however, not last long, as the Wall Street Crash of 1929 ushered in the Great Depression of the 1930s. Initially, the consequences were not as harsh for the Netherlands as they were for other European countries, but when Britain let go of the golden standard and Germany restricted its foreign exchange in 1931, the Netherlands were dragged into the crisis as well. Nevertheless, Sunier pointed out that in 1932, the revenues of Artis were sixteen percent lower than they were in 1928, whereas all the other zoos in the Netherlands, as well as the London Zoo in Regent's Park and seven different German zoos, suffered harsher consequences. The decline of the revenues of all those zoos was higher than sixteen percent. Whereas Artis was rather unsuccessful compared to other zoos between 1902 and 1927, as Kerbert had pointed out in the annual reports, it was

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¹⁷² Smit, Artis, een Amsterdamse tuin, 6–7.

¹⁷³ Nieuwendijk, "125 Jaar Natura Artis Magistra," 125.

¹⁷⁴ Friso Wielenga, *Nederland in de twintigste eeuw* (Amsterdam: Boom, 2009), 118; For a more detailed description of the Netherlands during the Great Depression, see: Jan Luiten van Zanden, *De dans om de gouden standaard: Economisch beleid in de depressie van de jaren dertig* (Amsterdam: Vrije Universiteit, 1988).
¹⁷⁵ Armand Louis Jean Sunier, "90: Jaarverslag 1932-1933," 1933, 2–3, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive; Sunier often looked to German zoos to compare Artis to. In 1932, for example, he tried to explain the excessiveness of the number of days on which Artis still maintained a reduced entrance fee - forty-five per year at the time - by stating that none of the German zoos had more than ten of those "inexpensive days" per year. Armand Louis Jean Sunier, "89: Jaarverslag 1931-1932," 1932, 3, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive.

relatively prosperous in the early 1930s. 176

Despite doing relatively well during the 1930s, Artis still suffered heavily from the crisis. Sunier made clear that it was of the utmost importance that more "modern animal exhibits", needed to be built after the first innovations were made in 1927,¹⁷⁷ but the depression did not allow the start of any new building or renovation projects throughout the 1930s.¹⁷⁸ It was in this time of crisis that the new purpose of the Amsterdam zoo that Sunier had in mind, became particularly clear. In 1934, it was suggested to raise the entrance fee for visitors in order to increase the zoo's incomes, which Sunier dismissed by stating that "it is self-evident that the Society, as a non-commercial, merely cultural institution, gladly wants to foster as much visitors as possible for an entrance fee as low as possible." He repeated this argument three years later, in the annual report of 1937. The purpose of Artis was of a scientific, aesthetic, and pedagogical nature; it was not a commercial institute. This indicates that, although Hagenbeck's zoo designs were adopted in Amsterdam, Artis was considerably different from the *Tierpark* in Stellingen. Sunier's intentions were not at all similar to Hagenbeck's commercial motiviations.

When the Society was threatened with bankruptcy after all, several Amsterdam-based businessmen and representatives from the banking world gathered money to support the zoo, and in 1938, the "Artis Rescue Committee" was founded. In 1939, the committee made a sum of 230.000 guilders available to the Society in order to realise Sunier's innovation plans. In 1940, a "monkey rock" (see Figure 4) and an "ungulate field" were built, and in 1941, a "mountain animal rock" was realised. Built in the style of Carl Hagenbeck, the new exhibits were separated from the public by moats instead of by bars, and it was attempted to make them resemble the natural living conditions of the animals as much as possible. In a flyer that accompanied the monkey rock, it was explained that this design was chosen particularly to

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¹⁷⁶ The Netherlands were dragged into the crisis in 1931, which was relatively late. This would partly explain why Artis was more successful than the London Zoo and the German zoos in 1932, but in this time, Artis did also better than the other zoos in the Netherlands, while they suffered from the crisis at the same time.

¹⁷⁷ Sunier, "85: Jaarverslag 1927-1928," 6.

¹⁷⁸ Armand Louis Jean Sunier, "91: Jaarverslag 1933-1934," 1934, 8, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive; Armand Louis Jean Sunier, "96: Jaarverslag 1938-1939," 1939, 10, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive.

¹⁷⁹ Sunier, "91: Jaarverslag 1933-1934," 4. My translation from Dutch.

¹⁸⁰ Armand Louis Jean Sunier, "94: Jaarverslag 1936-1937," 1937, 5, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive.

adjust to the living conditions of the animals. 181 Both the local and the national press paid close attention to the new constructions, as numerous newspaper headlines in 1940 urged people to "go to Artis and see the monkeys wanton on the new rock island." 182 An extensive



Figure 4. The Monkey Rock in 1940. Picture taken in 1940. From: "Apenrots," accessed July 26, 2017, https://www.artis.nl/nl/ontdek/verhalen/apenrots/#left-panel.

article on the frontpage of the Dutch national newspaper *De Telegraaf* from 24 July 1941 subsequently described the ibex that lived on the Mountain Animal Rock as "an animal that belongs in the highest mountains, feeding itself with alpine herbs, and moving on the edge of immeasurably deep ravines" (See Figure 5). The article concluded that "all of this can be seen in Artis, now that the ibex is put into its own environment there". ¹⁸³ By stating that the ibex

was put into its own environment in Artis, the article did not present the Mountain Animal Rock in the zoo as an imitation of the wild, but instead, it presented the exhibit as if it actually was the wild.

The new exhibits that were built between 1927 and 1941, it could be argued, reflected the new purpose of Artis that was envisioned by Sunier. In the late nineteenth century, historian Timothy Mitchell argues, European exhibiting institutes, such as museums, world fairs, theatres, and zoos tended to render the world as a picture. By displaying objects on an exhibition along with other objects, a relation between them is suggested. This way, the collection of objects was supplemented with an external, non-physical structure that stood apart from the objects themselves. It is this sense of structure that made the collection of objects more than just a collection of objects; it supplemented it with



Figure 5. The Ibex on the Mountain Animal Rock. From: "Alpensteenbok beheerscht bergdierenrots," De Telegraaf, July 24, 1941.

¹⁸¹ Smit, *Artis, een Amsterdamse tuin,* 105–14. A "bison meadow" and a "flamingo meadow" were also planned to be built in 1941, but due to the German occupation of the Netherlands in the Second World War in 1940, it became difficult to acquire more building materials.

¹⁸² "3053: Tijdschriften- en courantenknipsels, 1927-1942," 1942 1927, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive. My translation from Dutch. ¹⁸³ "Alpensteenbok beheerscht bergdierenrots," *De Telegraaf*, July 24, 1941. My translation from Dutch.

meaning.¹⁸⁴ The display of animals in Artis could be seen this way too. When Kerbert arranged the animals according to Linnaeus's taxonomic order in the early twentieth century, it was this system that related the animals to each other and provided an external structure. This subsequently ascribed a certain meaning to the animals in the zoo, as they were displayed as representatives of scientific categories.

When Sunier recognised that Artis no longer appealed to a scientifically interested audience only, he re-evaluated the purpose of the zoo. According to Sunier, as explained in chapter two, the ongoing conversion of "wilderness" into "cultured land" increased not only the scientific, but also the aesthetic and pedagogical importance of Artis. ¹⁸⁵ In order to realise this threefold purpose, the animals had to be displayed in exhibits that resembled their natural living conditions. The animal exhibits that were built between 1927 and 1941 were thus supposed to display the wild. The Mountain Animal Rock, for example, was not merely a collection of rocks, bushes, and mountain animals. Instead, by displaying them as such, the objects and the animals were related to each other, which led to the creation of a structure that was "the wild". The exhibits represented the animals in their natural living conditions. This was, in turn, communicated to the public by means of press coverage and flyers that accompanied the new exhibits. When the article in *De Telegraaf* for example described how the ibex lived in its natural habitat in the Alps, and subsequently stated that it was put into exactly those living conditions in Artis, it spread the idea that the Mountain Animal Rock in Artis was, in fact, the wilderness.

Mitchell writes that maps, guidebooks, sign-posts, and other texts accompanying the exhibits indeed "mediated between the visitor and exhibit by supplementing what was displayed with a structure and meaning", but they did something else as well. He continues to argue that, subsequently, "the seemingly separate text or plan, one might say, was what confirmed the separation of the person from the things themselves on exhibit." Mitchell argues that, in order to exhibit what was to be exhibited as accurately as possible, it needs to be set apart from the spectators. One's own presence was, ideally, rendered invisible. This separation was, in Artis, on the one hand realised by means of the accompanying flyers that confirmed the separation between spectator from exhibit, but on the other hand also by the zoo designs themselves. The moats and rock formations not only literally separated the animals from the public, they also obscured the artificialness of the exhibits as much as

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¹⁸⁴ Timothy Mitchell, Colonising Egypt (Berkeley; Los Angeles; London: University of California Press, 1988), xii.

¹⁸⁵ Sunier, "85: Jaarverslag 1927-1928," 7.

¹⁸⁶ Mitchell, *Colonising Egypt*, 20.

possible. There were, after all, no bars, and no spectators in the wilderness. This connects to Mitchell's assertion that, eventually, the exhibitions became so accurate and so extensive, that no one ever realised that the "real world" they promised was not there. 187 This was supposed to be achieved in Artis as well; the animal exhibits were to replace "the real wilderness" in order to allow people to see it in Amsterdam.

For the Animals' sake?

While the animals in Artis were supposed to be displayed in an environment that resembled their natural living conditions as accurately as possible, their actual living conditions in the wilderness were being threatened. After having asserted that this led to an increasing scientific, aesthetic, and pedagogical importance of zoos, as discussed in chapter two, Sunier wrote that: "it is sufficiently known that many big mammals, whose survival in free nature is threatened by the expansion of cultured land, procreate easily in well managed zoos, and that some large mammalian species practically even live only in zoos." 188 He saw a role for Artis as such a zoo in which threatened species were conserved as well. Artis was thus not only supposed to be a place where animals were displayed in their natural habitat to entertain the people of Amsterdam, it was also supposed to be a place where those animals were protected from the threats to their actual habitats in the wild. This scientific, aesthetic, and pedagogical importance of Artis for its visitors, and the conservationist role for its animals were connected to each other in the new animal exhibits, as Sunier wrote that:

The modern animal exhibit, taking into account the demands of a good animal sustenance on the one hand, and the demands of the public as a spectator of the animal, situated in as favourable conditions as possible, on the other hand, should provide the animal the opportunity to show what it can do with its body. 189

In those "modern animal exhibits" both the demands of the public and the supposed needs of the animals were met.

Sunier's policy with regard to animal sustenance was successful. In 1931 and 1932, the number of births among the animals of which their exhibits were better equipped to their living conditions, rose considerably, and the number of animal births in general had, since the founding of Artis in 1838, never been as high as it was in that year. ¹⁹⁰ Furthermore, Artis

¹⁸⁷ Ibid., 10.

¹⁸⁸ Sunier, "85: Jaarverslag 1927-1928," 7. My translation from Dutch.

¹⁸⁹ Ibid., 6. My translation from Dutch.

¹⁹⁰ Smit, Artis, een Amsterdamse tuin, 56.

proved to be a key player in the survival of the European bison in particular. In 1934, Sunier noted that there were only seventy individual European bison alive, and that Artis was one of the six institutes that was able to breed them in good conditions in order to preserve the species from extinction. ¹⁹¹ This proved to have been a success, as in 1937, two more calves had been born, and Artis accommodated seven healthy European bison in total. 192

Artis's role as a site of species conservation needs to be seen in the context of upcoming efforts of nature protection in the early twentieth century in general. The first efforts of nature protection around 1900 were locally or nationally orientated, and those who concerned themselves with it, eagerly stressed the patriotic value of their work. Soon, however, they realised that the disappearance of natural areas and the extinction of species were international problems. Swiss zoologist and ethnographer Paul Sarasin extensively put the theme of world nature protection on the agenda of scientific conferences in the 1910s, and after he managed to bring it under the attention, international conservation organisations were established, and conferences were regularly organised in order to make international agreements about nature protection. While those conferences were initially attended by all kinds of people, ranging from landscape painters to politicians, they were increasingly dominated by scientific zoological experts. 193 Raf de Bont points out that the international concerns with nature protection offered institutes such as natural history museums and zoological gardens the possibility to reinvent old practices and re-establish institutional reputations. Having lost their scientific reputation that gave them credibility in the nineteenth century, De Bont argues, zoos "increasingly turned into centres of scientific nature conservation that engaged in the breeding of threatened animals." ¹⁹⁴

Sunier's assertion that the scientific, aesthetic, and pedagogical value of Artis increased due to the threat to the natural living conditions of animals, indicates that Artis, like many other zoos at the time, took up the role as a site of species conservation to re-establish its institutional reputation. It could hence be argued that animal species were being conserved in Artis primarily for the good name of the zoo, instead of for their own intrinsic value, which would relate to Randy Malamud's characterisation of the zoo as a place "where humanity holds dominion over lesser species arrayed for our pleasure, our betterment, our use." Such an assertion would, however, not do justice to the complexity of the situation. It is indeed true

¹⁹¹ Sunier, "90: Jaarverslag 1932-1933," 8.

¹⁹² Sunier, "94: Jaarverslag 1936-1937," 13.

¹⁹³ de Bont, "Borderless Nature," 49-50, 57.

¹⁹⁴ Ibid., 59.

¹⁹⁵ Malamud, Reading Zoos, 59.

that there were certain forms of power at play in Artis, but this does not mean that its only effect was that humans held dominion over animals for their own use. As philosopher Michel Foucault asserts, power is more than just a repressive phenomenon. It does not only restrict and prohibit, but it also traverses and produces things. Power is, as Foucault argues, above all a productive phenomenon. ¹⁹⁶ In Artis, animals were displayed and species were conserved for their scientific, aesthetic, and pedagogical value, which in turn benefitted the institutional reputation of the zoo, but in order to do this, the exhibits needed not only to be adjusted to the demands of the public, but to the needs of the animals as well. The zoo animals were indeed subject to certain power relations, but the consequences of those power relations improved the living conditions of the zoo animals as well.

As it was explained in chapter one, the circulation of scientific ideas that blurred the boundary between man and animal in society, led for a number of people to a certain concern for the well-being of animals. This was reflected in the newly defined Artis after 1927 too, as the well-being of the zoo animals received considerable attention. Sunier did, however, not equate the interests of animals with those of humans, as he wrote that "people generally start to realise that it is absolutely incorrect to ascribe human feelings of homesickness or agony due to lost freedom, to animals that live in captivity." This was, rather paradoxically, indeed the consequence of the blurring boundary between man and animal. As Harriet Ritvo argues, explicit claims of unity of humans and animals, such as, for example, Darwin's theories, often worked to reinforce the human-animal boundary they were intended to resolve, as they led to firm responses that sought to fortify conceptions of difference. 198 The reinforcement of the human-animal boundary did, however, not mean that the interests of the animals were discarded. On the contrary, the health of the animals in general became a recurring section in the annual reports from 1934 on, ¹⁹⁹ and eventually, this indeed led them to procreate more easily. The number of births among the animals of which their exhibits were better equipped to their living conditions, did rise after all, and the number of animal births had, in 1932, never been as high before. ²⁰⁰

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¹⁹⁶ Michel Foucault, *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977*, ed. Colin Gordon (New York: Pantheon Books, 1980), 119.

¹⁹⁷ Sunier, "85: Jaarverslag 1927-1928," 8.

¹⁹⁸ Ritvo, "On the Animal Turn," 119.

¹⁹⁹ Sunier, "91: Jaarverslag 1933-1934," 13; Sunier, "94: Jaarverslag 1936-1937," 16.

²⁰⁰ Smit, *Artis, een Amsterdamse tuin*, 56.

Conclusion

How did the exhibits that were built in Artis after 1927 reflect the new purpose of the zoo? Between 1902 and 1927, Artis found itself in a period of transition. While the general public was already being admitted to the zoo, Kerbert still tried to maintain Artis's scientific relevance. He arranged the animals on display according to the Linnaean taxonomic system, which led to a presentation of the animals as representatives of biological categories. The animals were displayed as objects of science, and this way, the animal exhibits reflected the purpose of the zoo before 1927. When Sunier became director, he re-evaluated the purpose of the zoo. He argued that the scientific, aesthetic and pedagogical relevance of Artis rose with the increasing conversion of wilderness into cultured land. In order to realise this threefold purpose, new animal exhibits were built in the architectural style of Carl Hagenbeck; the animals were supposed to be displayed in an environment that resembled their natural living conditions as much as possible. The purpose of those exhibits was twofold; on the one hand, it met the demands of the public, and on the other hand, it met the demands of a good animal sustenance. While the living conditions of the animals in the wilderness were being threatened, the importance of the zoo rose, as it was supposed to resemble those living conditions, but this time, in a safe area that secured their survival. In order to realise the new purpose of Artis, as the zoo took on the role of a site of species conservation to realise it, which was reflected in the new animal exhibits.

In chapter one, it was explained how the circulation of scientific ideas that blurred the boundary between man and animal in society, led for a number of people to a concern for the well-being of animals, as it was figured that ethical principles that applied to humans, could apply to animals as well, and in chapter two, it was explained that Artis was primarily an institute of science until this function was re-evaluated in 1927 in order to adjust it to a more general public. Hence, I formulated the hypothesis that concerns for the well-being of animals that circulated in society, were adopted in Artis after 1927 too. Having examined motivation behind the new animal exhibits that were being built in "Artis's second life", this hypothesis could be confirmed. As the first part of the question how the change of Artis from a closed society to an openly accessible zoo between 1902 and 1941 reflected the way people saw and treated animals, was explained in chapter two, the second part of this question, i.e. the way animals were treated in the zoo due to those developments, has been addressed in this chapter. However, in order to formulate a more extensive answer to this question, the developments Artis went through and the consequences this had for the way people saw and treated animals, need to be placed in a broader context. This will be done in chapter four.

Chapter 4. Colonial Dimensions, 1902-1941

On 29 May 1910, twelve craftsmen from Java and Sumatra sat on a grass patch below the monument for Westerman in Artis. They were waiting for queen Wilhelmina, who was visiting Amsterdam that day, and made a tour through the zoo accompanied by Kerbert and former governor general of the Netherlands Indies Joannes Benedictus van Heutsz (1851-1924). When they walked past the statue, the craftsmen greeted them with three *sembahs*; Indonesian gestures that express respect and reverence. "It was a very silent, and touching tribute, in strong contrast with the loud cheers of our own public", ²⁰¹ as a front page article of Dutch newspaper the *NRC* described it. The day thereafter, the Indonesians left for the world exhibition in Brussels, where they were to perform their crafts on the Dutch colonial exhibition. ²⁰² Although exhibitions of non-European people were regularly organised in the Netherlands, as well as in other European countries, ²⁰³ they usually did not take place in Artis, Hence, it is telling that, on her tour through Amsterdam, Wilhelmina was to encounter the Indonesian craftsmen in the zoo, instead of somewhere else in the city. ²⁰⁴

Artis was not explicitly a colonial institute, but it did rely on the economic networks of Dutch imperialism. Characterising it as "a locus of colonial pursuits", Donna Mehos writes that:

Colonization facilitated the collection of exotic specimens; colonial shipping made possible the transport of live animals to Amsterdam; and colonial commerce contributed to both the prosperity of Amsterdam and the accumulation of the capital that built *Artis*. ²⁰⁵

It was due to the benefits from its colonial endeavours, that the Dutch middle class was able to finance and sustain an institute such as Artis in Amsterdam. This does, however, not directly explain why the Indonesian craftsmen sat in Artis to meet Wilhelmina. The zoo was thus not only connected to colonial networks on an economic level, it had a certain symbolic function as well. In this chapter, the colonial dimensions of Artis will therefore be further

²⁰¹ "Koninklijk bezoek aan Amsterdam," *Nieuwe Rotterdamsche Courant*, May 29, 1910.

²⁰² Marieke Bloembergen, *De koloniale vertoning: Nederland en Indië op de wereldtentoonstellingen (1880-1931)* (Amsterdam: Wereldbibliotheek, 2002), 221–22.

²⁰³ For an overview of all the people exhibitions held in the Netherlands, see: Bert Sliggers, "De exotische mens als amusement. Levende tentoonstellingsobjecten in Nederland," in *De exotische mens: andere culturen als amusement*, ed. Patrick Allegaert and Bert Sliggers (Tielt: Lannoo, 2009), 34–35.

²⁰⁴ The encounter was, of course, planned beforehand, but queen Wilhelmina herself was informed of the presence of the craftsmen only just before she walked past them. Bloembergen, *De koloniale vertoning*, 221. ²⁰⁵ Mehos, *Science and Culture for Members Only*, 126.

explored in order to place the developments the Amsterdam zoo went through from 1902 to 1941 in a broader context.

As seen in chapter two and three, Artis developed from a closed bourgeois society to an openly accessible zoo between 1902 and 1927, and adjusted its purpose to the new visiting public in the years thereafter. Instead of displaying the animals as representatives of biological taxonomic categories, the zoo adopted the role of a site of species conservation, and attempted to display the animals in their natural living conditions in order to meet the demands of the public on the one hand, and to serve the demands of the a good animal sustenance on the other hand. Because Sunier asserted that Artis took on this role because the conversion of wilderness into cultured land threatened the natural living conditions of animals in the wild, and a large number of the animals in Artis came from colonised areas, the hypothesis that will be central to this chapter is that the developments Artis went through between 1902 and 1941, were connected to developments in Dutch colonialism in general.

Bourgeois Nationalism

The front pages of the national newspapers on 30 May 1910 wrote that the Indonesian craftsmen had only agreed to travel to Europe and perform their craft at the world exhibition in Brussels if they were allowed to meet queen Wilhelmina in the Netherlands. ²⁰⁶ This might explain why the meeting took place in Amsterdam, but it does not explain why it took place in Artis specifically. Therefore, a further exploration of the role of Artis within the Dutch colonial empire might be fruitful. As Mehos argues, Artis needs to be seen in the context of a developing Dutch national identity. The construction of such an idea of national sentiment, as historians Henk te Velde and Remieg Aerts indicate, was inherently tied to the bourgeois culture of the Dutch middle class. The productive commitment of the independent individual to society was, after all, one of its core values, and in order to cultivate this value, such a society needed to be conceived first. Instead of a cultural nationalism, it is therefore, according to Te Velde, better to speak of "bourgeois nationalism". ²⁰⁷

Mehos argues that, in order to pursue this ideal, the Dutch privileged middle classes tended to found and financ institutes that would reflect their conceived national identity.

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²⁰⁶ "Het koninklijk bezoek," *De Telegraaf*, September 30, 1910; "Het koninklijk bezoek van zondag," *Algemeen Handelsblad*, May 30, 1910.

²⁰⁷ Henk te Velde, "Herenstijl en burgerzin. Nederlandse burgerlijke cultuur in de negentiende eeuw," in *De stijl van de burger: Over Nederlandse burgerlijke cultuur vanaf de middeleeuwen*, ed. Remieg Aerts and Henk te Velde (Kampen: Kok Agora, 1998), 175; Remieg Aerts, "Alles in verhouding. De burgerlijkheid van Nederland," in *De stijl van de burger: Over Nederlandse burgerlijke cultuur vanaf de middeleeuwen*, ed. Remieg Aerts and Henk te Velde (Kampen: Kok Agora, 1998), 281.

Whereas art museums such as the *Rijksmuseum* and the *Mauritshuis*, focused on the Netherlands' past and celebrated the Dutch Golden Age in order to imply a certain continuity between the past and the present, ²⁰⁸ Artis was, however, supposed to reflect a different aspect of the Dutch national identity. It had to put the Netherlands on the map by developing a scientific institute of international allure. Whereas an idea of historicity was reflected in art museums, the contemporary relevance and the progressive nature of the Dutch was supposed to be demonstrated by scientific societies such as Artis. ²⁰⁹ The celebration of the Golden Age had been especially prominent in Dutch nationalism in the early nineteenth century, but later, when the fruits of the industrialisation in the Netherlands started to be reaped, this progressive aspect became increasingly important. Combined with the inauguration of queen Wilhelmina in 1898, this also led to an increasing popularity of the Dutch monarchy, which started to figure prominently in the Dutch national sentiment in the early twentieth century. ²¹⁰

As several scholars have pointed out, the idea of a Dutch national identity was not only developed within the Netherlands, it was also constructed overseas. Historian Frances Gouda argues that the Netherlands was, in the late nineteenth and early twentieth century, nothing more than "a diminutive democracy in northern Europe, which played only a cameo role in the grand theatre of powerful European nations", but overseas, she continues, it was in fact "a colonial giant", which led the Netherlands to see itself as "a David amidst the Goliaths of Empire". Hence, the idea of empire was inherently imbricated in conceptions of a national identity. Like Gouda, Mehos singles out colonial power as a crucial element of the Dutch national identity. As a scientific institute, Artis focused on natural history in general, but in the context of that interest, it proudly displayed the colonial world that was ruled by the Dutch privileged middle class. It is according to Mehos, this reinforcement of the Dutch national identity be means of proudly displaying colonial power, that led the Amsterdam middle-class to support the zoological society and make it into the cultural centre of the city in the second half of the nineteenth century.

Gouda argues that while displaying colonial power was a crucial aspect of the Dutch

²⁰⁸ As Historian Eric Hobsbawm argues, it is this constructed relation of the present to the pas that functions as a legitimator of (collective) action and as cement of group cohesion. Eric Hobsbawm, "Inventing Traditions," in *The Invention of Tradition*, ed. Eric Hobsbawm and Terence Ranger, Canto (Cambridge: Cambridge University Press, 1992), 12.

²⁰⁹ Mehos, Science and Culture for Members Only, 125–26.

²¹⁰ Bloembergen, *De koloniale vertoning*, 30.

²¹¹ Frances Gouda, *Dutch Culture Overseas: Colonial Practice in the Netherlands Indies 1900-1942.* (Jakarta: Equinox, 2008), 41.

²¹² Ibid., 1–3.

²¹³ Mehos, *Science and Culture for Members Only*, 15.

national identity, the colonial experience also shaped and redefined this identity.²¹⁴ This idea is shared by historian Ann Stoler, who writes that "colonial contexts make clear that bourgeois culture was in question on its social and geographic outposts, among those working out its changing standards."²¹⁵ In the colonies, Stoler argues, "the cultural accoutrements of bourgeois distinction were partially shaped through contrasts forged in the politics and language of race."²¹⁶ Those politics and language of race to which Stoler refers, could be characterised as what literary scholar Edward Said would call an "orientalist discourse". Such a discourse appears to describe the oriental, but in fact, it says more about those who describe than about what it describes. According to Said, orientalism is "more particularly valuable as a sign of European-Atlantic power over the Orient than it is as a veridic discourse about the Orient (which is what, in its academic or scholarly form, it claims to be)."²¹⁷

Said's analysis of the relationship between the east and the west as one that is defined by an unequal distribution of power, or, as he characterises it himself, borrowing Marxist philosopher Antonio Gramsci's terminology, one that is defined by a "cultural hegemony" of the west over the east. Social geographers Felix Driver and Luciana Martins problematise Said's conception of orientalism, and argue that the employment of his theories comes with two risks. One is that such images of the east tend to be conceived as already fully formed, which greatly exaggerates their coherence and consistency, and the other is that it implies that the east is a homogenous screen on which those images can be depicted. Driver and Martins do not discard Said's theories altogether, but, they argue, instead of focussing on European expansion and colonial power, we should focus on the "the extent to which the process of extension is actually transformative of the European sense of culture and history." 219

This is recognised by Stoler too, as she argues that among their colonial subjects in the Netherlands Indies, the Dutch middle-class citizenry found out that its bourgeois identity was not as stable as they thought. It appeared to be of a protean nature instead, as its characteristic focus on self-restraint and self-discipline proved to be rather vulnerable away from home. It was discovered that not only the colonised were driven by a ravenous instinct, as the racial discourses suggested, but various Europeans exhibited those traits too, which meant they

²¹⁴ Gouda, Dutch Culture Overseas: Colonial Practice in the Netherlands Indies 1900-1942., 3.

²¹⁵ Ann Laura Stoler, *Race and the Education of Desire: Foucault's History of Sexuality and the Colonial Order of Things* (Durham: Duke University Press, 1995), 116.

²¹⁶ Ibid., 5.

²¹⁷ Edward Said, *Orientalism* (New York: Vintage Books, 1979), 6.

²¹⁸ Ibid., 7.

²¹⁹ Felix Driver and Luciana de Lima Martins, "Views and Visions of the Tropical World," in *Tropical Visions in an Age of Empire*, ed. Felix Driver and Luciana de Lima Martins (Chicago: University of Chicago Press, 2005), 4–5.

essentially undermined certain bourgeois values and made them improper burghers. Hence, Stoler argues, the civilising mission, which was adopted to restrict those instincts, was directed not only at the colonised, as often assumed, but also at "recalcitrant and ambiguous participants in imperial culture" at home. ²²⁰ As we have seen in chapter two, a sense of social order was cultivated in Artis too, which was internalized by the middle class members of the Society and the general public alike.

The Ethnographic Museum

The contextualisation of Artis in nationalist and imperialist self-definition explains why the Indonesian craftsmen were to meet Wilhelmina in Artis, as it was a place that expressed a Dutch national identity of which its overseas expansion and colonial power was a crucial element, but it does not explain why specifically Artis was selected; there were, after all, other institutes in Amsterdam that also reflected this identity. In order to clarify this, a further exploration of Artis's scientific purpose is necessary. In the prospectus of Artis from 1838, it was stated that the goal of Artis was to advance "the knowledge about Natural History". Initially, the Society's collection consisted of exotic birds and four-legged animals, both alive and stuffed, but it quickly expanded. The stuffed animals were displayed in a zoological museum, a natural historical library was put together, and in 1861, an ethnographic museum was built. In 1904, even the trees, bushes, and flowers in Artis were labelled as if they were objects on display. All those developments were to serve the improvement of knowledge about nature.

The building of the Ethnographic Museum was too small for the expanding collection, and in 1888, when the fiftieth anniversary of the Society was celebrated, its collection was housed in a new building, named *De Volharding* (The Perseverance) (see Figure 6).²²³ Members of the Society

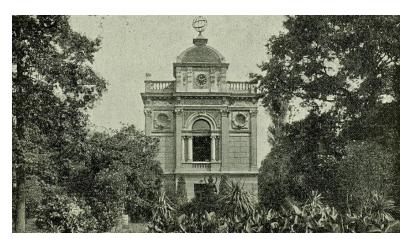


Figure 6. De Volharding in Artis. Picture taken in 1888. From: 'De Volharding,' accessed February 8, 2017, https://www.artis.nl/nl/ontdek/collectie/de-volharding/#content.

²²⁰ Stoler, Race and the Education of Desire, 109.

²²¹ "84: Prospectus Natura Artis Magistra."

²²² Kerbert, "61: Jaarverslag 1903-1904," 15.

²²³ Mehos, Science and Culture for Members Only, 21–22.

brought objects from their expeditions and travels around the world and donated them to the museum, where they were labeled and added to its catalogue. The collection mainly consisted of clothes, jewelry, and weapons, but it did not limit itself to those three categories. In 1902, for example, it also received a statue of a Congolese person and a model of a Javanese house.²²⁴ The one thing all those objects had in common, was that they were created by non-European peoples.

The collection of the Ethnographic Museum in Artis needs to be seen as an exhibitionary counterpart of the scientific fields of ethnology and anthropology that started to emerge in the Netherlands in the late nineteenth century. Around this time, Dutch scientists increasingly started to follow the German scientific tradition as an exemplary model.²²⁵ In the German tradition, as historian Andrew Zimmerman points out, anthropologists made a sharp distinction between Naturvölker ("natural peoples") on the one hand, and Kulturvölker ("cultural peoples") on the other hand. European peoples were generally seen as *Kulturvölker*, as it was thought that they had developed a form of civilisiation resulting from historical developments, ²²⁶ while non-European peoples were generally seen as *Naturvölker*, as it was believed they were part of the world of nature and, since nature was perceived to be a static phenomenon, they were, by definition, excluded from the narrative of progress, historicity, and civilisation. To grasp the true essence of humanity, without having to take the complications of history and civilisation into account, it was thought, one had to study the Naturvölker instead of the Kulturvölker.²²⁷ It was for those reasons that Paul Sarasin argued in his speeches at scientific conferences in the 1910s, that *Naturvölker* should be at the core of international nature conservation. 228 After 1870, the terms "natural people" and "cultural people" started to be used in the Dutch scientific tradition too. 229

In most ethnographic museums in Europe, objects created by people from other

²²⁴ Coenraad Kerbert, "59: Jaarverslag 1901-1902," 1902, 14, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive.

²²⁵ Fenneke Sysling, *Racial Science and Human Diversity in Colonial Indonesia* (Singapore: National University of Singapore Press, 2016), 6.

²²⁶ Both in Germany and in the Netherlands, the terms "civilisation" and "culture" were used interchangeably in the late nineteenth and early twentieth century, which set them apart from the English and the French traditions, where this was not the case. Remieg Aerts and Wessel Krul, "Van hoge beschaving naar brede cultuur, 1780-1940," in *Beschaving: Een geschiedenis van de begrippen hoofsheid, heusheid, beschaving en cultuur*, ed. Pim den Boer (Amsterdam: Amsterdam University Press, 2001), 230–31.

²²⁷ Andrew Zimmerman, *Anthropology and Antihumanism in Imperial Germany* (Chicago: University Of Chicago Press, 2001), 20, 50.

²²⁸ Raf de Bont, "'Primitives' and Protected Areas: International Conservation and the 'Nturalization' of Indigenous People, Ca. 1910–1975," *Journal of the History of Ideas* 76, no. 2 (2015): 219–20, doi:10.1353/ihi.2015.0014.

²²⁹ Aerts and Krul, "Van hoge beschaving naar brede cultuur, 1780-1940," 233.

continents were displayed as if they came from *Naturvölker* too. In most cases, only the form of the object was described, and usually, little attention was paid to their history or their role in society. ²³⁰ In the second half of the nineteenth century, cultural anthropologist Brian Durrans argues, ethnographic museums, like academic anthropology, emerged in different European countries as adjuncts of their expansion and colonialism.²³¹ By displaying objects from the Dutch overseas territories in the Ethnographic Museum, Artis also expressed the colonial power of the Netherlands, and emphasised it as an element of a Dutch national identity it contributed to. The Ethnographic Museum did, however, not only display objects from the Dutch colonies, but also had a section dedicated to areas controlled by other European powers, such as India and Congo, and sections dedicated to independent non-European countries, such as China and Japan. 232 However, in order to work legitimately as symbols of imperial power, Durran points out, ethnographical museums had to avoid explicitly political statements. "They had to retain an image of detached objectivity, and the simplest way to retain that image was by working as they had done before, with a positivist orientation and commitment to science." 233 It is this scientific orientation that led museums to acquire and display things from other parts of the world too. In order to preserve the image of objectivity, a degree of detachment from colonialism was necessary.

From the moment it was founded in 1838 until Kerbert's death in 1927, the primary purpose of Artis had been the advancement of knowledge about natural history. The Ethnographic Museum, which displayed non-European cultures as natural phenomena, needs to be seen in this context too, and this was also the reason why the Indonesian craftsmen were supposed to meet Wilhelmina in the zoo, instead of somewhere else in Amsterdam. They were seen as natural peoples and were therefore placed in the context of an institute dedicated to natural history. However, this display of colonial power that had been commonplace throughout the nineteenth century and the first decade of the twentieth century, quickly started to change thereafter. Although Kerbert wrote in 1913 that "the Society's interest in our

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²³⁰ J.B. Avé, "Ethnographical Museums in a Changing World," in *From Field-Case to Show-Case. Research, Acquisition and Presentation in the Rijksmuseum Voor Volkenkunde (National Museum of Ethnology), Leiden.*, ed. P.H. Pott et al. (Amsterdam: Gieben, 1980), 12–14.

²³¹ Brian Durrans, "The Future of the Other: Changing Cultures on Display in Ethnographic Museums," in *The Museum Time-Machine: Putting Cultures on Display*, ed. Robert Lumley (London; New York: Routledge, 1988), 147

²³² Kerbert, "60: Jaarverslag 1902-1903," 11; Kerbert, "62: Jaarverslag 1904-1905," 14; Kerbert, "65: Jaarverslag 1907-1908," 18.

²³³ Durrans, "The Future of the Other: Changing Cultures on Display in Ethnographic Museums," 30.

colonies is still rising," and repeated this in 1917,²³⁴ the collection of the Ethnographic Museum stopped growing after the first decade of the twentieth century,²³⁵ and in 1921, it was donated entirely to the Colonial Institute in Amsterdam.²³⁶

Nature Conservation in Context

Whereas the Society's interest in the colonies was regularly discussed in the annual reports between 1902 and 1927, it was not mentioned anymore in the years thereafter. The Ethnographic Museum had been removed, Artis had lost its scientific relevance, and its focus came to lie exclusively on its animals. Nevertheless, the colonial connections of the zoo did not disappear altogether. Throughout the 1930s, a considerable number of animals from the Netherlands Indies was still being donated to the zoo by members of the Society.²³⁷ It could furthermore be argued that the conservationist role Artis took on after 1927, was not a dismissal of the colonies, but rather a reflection of and a response to the colonial situation at the time.

In the first two decades of the twentieth century, the colonial rule in the Netherlands-Indies was characterised by the so-called "ethical policy". Dutch rule in the Netherlands-Indies was supposed to be focused on the development of the people in the colony; they were to receive education based on western principles, and the taxes collected in the colony were to be spent there instead of in the Netherlands. This ethical policy, went, however, hand in hand with a further expansion of Dutch rule, which was thought to be necessary to effectuate this development. As historian Elsbeth Locher-Scholten argues, those two decades could therefore be characterised as a time of "ethical imperialism". The emphasis on the development of the colony could be seen as an expression of Dutch colonial self-confidence. The colonial rulers wanted to show how they could effectively unite the peoples of the Indonesian archipelago, maintain peace and order, and be model-colonizers that effectuated modernisation at the same time.²³⁸ When insurgencies inspired by communist thought broke out on Java and Sumatra in 1926 and 1927, the principles of Dutch rule in the Netherlands-Indies changed. In the late

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²³⁴ Coenraad Kerbert, "70: Jaarverslag 1912-1913," 1913, 6, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive. My translation from Dutch. Coenraad Kerbert, "74: Jaarverslag 1916-1917," 1917, 4, 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra, Amsterdam City Archive.

²³⁵ The last time an expansion of the collection was mentioned, was in 1910. Kerbert, "67: Jaarverslag 1909-1910," 25.

²³⁶ Smit, *Artis, een Amsterdamse tuin,* 29.

²³⁷ Sunier, "96: Jaarverslag 1938-1939," 14.

²³⁸ Elsbeth Locher-Scholten, *Ethiek in fragmenten: Vijf studies over koloniaal denken en doen van Nederlanders in de Indonesische archipel 1877-1942* (Utrecht: HES Publishers, 1981), 194–99.

1920s and throughout the 1930s, Dutch colonial rule was not as self-evident as it had been before, and the colonial government became more reactionary and conservative. Its main focus was on peace and order, rather than on development.²³⁹

In her study of the Dutch colonial expositions on the world exhibitions from 1883 till 1931, historian Marieke Bloembergen points out that those exposition reflected the changing colonial situation at the time. On the Dutch colonial expositions at the world exhibition in Amsterdam in 1883, a strong emphasis was laid on difference; everything that indicated the "otherness" of the colony was displayed. On the world exhibitions in 1900 in Paris and in 1910 in Brussels, the Indonesian craft industry and the way the Dutch helped their colonial subjects to develop it, was given prominent attention. The expositions from 1900 and 1910 thus justified the presence of the Dutch in the Netherlands-Indies, entirely in line with the ethical policy. At the world exhibition in Paris in 1931, the focus was shifted again. The enchanting beauty and the profoundly religious aspect of the indigenous culture were highlighted, and the colonial government presented itself as a conservator of this authenticity. After the experience with the insurgencies in the 1920s, it was feared that too much of a focus on development, would arouse an Indonesian national conscious, and therefore, the conservation of indigenous institutes and traditions was strongly emphasised. After all, the colonial status-quo in the Netherlands-Indies had to be maintained. ²⁴⁰ In the first two and a half decades of the twentieth century, Artis proudly displayed colonial power, which could be seen as an expression of the Dutch colonial confidence that gave incentive to the ethical policies at the same time. In the late 1920s and 1930s, Artis took on a conservationist role with regard to its animals, while the colonial government in the Netherlands Indies issued a more conservative policy and represented itself as a conservationist of everything indigenous at the world exhibition in 1931. It could thus be argued that the developments Artis went through, mirror the developments in Dutch colonialism in general.

Conclusion

The changing colonial dimensions in Artis mirror the developments in the colonial expositions on the world exhibitions. In the first two decades of the twentieth century, the Dutch colonial confidence that gave incentive to the ethical policies, was reflected in the way

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²³⁹ Bloembergen, *De koloniale vertoning*, 280–82.

²⁴⁰ Ibid., 283, 315–315, 323–26; As historian Benedict Anderson points out, the genealogy of nationalism in many countries in Asia and in Africa indeed goes back to the way the colonial state defined its territory and its subjects by means of maps, censuses, and museums. It could be argued that the World Exhibitions had the same function as museums here. Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism*, Revised edition (London; New York: Verso, 2006), 163–85.

Artis displayed colonial power as an element of a Dutch national identity. This colonial power was reflected in the exhibitions in the Ethnographic Museum, as well as in the encounter between Wilhelmina and the Indonesian craftsmen in Artis. It is telling that those same craftsmen were to represent those ideas a day later on the world exhibition in Brussels. In 1927, Dutch colonial rule was not as self-evident as it had been before, and Artis started to focus exclusively on the display of animals and took on the role of a site of species conservation. Whereas the proud display of colonial power in Artis mirrors a Dutch colonial confidence in the first two and a half decades of the twentieth century, the conservationist role Artis took on after 1927 and maintained throughout the 1930s, strongly mirrored the Dutch colonial policy at the time, as well as the way the Dutch portrayed indigenous culture at the world exhibition in Paris in 1931. The hypothesis that the developments Artis went through between 1902 and 1941, were connected to developments in Dutch colonialism in general, could therefore be confirmed. It can be concluded that the developments Artis went through between 1902 and 1941 could not be seen separately from the developments in Dutch colonialism in general.

Conclusion

When the Amsterdam zoo was founded in 1838, the advancement of the knowledge about Natural History was established as its primary purpose. Artis was to be an intellectual society that aimed at putting the Netherlands on the map in the international scientific arena. Within a few years of its founding, Artis grew out to become the cultural centre for the privileged middle class of Amsterdam. In the zoo, scientific research was conducted, but it also functioned as a meeting place for the bourgeois citizens of Amsterdam that came together in the zoo for a pleasant walk through the park, to listen to music performances, and to exchange thoughts with like-minded individuals. Simultaneously, Artis functioned as a symbol of a Dutch national identity that was being constructed in the nineteenth century. Whereas art museums such as the Rijksmuseum and the Mauritshuis celebrated the Dutch Golden Age and connected to the Netherlands' past, Artis aimed at the future. By aspiring to compete in the international arena of scientific research, it expressed the conceived progressive aspects and contemporary relevance the Dutch, and by proudly displaying colonial power, it emphasised the Netherlands' relevance as a colonial giant among the other empires controlled by European powers. Artis continued to fulfil those purposes throughout the nineteenth century, but at the turn of the century, this started to change.

In the late nineteenth century, the Municipal University of Amsterdam started to develop more and more into a recognised institute of scientific research and came to replace institutes such as Artis, which started to lose its scientific relevance, while the zoo had to suffer heavy competition from the Concert Hall and the Municipal Theatre in Amsterdam, with regard to the music performances. At the end of the nineteenth century, Artis started to lose its function as the cultural centre of Amsterdam. At the same time, the inhabitants of Amsterdam started to benefit from the industrialisation of the Netherlands, as they had increasingly more money to spend. Entrance to the zoo was demanded, and from 1902 onwards, Artis opened its doors to everyone who was willing and able to pay the reduced entrance fee in September every year. Due to those inexpensive months, people discontinued their membership of the Society, and the zoo came to rely primarily on the incomes from the non-member visits. Although Artis had lost its scientific relevance to the university, the Society initially kept trying to emphasise that Artis was primarily aimed at the advancement of knowledge in natural history. This started to change in 1927. In that year, Sunier replaced Kerbert as director of Artis, the zoo was opened to the general public every day of the year, the purpose of the Society was re-evaluated and adjusted to the public, and new animal

exhibits were being built. It could be stated that while it went through a transition period between 1902 and 1927, Artis had been fully transformed into an openly accessible zoo in the years thereafter.

How did the change of Artis from a closed society to an openly accessible zoo between 1902 and 1941 reflect and influence the way people saw animals, and what consequences did this have for the animals in the zoo? When scientific ideas that blurred the boundary between man and animal started to circulate in society, people started to associate differently with animals, as it was figured that ethical principles that applied to humans could apply to animals too. In the Netherlands, this was institutionalised in the form of an antivivisection movement and a vegetarian association. In 1902, the general public was admitted to Artis, but the purpose of the zoo was not yet adjusted to its interests. Kerbert continued the ideological policy of the nineteenth century and tried to maintain the scientific relevance of Artis. This was reflected in the way the animals were displayed, too, as he had ordered the exhibits according to the Linnaean taxonomic system. The animals were displayed to the public as representatives of scientific categories. When Sunier became the director of Artis in 1927, he adjusted the purpose of the zoo to the new public. Sunier argued that with the increasing threats to natural living conditions of animals in the wild, the scientific, aesthetic, and pedagogical importance of Artis rose. Artis was supposed to be a site of species conservation. While the wilderness disappeared on a global scale, it was supposed to be preserved in the zoo. In order to realise this, new exhibits were tried to recreate the natural living conditions of the animals as accurately as possible. This served the interests of the visitors, who were able to watch the animals as if they were in the wild, on the one hand, and it served the needs of a good animal sustenance on the other hand.

The re-evaluation of the purpose of Artis occurred against the background of developing ideas about nature conservation, which offered Artis the opportunity to reestablish its institutional reputation, on the one hand, and to the background of a more conservative and reactionary colonial policy in the Netherlands-Indies, leading the Dutch to take on a conservationist attitude about everything indigenous in general, on the other hand. It could therefore be argued that Artis was, as Randy Malamud proposes, indeed a representation of imperialist power relations, which served the interests of humans rather than those of animals. The developments Artis went through between 1902 and 1941 did mirror the developments in Dutch colonialism, and the zoo indeed served the interests of the humans that administered it as well as those who visited it, which does indicate the functioning of certain power relations. However, as Michel Foucault argues, power is not only restrictive, it is also a

productive phenomenon. The living conditions of the animals improved, which is indicated by the significant raise in births among the animals of which their exhibits were adjusted to their natural habitats, and the health of the animals in general became a recurring section in the annual reports from 1934 on. The concern for the well-being of animals that started to circulate in society in the first half of the twentieth century, was thus reflected in the policy of Artis too.

Malamud's characterisation of the zoo as a representation of imperialist power relations is built upon the idea that in zoos, nature is surmounted with and therefore dominated by culture. The animal exhibits that were built in Artis after 1927 were supposed to represent nature, and although their artificialness was obscured as much as possible, they were still separated from the public by means of moats or rock formations. However, to conclude that this means that nature was surrounded with, and therefore dominated by culture, would mean that both culture and nature had an ontological status that not only separated them, but also related them negatively to each other, while in fact, as Bruno Latour argues, "the very notion of culture, is an artefact created by bracketing Nature off. Cultures – different or universal – do not exist, any more than Nature does."²⁴¹ In other words, the conceptual understanding of culture was inherently tied to the conceptual understanding of nature, which means that both were are grafted upon each other, rather than negatively defined against each other. What was supposed to be "nature" was, in Artis, just as artificial as culture was, as it was literally built by humans to accommodate animals. It cannot be denied that certain power relations were at work in Artis, but they did not operate on a conceptual level. Instead, they operated productively on the behaviour of the visitors, as it caused them to internalise ideas of social order, and it operated on the behaviour of the animals as it caused them to increase their procreative activities.

It could be concluded that the history of Artis reveals aspects of the history of institutional science, of bourgeois culture in the late nineteenth and early twentieth century, of the results of the industrialisation in Amsterdam in the late nineteenth century, of the economic crisis of the 1930s and its influence on cultural institutes, and of the developments of Dutch colonialism between 1900 and 1940. With regard to the history of human attitudes toward animals, which is often the focus of animal history, it could be stated that the animals were initially treated as representatives of biological taxonomic categories, but after a more broadly interested public was admitted to the zoo, the animals were seen as beings that could

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²⁴¹ Latour, We Have Never Been Modern, 104-9.

be appreciated for many other reasons too. Therefore, they were displayed in their natural living conditions and protected from extinction in the zoo. Due to the opening of Artis to the general public, a concern for the well-being of animals was adopted in Artis, which is telling about the attitude of humans toward animals at the time. People not only confined animals, but also studied them, admired them, and cared for them. Animals were not considered to be the same as humans, as a sense of difference was continuously maintained, but people related to them nonetheless.

As Erica Fudge wrote, "by rethinking our past – reading it for the animals as well as the humans – we can begin a process that will only come to fruition when the meaning of 'human' is no longer understood in *opposition* to 'animal.'"²⁴² As the developments Artis went through between 1902 and 1941, also had significant consequences for the animals, this history needs to be read for the animals as well. Sunier re-evaluated the purpose of Artis, but in order to realise this, a certain activity of the animals was required too. As Latour argues, both human and non-human entities can be seen as "actants", as something that acts or to which activity is granted by others, and in the annual reports of Artis, animal activity is described multiple times. As pointed out in chapter three, the animal exhibits that were built after 1927, "should provide the animal the opportunity to show what it can do with its body", and in a "well managed zoo", which Artis was supposed to be, the animals were to procreate more easily in order to secure the survival of their species. According to its re-evaluated purpose, Artis was supposed to have scientific, aesthetic, and pedagogical relevance, which could only be achieved when the animals actively showed how they lived in "the wilderness", and this wilderness was supposed to be recreated and preserved in Artis, in order to prevent species from going extinct, which could only be achieved if the animals actively procreated. As Latour argues, activity implies no special motivation of an actor, which means that animals actively contributed to the realisation of the purpose of Artis just as much as humans did. The animals were thus no passive objects in the history of Artis, and they too benefitted from the changes between 1902 and 1941. The development of Artis from a closed society to an openly accessible zoo led, for the animals, to an improvement in their living conditions, in their sustenance, and, in some cases, it led to the survival of their species as well.

While Artis nowadays participates as a member of the European Association of Zoos and Aquaria (EAZA) in campaigns to bring animal species that are threatened with extinction under the attention of the general public in order to raise money for protection projects, the

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²⁴² Fudge, "A Left-Handed Blow: Writing the History of Animals," 16.

origins of this function are to be found in the late 1920s. As a consequence of the development of Artis from a closed society to an openly accessible zoo, Artis took on the role of a site of species conservation. In the years thereafter, Artis did not yet necessarily put the interests of the animals above anything else, and only thereafter found ways for humans to observe them, as a morally responsible zoo should do, according to Peter Singer, but it did display a certain concern for the well-being of the animals that started to grow overtime. By describing amd contextualising the developments Artis went through between 1902 and 1941, and focusing on the motivations of the Society and the interests of the visitors, without entirely discarding semiotic implications and power relations that were involved with them, I hope to have made a contribution to the history of zoos in the early twentieth century. Furthermore, by reading this history not only for humans by exploring the reflection of their attitudes towards animals in Artis, but also taking into account their active contribution of the zoo animals to the developments Artis went through, as well as the consequences those developments had for them, I hope to have made a contribution to the field of animal history too. A sense of difference between man and animal was maintained in Artis throughout the first half of the twentieth century, but this does not mean that the animals were seen as completely passive objects.

Sources

Archives

Amsterdam City Archive. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra:

- "3053: Tijdschriften- en courantenknipsels, 1927-1942," 1942 1927. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Kerbert, Coenraad. "57: Jaarverslag 1899-1900," 1900. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Kerbert, Coenraad. "59: Jaarverslag 1901-1902," 1902. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Kerbert, Coenraad. "60: Jaarverslag 1902-1903," 1903. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Kerbert, Coenraad. "61: Jaarverslag 1903-1904," 1904. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Kerbert, Coenraad. "62: Jaarverslag 1904-1905," 1905. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Kerbert, Coenraad. "65: Jaarverslag 1907-1908," 1908. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Kerbert, Coenraad. "66: Jaarverslag 1908-1909," 1909. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Kerbert, Coenraad. "67: Jaarverslag 1909-1910," 1910. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Kerbert, Coenraad. "70: Jaarverslag 1912-1913," 1913. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Kerbert, Coenraad. "71: Jaarverslag 1913-1914," 1914. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Kerbert, Coenraad. "72: Jaarverslag 1914-1915," 1915. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Kerbert, Coenraad. "73: Jaarverslag 1915-1916," 1916. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Kerbert, Coenraad. "74: Jaarverslag 1916-1917," 1917. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.

- Kerbert, Coenraad. "77: Jaarverslag 1919-1920," 1920. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Kerbert, Coenraad. "78: Jaarverslag 1920-1921," 1921. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Kerbert, Coenraad. "80: Jaarverslag 1922-1923," 1923. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Kerbert, Coenraad. "83: Jaarverslag 1925-1926," 1923. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Sunier, Armand Louis Jean. "85: Jaarverslag 1927-1928," 1928. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Sunier, Armand Louis Jean. "89: Jaarverslag 1931-1932," 1932. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Sunier, Armand Louis Jean. "90: Jaarverslag 1932-1933," 1933. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Sunier, Armand Louis Jean. "91: Jaarverslag 1933-1934," 1934. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Sunier, Armand Louis Jean. "94: Jaarverslag 1936-1937," 1937. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.
- Sunier, Armand Louis Jean. "96: Jaarverslag 1938-1939," 1939. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive.

Amsterdam City Archive. 399: Archief van de Familie Westerman en Aanverwante Families:

"84: Prospectus Natura Artis Magistra," 1838. 399: Archief van de Familie Westerman en Aanverwante Families. Amsterdam City Archive.

Newspaper Articles

- "Alpensteenbok beheerscht bergdierenrots." De Telegraaf, July 24, 1941.
- "September in Artis." Geïllustreerd zondagsblad van Het volksblad, September 15, 1901.
- "Het koninklijk bezoek." De Telegraaf, September 30, 1910.
- "Het koninklijk bezoek van zondag." Algemeen Handelsblad, May 30, 1910.
- "Koninklijk bezoek aan Amsterdam." Nieuwe Rotterdamsche Courant, May 29, 1910.

Printed Sources

Bakker, Gerbrand. *Natuur- en geschiedkundig onderzoek aangaande den oorspronkelijken stam van het menselijk geslacht*. Haarlem: Francois Bohn, 1810.

- Blumenbach, Johann Friedrich. *Abbildungen naturhistorischer Gegenstände*. Göttingen: Heinrich Dieterich, 1810.
- Blumenbach, Johann Friedrich. *The correspondence of Johann Friedrich Blumenbach*. *Volume IV: 1791-1795, letters 645-965*. Edited by Frank William Peter Dougherty and Norbert Klatt. Göttingen: Norbert Klatt Verlag, 2012.
- Camper, Petrus. "Redevoering over den oorsprong en kleur der zwarten." *De Rhapsodist* 2 (1773): 373–94.
- Doornik, Jacobus Elisa. Wijsgeerig-natuurkundig onderzoek aangaande den oorspronglijken mensch, en de oorspronglijke stammen van dezelfs geslacht. Amsterdam: J.S. van Esveldt-Holtrop, Koninglijk boekhandlaar, 1808.
- Hagenbeck, Carl. *Von Tieren und Menschen. Erlebnisse und Erfahrungen*. Berlin: Vita Deutsches Verlagshaus, 1909.
- Marum, Martinus van. "Brief van dr. Van Marum aan den schrijver van dit weekblad over eene orang-outang." *Algemeene Konst- en Letterbode* 281 (November 15, 1793): 153–55.
- Linnaeus, Carolus. *Systema naturae*. Leiden: Apud Theodore Haak: Ex Typographia Joannis Wilhelmi de Groot, 1735.
- Rousseau, Jean-Jacques. *Du contrat social | Discours sur les sciences et les arts | Discours sur l'origine de l'inégalité parmi les hommes*. Paris: Union Générale d'Éditions, 1963. "Zoology and Eugenics." *The Lancet* 203, no. 5247 (March 1924): 610–11.

^{*}The picture on the front page is from: 4514: Apen. 80 foto's, 7 prentbriefkaarten en 1 schets. 395: Archief van het Koninklijk Zoölogisch Genootschap Natura Artis Magistra. Amsterdam City Archive

Literature

- Abbenhuis, Maartje M. *The Art of Staying Neutral: The Netherlands in the First World War,* 1914-1918. Amsterdam: Amsterdam University Press, 2006.
- Aerts, Remieg. "Alles in verhouding. De burgerlijkheid van Nederland." In *De stijl van de burger: Over Nederlandse burgerlijke cultuur vanaf de middeleeuwen*, edited by Remieg Aerts and Henk te Velde, 272–300. Kampen: Kok Agora, 1998.
- Aerts, Remieg, and Wessel Krul. "Van hoge beschaving naar brede cultuur, 1780-1940." In *Beschaving: Een geschiedenis van de begrippen hoofsheid, heusheid, beschaving en cultuur*, edited by Pim den Boer, 213–54. Amsterdam: Amsterdam University Press, 2001.
- Åkerberg, Sofia. "Knowledge and Pleasure at Regent's Park: The Gardens of the Zoological Society of London during the Nineteenth Century." PhD dissertation, Department of Historical Studies, Umeå University, 2001.
- Anderson, Benedict. *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. Revised edition. London; New York: Verso, 2006.
- Avé, J.B. "Ethnographical Museums in a Changing World." In *From Field-Case to Show-Case. Research, Acquisition and Presentation in the Rijksmuseum Voor Volkenkunde (National Museum of Ethnology), Leiden.*, edited by P.H. Pott, Willem R. van Gulik, H.S. van der Straaten, and G.D. van Wengen, 11–28. Amsterdam: Gieben, 1980.
- Baratay, Éric, and Élisabeth Hardouin-Fugier. *Zoo: A History of Zoological Gardens in the West.* London: Reaktion Books, 2002.
- Bennett, Tony. "The Exhibitionary Complex." New Formations 4 (1987): 73–102.
- Blancke, Stefaan. "Lord Monboddo's Ourang-Outang and the Origin and Progress of Language." In *The Evolution of Social Communication in Primates*, edited by Marco Pina and Nathalie Gontier, 31–44. Cham: Springer International Publishing, 2014. doi:10.1007/978-3-319-02669-5_2.
- Bloembergen, Marieke. *De koloniale vertoning: Nederland en Indië op de wereldtentoonstellingen (1880-1931)*. Amsterdam: Wereldbibliotheek, 2002.
- Bont, Raf de. "Borderless Nature: Experts and the Internationalization of Nature Protection, 1890-1940." In *Scientists' Expertise as Performance: Between State and Society, 1860-1960*, edited by Joris Vandendriessche, Evert Peeters, and Kaat Wils, 49–65. London: Pickering & Chatto, 2015.

- Bont, Raf de. "Primitives' and Protected Areas: International Conservation and the 'Nturalization' of Indigenous People, Ca. 1910–1975." *Journal of the History of Ideas* 76, no. 2 (2015): 215–36. doi:10.1353/jhi.2015.0014.
- Bos, Dennis. "Oproer en overleg: Socialisten tussen conflict en consensus." In *Harmonie in Holland: Het poldermodel van 1500 tot nu*, edited by Maurits Ebben and Henk te Velde, 152–75. Amsterdam: Uitgeverij Bert Bakker, 2007.
- Bostock, Stephen St. C. *Zoos and Animal Rights: The Ethics of Keeping Animals*. London; New York: Routledge, 2004.
- Bourke, Joanna. What It Means to Be Human: Reflections from 1791 to the Present. London: Virago, 2013.
- Bynum, William Frederick. *Science and the Practice of Medicine in the Nineteenth Century*.

 Cambridge: Cambridge University Press, 1995.
- Cribb, Robert, Helen Gilbert, and Helen Tiffin. Wild Man from Borneo: A Cultural History of the Orangutan. Honolulu: University of Hawai'i Press, 2014.
- Derrida, Jacques. *The Animal That Therefore I Am*. New York: Fordham University Press, 2008.
- Dolphijn, Rick, and Iris van der Tuin. "Pushing Dualism to an Extreme: On the Philosophical Impetus of a New Materialism." *Continental Philosophy Review* 44, no. 4 (November 1, 2011): 383–400. doi:10.1007/s11007-011-9197-2.
- Doorn, Cornelis van. 125 Jaar Diergaarde: 1857 mei 1982. Rotterdam: Stichting Koninklijke Rotterdamse Diergaarde, 1982.
- Dougherty, Frank William Peter. Gesammelte Aufsätze zu Themen der klassischen Periode der Naturgeschichte / Collected essays on themes from the classical period of natural history. Göttingen: Klatt, 1996.
- Driver, Felix, and Luciana de Lima Martins. "Views and Visions of the Tropical World." In *Tropical Visions in an Age of Empire*, edited by Felix Driver and Luciana de Lima Martins, 3–20. Chicago: University of Chicago Press, 2005.
- Durrans, Brian. "The Future of the Other: Changing Cultures on Display in Ethnographic Museums." In *The Museum Time-Machine: Putting Cultures on Display*, edited by Robert Lumley, 144–69. London; New York: Routledge, 1988.
- Forbes, Robert Jacobus. *Martinus van Marum. Life and Work. Volume II*. Haarlem: H.D. Tjeenk Willink, 1970.
- Foucault, Michel. *Power/Knowledge: Selected Interviews and Other Writings*, 1972-1977. Edited by Colin Gordon. New York: Pantheon Books, 1980.

- Fudge, Erica. "A Left-Handed Blow: Writing the History of Animals." In *Representing Animals*, edited by Nigel Rothfels, 3–18. Bloomington: Indiana University Press, 2002.
- Furnée, Jan Hein. *Plaatsen van beschaafd vertier: Standsbesef en stedelijk cultuur in Den Haag, 1850-1890.* Amsterdam: Uitgeverij Bert Bakker, 2012.
- Gouda, Frances. *Dutch Culture Overseas: Colonial Practice in the Netherlands Indies 1900-1942*. Jakarta: Equinox, 2008.
- Gross, Charles G. "Hippocampus Minor and Man's Place in Nature: A Case Study in the Social Construction of Neuroanatomy." *Hippocampus* 3, no. 4 (October 1993): 403–15. doi:10.1002/hipo.450030403.
- Hall, Stuart. "Introduction." In *Representation: Cultural Representations and Signifying Practices*, edited by Stuart Hall, 1–12. Culture, Media, and Identities. London; Thousand Oaks, Calif: Sage in association with the Open University, 1997.
- Hancocks, David. "The Design and Use of Moats and Barriers." In *Wild Mammals in Captivity: Principles and Techniques*, edited by Devra G. Kleiman, Mary E. Allen, Katherina V. Thompson, and Susan Lumpkin, 191–203. Chicago: University of Chicago Press, 1996.
- Hancocks, David. "The History and Principles of Zoo Exhibition." In Wild Mammals in Captivity: Principles and Techniques for Zoo Management, edited by Devra G.
 Kleiman, Katerina V. Thompson, and Charlotte Kirk Baer, Second edition., 121–36.
 Chicago: University of Chicago Press, 2010.
- Haraway, Donna. "A Cyborg Manifesto: Science, Technology and Socialist Feminism in the Late Twentieth Century." In *The Cybercultures Reader*, edited by David Bell and Barbara M. Kennedy, 291–324. London; New York: Routledge, 2000.
- Haraway, Donna. *Primate Visions: Gender, Race, and Nature in the World of Modern Science*. New York: Routledge, 1989.
- Harrison, Peter. "Descartes on Animals." *The Philosophical Quarterly* 42, no. 167 (April 1992): 219. doi:10.2307/2220217.
- Heide, Janneke van der. *Darwin en de strijd om de beschaving in Nederland, 1859-1909*. Amsterdam: Wereldbibliotheek, 2009.
- Heide, Janneke van der. "Haeckel in Holland. Nederlandse correspondentie aan een Duits darwinist en monist." *Gewina* 25, no. 2 (2002): 99–112.

- Hoage, R.J., and William A. Deiss, eds. *New Worlds, New Animals: From Menagerie to Zoological Park in the Nineteenth Century*. Baltimore: Johns Hopkins University Press, 1996.
- Hobsbawm, Eric. "Inventing Traditions." In *The Invention of Tradition*, edited by Eric Hobsbawm and Terence Ranger, 1–14. Canto. Cambridge: Cambridge University Press, 1992.
- Hochadel, Oliver. "Science in the 19th-Century Zoo." *Endeavour* 29, no. 1 (March 2005): 38–42. doi:10.1016/j.endeavour.2004.11.002.
- Hudson, Nicholas. "From 'Nation' to 'Race': The Origin of Racial Classification in Eighteenth-Century Thought." *Eighteenth-Century Studies* 29, no. 3 (1996): 247–64. doi:10.1353/ecs.1996.0027.
- Kete, Kathleen. *The Beast in the Boudoir: Petkeeping in Nineteenth-Century Paris*. Berkeley: University of California Press, 1994.
- Keulartz, Jozef. "Ethics of the Zoo." Oxford Research Encyclopedia of Environmental Science, 2017. doi:10.1093/acrefore/9780199389414.013.162.
- Kluveld, Amanda. Reis door de hel der onschuldigen: De expressieve politiek van de Nederlandse anti-vivisectionisten, 1890-1940. Amsterdam: Amsterdam University Press, 2000.
- Knegtmans, Peter Jan. *Professoren van de Stad: Het Athenaeum Illustre En de Universiteit van Amsterdam, 1632-1960.* Amsterdam: Amsterdam University Press, 2007.
- Kohlstedt, Sally Gregory. "Reflections on Zoo History." In *New Worlds, New Animals: From Menagerie to Zoological Park in the Nineteenth Century*, edited by R.J. Hoage and William A. Deiss, 3–7. Baltimore: Johns Hopkins University Press, 1996.
- Kuiper, Yme. "Aristocraten contra burgers. Couperus' Boeken der kleine zielen en het beschavingsdefensief rond 1900." In *De stijl van de burger: Over Nederlandse burgerlijke cultuur vanaf de middeleeuwen*, edited by Remieg Aerts and Henk te Velde, 186–217. Kampen: Kok Agora, 1998.
- Latour, Bruno. "On Actor-Network Theory. A Few Clarifications." *Soziale Welt : Zeitschrift Für Wissenschaft Und Praxis Des Sozialen Lebens*, no. 4 (1996): 369–81.
- Latour, Bruno. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford; New York: Oxford University Press, 2007.
- Latour, Bruno. We Have Never Been Modern. Cambridge, Massachusetts: Harvard University Press, 1993.

- Locher-Scholten, Elsbeth. Ethiek in fragmenten: Vijf studies over koloniaal denken en doen van Nederlanders in de Indonesische archipel 1877-1942. Utrecht: HES Publishers, 1981.
- Malamud, Randy. *Reading Zoos: Representations of Animals and Captivity*. Basingstoke: Macmillan, 1998.
- Maple, Terry L. "Toward a Responsible Zoo Agenda." In *Ethics on the Ark: Zoos, Animal Welfare, and Wildlife Conservation*, edited by Bryan G. Norton, Michael Hutchins, Elizabeth E. Stevens, and Terry L. Maple, 20–30. Washington: Smithsonian Institution Press, 1995.
- Mehos, Donna C. Science and Culture for Members Only: The Amsterdam Zoo Artis in the Nineteenth Century. Amsterdam: Amsterdam University Press, 2006.
- Meijer, Miriam Claude. *Race and Aesthetics in the Anthropology of Petrus Camper* (1722-1789). Studies in the History of Ideas in the Low Countries, nr. 4. Amsterdam; Atlanta, GA: Rodopi, 1999.
- Mijnhardt, Wijnandus W. *Tot heil van 't menschdom: culturele genootschappen in Nederland,* 1750-1815. Amsterdam: Rodopi, 1988.
- Mitchell, Timothy. *Colonising Egypt*. Berkeley; Los Angeles; London: University of California Press, 1988.
- Mullan, Bob, and Garry Marvin. *Zoo Culture*. Second edition. Urbana: University of Illinois Press, 1999.
- Niekerk, Carl. "Man and Orangutan in Eighteenth-Century Thinking: Retracing the Early History of Dutch and German Anthropology." *Monatshefte* 96, no. 4 (2004): 477–502. doi:0026-9271/2004/0004/477.
- Nieuwendijk, J.G. "125 Jaar Natura Artis Magistra." Ons Amsterdam 15, no. 4 (1963): 97–
- Noordman, Jan. *Om de kwaliteit van het nageslacht: Eugenetica in Nederland 1900-1950*. Nijmegen: Sun, 1989.
- Regan, Tom. "Are Zoos Morally Defensible?" In *Ethics on the Ark: Zoos, Animal Welfare*, and *Wildlife Conservation*, edited by Bryan G. Norton, Michael Hutchins, Elizabeth E. Stevens, and Terry L. Maple, 38–51. Washington: Smithsonian Institution Press, 1995.
- Regan, Tom. *The Case for Animal Rights*. Berkeley, Los Angeles: University of California Press, 2004.
- Reichenbach, Herman. "A Tale of Two Zoos. The Hamburg Zoological Garden and Carl Hagenbeck's Tierpark." In *New Worlds, New Animals: From Menagerie to Zoological*

- Park in the Nineteenth Century, edited by R. J. Hoage and William A. Deiss, 51–62. Baltimore: Johns Hopkins University Press, 1996.
- Ritvo, Harriet. "On the Animal Turn." *Daedalus* 136, no. 4 (2007): 118–22. doi:10.1162/daed.2007.136.4.118.
- Ritvo, Harriet. *The Animal Estate: The English and Other Creatures in the Victorian Age*. Cambridge, Massachusetts: Harvard University Press, 1987.
- Romein, Jan. Op het breukvlak van twee eeuwen. Amsterdam: Querido, 1976.
- Rothfels, Nigel. *Savages and Beasts: The Birth of the Modern Zoo*. Baltimore; London: Johns Hopkins University Press, 2002.
- Said, Edward. Orientalism. New York: Vintage Books, 1979.
- Schellekens, Huub, and Rob. P. W Visser. *De genetische manipulatie*. Amsterdam: Meulenhoff informatief, 1987.
- Sens, Angelie. "Dutch Debates on Overseas Man and His World, 1770-1820." In *Colonial Empires Compared: Britain and the Netherlands, 1750-1850; Papers Delivered to the Fourteenth Anglo-Dutch Historical Conference, 2000*, edited by Bob Moore and Henk F. K. van Nierop, 77–93, 2003.
- Singer, Peter. Animal Liberation. New York: Ecco, 2002.
- Singer, Peter. "You Ask The Questions." *The Independent*, October 9, 2006.
- Sliggers, Bert. "De exotische mens als amusement. Levende tentoonstellingsobjecten in Nederland." In *De exotische mens: andere culturen als amusement*, edited by Patrick Allegaert and Bert Sliggers, 9–35. Tielt: Lannoo, 2009.
- Smit, Pieter. Artis, een Amsterdamse tuin. Amsterdam: Rodopi, 1988.
- Smit, Pieter. "Sunier, Armand Louis Jean (1886-1974)." *Biografisch Woordenboek van Nederland*, December 11, 2013. URL:http://resources.huygens.knaw.nl/bwn1880-2000/lemmata/bwn2/sunier.
- Stocking, George W. Victorian Anthropology. New York; London: Free Press, 1987.
- Stoler, Ann Laura. *Race and the Education of Desire: Foucault's History of Sexuality and the Colonial Order of Things*. Durham: Duke University Press, 1995.
- Stuurman, Siep. Wacht op onze daden: Het liberalisme en de vernieuwing van de Nederlandse staat. Amsterdam: Uitgeverij Bert Bakker, 1992.
- Sysling, Fenneke. *Racial Science and Human Diversity in Colonial Indonesia*. Singapore: National University of Singapore Press, 2016.
- "The Rio Conventions." Accessed July 17, 2017. https://www.cbd.int/rio.

- The World Zoo Organization. *The World Zoo Conservation Strategy: The Role of the Zoos and Aquaria of the World in Global Conservation*. Brookfield: Chicago Zoological Society, 1993.
- Turnbull, David. "Travelling Knowledge: Narratives, Assemblage and Encounters." In *Instruments, Travel, and Science: Itineraries of Precision from the Seventeenth to the Twentieth Century*, edited by Marie-Noëlle Bourguet, Christian Licoppe, and Heinz Otto Sibum, 273–95. Routledge Studies in the History of Science, Technology, and Medicine. London; New York: Routledge, 2002.
- Velde, Henk te. "Herenstijl en burgerzin. Nederlandse burgerlijke cultuur in de negentiende eeuw." In *De stijl van de burger: Over Nederlandse burgerlijke cultuur vanaf de middeleeuwen*, edited by Remieg Aerts and Henk te Velde. Kampen: Kok Agora, 1998.
- Velde, Henk te, and Remieg Aerts. "Inleiding." In *De stijl van de burger: Over Nederlandse burgerlijke cultuur vanaf de middeleeuwen*, edited by Remieg Aerts and Henk te Velde, 9–27. Kampen: Kok Agora, 1998.
- Verdonk, Dirk-Jan. Het dierloze gerecht: Een vegetarische geschiedenis van Nederland. Amsterdam: Boom, 2009.
- Waal, Frans de. Chimpanzee Politics. New York: Harper and Row, 1982.
- "Welzijn in plaats van vermaak." Trouw, June 17, 2013.
- Werner, Michael, and Bénédicte Zimmermann. "Beyond Comparison: Histoire Croisée and the Challenge of Reflexivity." *History and Theory* 45, no. 1 (February 1, 2006): 30–50. doi:10.1111/j.1468-2303.2006.00347.x.
- Wielenga, Friso. Nederland in de twintigste eeuw. Amsterdam: Boom, 2009.
- Wirtz, Patrick H. "Zoo City: Bourgeois Values and Scientific Culture in the Industrial Landscape." *Journal of Urban Design* 2, no. 1 (February 1997): 61–82. doi:10.1080/13574809708724396.
- Zanden, Jan Luiten van. De dans om de gouden standaard: Economisch beleid in de depressie van de jaren dertig. Amsterdam: Vrije Universiteit, 1988.
- Zanden, Jan Luiten van. De industrialisatie in Amsterdam, 1825-1914. Bergen: Octavo, 1987.
- Zimmerman, Andrew. *Anthropology and Antihumanism in Imperial Germany*. Chicago: University Of Chicago Press, 2001.