The tiger and the tram. Zoos as an urban wilderness.

The transformation of the zoological garden

Blijdorp Zoo in Rotterdam has a new Asia section. You find yourself wandering through bamboo forests, passing a copy of the Angkor Wat temple, because the original, of course, is in Cambodia, and then suddenly you find yourself face to face with the rare Sumatran tiger. It gives you a start, but fortunately not for long. Because you then notice the glass wall and at the same time you also hear the screeching sound of the tram taking the bend in the Van Aerssenlaan, a little further up the street. For the tiger too, it is a familiar sound, because he doesn't even look up, just like the tigers in Hagenbeck's zoo in Hamburg which totally ignore the planes constantly landing and taking off just above their housing.

The first time I visited Blijdorp, some 60 years ago, the tigers were not behind glass at all. At the time they were housed in an architectural wonder. Animal housing designed by Sybold van Ravesteyn, a predator gallery with an elegant symmetry, with terraces, few bars and a moat to protect the viewing public.² Van Ravesteyn was initially an adept in the new style of building but combined it in the 1930s with a sort of Tuscan baroque with pillars and curlicues, and concrete walls that looked padded. He was associated with the Netherlands Railways (NS) where he caused a commotion with his modern signal boxes which, and which in his Italian phase, led to very distinctive station buildings, culminating in Utrecht Station. In 1939 he also built the offices of the insurance company Verzekeringsmaatschappij Holland in Dordrecht which, in terms of its architecture, very much resembles Blijdorp and, almost at the same time also in Dordrecht, in the rather angular Kunstmin theatre he created a glamorous Hollywood-style palace.³

Blijdorp was a complete design. The old Rotterdam zoo in the centre between the Delftse Poort and Kruiskade stations was too much in the way and had to be moved. The moment chosen for this, 1940, was rather unfortunate, because while the new zoo was still under construction the old one was bombed.

¹ English version of the farewell speech given on 1 February 2010 in the great hall of the University of Groningen.

² Joh. De Vries, Ir. S. van Ravesteyn, Diergaarde Blijdorp (Rotterdam 1986).

³ His architecture was controversial. His admiration of Italian architecture, design elements of which the Fascist regime also made use of, was held against him. After the war his style moved more in the direction of the Delft school of Granpré Molière, as shown by the stations of Nijmegen, Vlissingen, Gouda and Den Bosch. See Kees Rouw, *Sybold van Ravesteyn. Architect van Kunstmin en De Holland* (Rotterdam 1988). But this shifted again in the much more modern Rotterdam Central Station.

This was humorously written about, particularly about the sea lions who ended up in the canal, but it was, of course, a catastrophe. Those of the animals that had survived were quickly transferred. Not the tigers unfortunately, because, like the other predators, they were shot because of the risk of escape.⁴



Predators gallery in Blijdorp Zoo by Van Ravesteyn, 1982 (photo Pim Kooij)

 $^{^4}$ K. van Zwieten, C. van Doorn, $\it 125$ jaar diergaarde (Rotterdam 1982) 31.

But after the war new tigers arrived, Siberian ones, which were already rare even then. They were given a concrete shelter, a nicely adapted home with a comfortable indoor section. Why are they no longer there? This is because there was a shift in what zoos saw as their objective. They no longer wanted to be just a menagerie, an ordered display of safely caged animals, but to offer a perceptive experience in which people can wander through the jungle. Although it should not be too natural either. Because should there be a direct encounter between human and animal, a gorilla in this case, it can turn out be more complicated than people might have thought.⁵

This is what I want to talk about today. The changing roles of zoos. This is not just because zoos have held a life-long fascination for me, but also because this subject gives me an opportunity to combine both the Groningen and the Wageningen work. In Groningen I am mainly involved with the urban environment and in Wageningen with green space. Zoos combine both these elements, as I have already shown, but in the past this combination has taken various forms. I will try to see if there is a pattern in this.

Zoos up until the 19th century

I will not cover the early history of zoos in any great detail. Menageries were already known to exist in classical antiquity beyond just the livestock kept for the Coliseum, which was more of a commodity. Some Pharaohs had already created real menageries, while Alexander the Great also built up an extensive collection in Alexandria.

Zoos were an expensive hobby, and it was thus only those at the top of the human social hierarchy who could afford them. Essentially it was mainly rulers and monarchs who kept menageries, in which exotic animals were a desired gift in forging a relationship. Charlemagne, for example, received an elephant from the Caliph of Baghdad, Harun al-Rashid. This elephant however did not live in a zoo, but travelled with Charlemagne, although more peaceably than Hannibal's elephants. He died, as it happens, on the battlefield in 810, in a battle with the Danes. The German emperors Otto I and Otto III had what were large collections for the time, which included lions and ostriches. Animal collections were often ambulant during the Middle Ages. Frederick II, for example, was accompanied during his trip through Italy in 1245 by five leopards, 24 camels and an elephant. The first real zoos were created in the late Middle Ages, such as the princely collections in Angers and Nancy.

In England too, a royal menagerie was set up by Henry I at Woodstock which, among other things, included lions, leopards, lynx and camels. Henry III

⁵ On 18 May 2007 the gorilla Bokito jumped over a moat thought to be impassable and out of anger attacked a member of the public who visited him almost daily and smiled at him, which was seen as a threat. He bit her many times and caused havoc in the restaurant before he could be sedated.

⁶ Raymond van Uytven, De papegaai van de paus. Mens en dier in de Middeleeuwen (Leuven/Zwolle 2003) 264.

⁷ Van Uytven, De papegaai van de paus, 264.

had it moved in 1252 to London, to the foot of the Tower. There was also a polar bear which, secured to a rope, could catch its own food in the river Thames. And two years later, an elephant arrived, a gift from Henry's son-in-law, Louis IX of France, who also kept his own menagerie.⁸

A number of Popes also collected animals. Clemens VI had a bear in Avignon, a deer, a wild boar and a lioness. And almost every Pope in the late Middle Ages kept parrots. These were ring-necked parakeets, originally from Africa and India, which had already been brought to Europe as cage and aviary birds in ancient times. Real parrots arrived at the start of the 16th century from the new colonies, together with a great many more new animals. Philip I of Castile already kept wild buffalo, rheas and turkeys. And as early as 1515 the first rhinoceros was brought to Europe, to Lisbon. It was an Indian rhinoceros which had been given to the Portuguese viceroy by a local sultan. The viceroy, Alfonso de Albuquerque, sent it on to King Manuel I. Who in turn, presented it as a gift to the Pope, but the animal never arrived in Rome because it drowned during a storm at sea. It was of this rhinoceros that Dürer made his famous drawing. He based it on hearsay, but nevertheless managed to create a reasonable likeness, apart from the extra horn on its back.

But what was actually the purpose of all these menageries? Perhaps in part entertainment, because one ruler was more serious in the collection of animals than another. Frederick II and Louis XI were ardent collectors. But the most important function of these early collections was essentially to underline the high status of their owners. Anyone who was a ruler had their own private zoo. And by making gifts of animals to one another, they confirmed their status among one another. Exchange even more so, since this made them equals. Frederick II, for example, exchanged a white bear for a giraffe with the sultan of Egypt.

Some animals, however, were added to the domesticated band of working horses, dogs and birds. Leopards, for example, were used for hunting, but there was still a boundary between birds of prey and pet birds, which was less the case with poultry. Keith Thomas describes how during the 17th and 18th centuries people in North West Europe started to develop more sympathy for animals and began to oppose cruelties, such as Spanish bullfighting. But this does not detract from the fact that people dealt with animals in an entirely utilitarian manner; they were there for the benefit and enjoyment of people.

This is a remarkable observation. In this same period, alongside the utilitarian view, a different attitude towards nature started to arise which can be termed as arcadian-paradisiacal. It first began in England, but soon took hold in the Dutch Republic and other countries, where the elite started leaving the cities which they found to be too dirty, unhealthy and overpopulated. They settled in the countryside where they built their estates, in the Netherlands in the dunes and

⁸ Wilfrid Blunt, The Ark in the Park. The Zoo in the Nineteenth Century (London 1976) 16.

⁹ Keith Thomas, Man and the natural world. Changing attitudes in England (1500-1800) (Harmondsworth 1983) ch. 3.

along the Amstel and Vecht rivers, for example. Around these country houses, formal gardens were laid out which were intended to provide a civilised contrast with the uncultivated marshland beyond. But these gardens soon started to become more lively, with winding paths, ponds, hillocks and small groups of trees. They gave the impression of nature as being something agreeable or pleasing, and making reference to the Greek Arcadia or to Paradise. People liked to spend their time there relaxing. ¹⁰

In essence, the elite created their own paradise on these country estates. And so you would expect this paradise to be decked with fauna, as Breughel and Rubens showed in their collaborative painting on the Fall of Man, for example. But that's not how animals were portrayed, although the occasional pheasantry did suggest that. In the literature, however, the collections of exotic animals were primarily linked to the curiosity collections which were beginning to appear at that time. Animals generally did not live long in captivity and a not inconsiderable benefit of this common event was that a dissection could be performed, which then revealed a great deal about the anatomy of the animal. This was then painstakingly drawn after which the animal was preserved in formaldehyde or if it was rather larger, stuffed and mounted, or if the dissection had been rather too exhaustive, only the skeleton was prepared. It is therefore not surprising that the public official, Arnout Vosmaer, who himself had set up a renowned collection of natural curiosities after becoming director of the natural history collection of stadholder Willem V in 1756, also became administrator of his menagerie.11

This menagerie of Willem V was the most famous 'Dutch' animal collection of the Old Regime. It was initially based at Het Kleine Loo near Voorburg. The basis for the collection was formed by gifts which were brought with East India Company (VOC) ships, including orang-utans. Two young Indian elephants, Hans and Parkie, were added in 1786. A couple of months later they accompanied the stadholder to Het Loo near Apeldoorn, where he felt safer. During the French occupation in 1795 the collection was confiscated, some of it was eaten and the rest taken to Paris: the transport of the elephants was no mean feat. They were added to the menagerie in the Jardin des Plantes. Hans died there fairly soon afterwards, but Parkie, in the meantime auspiciously renamed Marguerite, lived there until 1816.

In the 18th century a couple of civil collections were begun by ordinary people. Usually these were travelling collections which, possibly as part of a fair, travelled from town to town but which at a certain point in time remained behind at a particular place. One famous collection was that of 'Blaauw Jan' Berentsz Westerhof, an innkeeper on Kloveniersburgwal in Amsterdam, a menag-

¹⁰ Pim Kooij, Mythen van de Groene Ruimte (Wageningen) 7.

¹¹ Florence Pieters & Kees Rookmaaker, 'Arnout Vosmaer, topcollectioneur van naturalia en zijn *Regnum animale*', in B.C. Sliggers and A.A. Wertheim, *Een vorstelijke dierentuin. De menagerie van Willem V* (Zutphen 1994) 11-39.

erie which remained there for more than a century, until 1784.¹² Apart from birds, lions, tigers, panthers and baboons, dwarfs and giants were also put on display, it was always a fairground attraction but also attracted visitors interested in natural history, such as Linnaeus and Emperor Joseph II of Austria.

A very famous fairground attraction was a rhinoceros which I mention only because it twice visited Groningen, in 1745 and 1756. It was also a native of Groningen who was behind her arrival in Europe. That was Joan Albert Sichterman, later known in Groningen as the Bengalese Sichterman, who was an East India Company (VOC) director there and became extremely rich. He had been given to him as a baby by a great Mongol in 1738 and was allowed to roam about his house. But Clara, as she was called, grew bigger and started to behave like a rhinoceros in a china shop. Therefore in 1840 she was given away to a ship's captain, Douwe Mout van der Meer, who with a great flair for marketing travelled around Europe with her for 18 years. However this involved considerable effort. Clara weighed more than 2000 kilos, was housed in a special wagon which had to be drawn by at least eight horses, but on poor roads more were needed. There was royal and even imperial interest here too. She was seen by Frederick II of Prussia, for example, and Franz I and Maria Theresia of Austria, Louis XV of France and the English royal family.

These fairground menageries were purely utilitarian, there was nothing arcadian-paradisiacal about them. But this was different with the sovereign collections. Towards the end of the 18th century there was an interesting development. They became more professional and opened their doors to the general public, who in this way gained access to the little paradise.

The first menagerie where this took place was the imperial one in Austria. The menagerie was situated in Neugebäude to the south of Vienna, but on imperial orders was moved in 1852 to Park Schönbrunn in Vienna, where the imperial palace was also situated. It was a baroque-style round garden, essentially divided into pie-slices with the animal housing along the perimeter and a pavilion in the centre. In 1778 this menagerie was opened to the public.

The second modern zoo was the Jardin des Plantes in Paris. A royal collection was also housed here, although hardly with the permission of its owners. In the context of the revolution, the Royal Menagerie was transferred in 1792 from Versailles to Paris. Here the zoo became an annex to the 17th-century medicinal herb garden which had been laid out in 1626 by the personal physician to Louis XIII, Guy de La Brosse. The plans for both gardens show an interesting contrast.

http://www.freewebs.com/showbanded/blaauwjan.htm. Accessed 4-11-2009; F.J.M. Pieters and M.F. Mörzer Bruyns, 'Menagerieën in Holland in de 17^e en 18^e eeuw' Holland, regionaal-historisch tijdschrift 20 (1988) 105 200

¹³ Willem G. Doornbos, 'Clara de Rinoceros', Stad en Lande 15 (2006) 32-35.

¹⁴ Wiet Kühne-van Diggelen, Jan Albert Sichterman, VOC-dienaar en 'koning' van Groningen (Groningen 1995).

¹⁵ Glynis Ridley, Clara's Grand Tour: Travels with a Rhinoceros in Eighteenth-Century Europe (New York 2005).

¹⁶ Mitchell G. Ash (ed.) Mensch, Tier und Zoo – Der Tiergarten Schönbrunn im internationalen Vergleich vom 18. Jahrhundert bis heute (Vienna 2008).

The herb garden had always had a formal design, while the zoo had more the appearance of an English landscape garden. But both fit within the Arcadian concept.

In the 19th century a new type of zoo started to appear, which could be called the public zoo. The first was the London zoo, founded in 1828 by the Zoological Society of London, which had been set up two years before. This was a learned society which was intended to disseminate zoological knowledge by presenting a collection of living animals, which could be viewed by the public but were primarily intended to be studied – dead or alive – by scholars, finally to end up in a related museum. The London zoo – the abbreviation which became popular in the 1860s – was presented with the almost moribund royal collection in 1848. Similar collections were transferred elsewhere too, such as in Madrid and in Prussia where Frederick William IV had already given away his animals in 1841.¹⁷ And thus zoos ceased being a sovereign institution. Rulers had in the meantime found other less costly ways of parading their status. But what would the zoo now become?

Zoos for burghers?

The London example was followed in many other places. As early as 1831 a Zoological Society was set up in Dublin. And in 1838 the Natura Artis Magistra society was set up in Amsterdam, which started a zoo in the Plantage. This Amsterdam initiative in turn served as an example to Antwerp where in 1843 the Maatschappij voor dierkunde was set up to found a zoo, which was opened in the same year. ¹⁸ In Berlin the Zoologischen Garten opened in 1844. ¹⁹ The relationship with the Zoologische Gesellschaft (zoological society) which was set up at the same time, was vague. Shares were issued but these zoos were largely dependent on visitors to cover operating costs. No entrance requirements were therefore instituted.

Can we now call these bourgeois zoos because they were set up for and by burghers? To be able to answer this question we must first consider 'who are the burghers', a discussion which I have already entered into further to the publication of the book *De stijl van de burger* by Remieg Aerts and Henk te Velde.²⁰ My particular problem with this book is that nowhere is the burgher defined as a social group but rather as those that have a certain mentality, more of a cultural identity, essentially. This style could be found among the upper as well as the middle classes, thus among the elite and middle social strata, as well as the upper layers of the artisan class. But when this is applied in practice the result is quite

¹⁷ The menagerie was set up by his predecessor, Fredrick William III, on the Pfaueninsel in Potsdam.

¹⁸ Roland Baetens, De roep van het paradijs. 150 jaar Antwerpse zoo (Tielt 1993).

¹⁹ Harro Strehlow, 'Die entwicklung der Zoologischen Gärten – Das Beispiel der Berliner Tierhaltungen', in Ash, *Mensch, Tier und Zoo*, 315-334.

²⁰ Remieg Aerts and Henk te Velde (eds.) *De stijl van de burger. Over Nederlandse burgerlijke cultuur vanaf de mid-deleeuwen* (Kampen 1998); Pim Kooij, 'De burger in een sociaal-historische context', in *Stijlen van burgers. Groniek Historisch Tijdschrift. Special edition* (2007) 133–145.

different. If we look at the background of the members of book clubs or theatre season-ticket holders, then who do we primarily see but the genteel middle classes. The odd schoolteacher may occasionally be seen, but the upper layer of the working class is skilfully excluded. In fact, book clubs or reading circles in the first half of the 19th century were more exclusive than ever. Even women were no longer allowed to take part.²¹



The entrance of Artis Amsterdam, 1883 (collection author)

At Artis it was also the upper elite who called the tune, at least on the board. Donna Mehos clearly shows this. She has published an interesting dissertation on Artis which was further developed in a later publication.²² Her overview of the members of the Artis board shows that they were mainly business proprietors, predominantly in the services sector, as well as those practising the professions, particularly lawyers. Here Donna Mehos sees a combination of the established patrician order and the new bourgeois elite, but what I see first and foremost is new money, which gives immigrants and Jews a seat on this body, for example.

 ²¹ Boudien de Vries, 'Lezende burgers. Cultuuridealen en leespraktijk in burgerlijke kringen in de negentiende eeuw', in Stijlen van Burgers. Groniek special edition (2007) 39-65. See also Henk Gras, 'Theater: vermaak voor alle burgers? De casus Rotterdam 1773-1916' in Stijlen van Burgers. Groniek special edition (2007) 65-99.
 ²² Donna C. Mehos, Science Displayed: Nation and Nature at the Amsterdam Zoo Artis (PhD Dissertation Univer-

²² Donna C. Mehos, Science Displayed: Nation and Nature at the Amsterdam Zoo Artis (PhD Dissertation University of Pennsylvania 1997); Donna C. Mehos, Science and Culture for Members only. The Amsterdam Zoo Artis in the Nineteenth Century (Amsterdam 2006).

In this context it might also be useful to look at where the board members lived, because their background also reflects the social structure of the Plantage, a chic new residential area, settled not by the established elite but by the new rich, and where Artis was set up. ²³

Viewed in a social history context, what you first see is a group of social climbers who presented themselves through a sort of country club which was exclusive to its own, where there were many extraordinary things to be seen and where interesting activities took place. They would prefer, just as in London on Sundays, to keep the zoological gardens closed, but to provide sufficient operating revenue, visitors were a necessary evil. There were, of course, idealists, such as the founder Westerman, who saw Artis primarily as a centre for zoological research. There were also people who wanted to use Artis to raise the national cultural standard. But it would seem to me to be going too far to see Artis primarily as a vehicle in the design of a bourgeois national culture. It was rather more the collective Arcadia of a new urban elite, who would no longer have to leave the city to find it. The ease with which the academic elements were put aside after 1876 in the direction of the new University of Amsterdam, supports this view.

In this context it is worthwhile to make a comparison with the two other 19th -century Dutch zoos, in The Hague and Rotterdam. The comparison with The Hague can be made because it has been studied by Jan Hein Furnée.²⁴ The zoo in The Hague was set up in 1863 by the Koninklijk Zoologisch Botanisch Genootschap van Acclimatatie (royal zoological and botanical society of acclimatization), which like Artis was a learned society.²⁵ The founder was a physician, L.H. Verwey, who thought that his initiative would only succeed if there was ample support forthcoming from various social strata. For this purpose he decided that shareholders did not have to take part in a ballot. This caused a run on the shares among the upper middle classes, without this deterring the elite. As in Artis, the elite was mainly represented by merchants and those practising the professions.²⁶ But Baron Van Brienen, the richest man in The Hague, also played a part in the founding of the zoo. He was probably the person responsible for persuading the King to become its patron which in turn drew the most elegant members of Hague society to the zoological gardens.²⁷ However when Koekamp was proposed as a possible site a group of them opposed the founding of a zoo. They wanted this space to be preserved as a quiet and dignified place in which to walk.

²³ Michiel Wagenaar, Amsterdam 1876-1914. Economisch herstel, ruimtelijke expansie en de veranderende ordening van het stedelijk grondgebruik (Amsterdam 1990) chs. 7 and 8.

²⁴ Jan Hein Furnée, 'Beschaafd vertier. Standen, sekse en de ruimtelijke ontwikkeling van Den Haag, 1850-1890', Tijdschrift voor sociale geschiedenis 27 (2001) 1-32. Jan Hein Furnée, Vrijetijdscultuur en sociale verhoudingen in Den Haag, 1850-1890 (Groningen 2007).

²⁵ Acclimatisation is adaptation to a different climate or environment.

²⁶ Furnée, 'Beschaafd vertier', 12

²⁷ Furnée, Vrijetijdscultuur, 208-209.

Ultimately, nothing came of Verwey's plan to create a zoo for all social classes. Hague residents who were not members could not enter and people from outside the town had to pay a high entry fee of 50 cents. Nevertheless, The Hague zoo managed to cover a broader social spectrum than Artis. Women were also entitled to join. That this did not lead to the departure of the elite was probably because the elite had a number of other institutions where they could keep things entirely *entre nous*. However, not everything went smoothly. The board was dominated by The Hague smart set, which in turn led to letters being sent to newspapers saying that ordinary people were being shut out.²⁸ And it also did not lead to any real interaction between the various layers of society, people continued to avoid one another in the zoo gardens.

Perhaps it was this particular social makeup of the membership of The Hague zoo which led to it being described as the rather backward cousin of the Amsterdam and Rotterdam zoos. The chicken run, it was called, because of the many birds.²⁹ Initially therefore, no predators were kept.³⁰ Despite the public draw, Betsy, an elephant, of course,³¹ the zoo became first and foremost a event centre providing meeting rooms. The new main building in the Moorish style dating from 1893, offered many facilities. After the closure in 1943, because the German defence line ran straight through it, it initially continued as such until this function too disappeared in 1968.

The Rotterdam zoo has been far less socially documented. This zoo was set up by a number of railway workers who in 1854 transformed a little field next to the Delftse Poort station into a small zoo with a clubhouse. Although it appeared to be a middle class initiative, in 1857 the good citizens of Rotterdam took it over and drew up the grandest plans to replace the old zoo with a new one.³² The old zoo already had some 500 members who paid Hfl. 10 per year. The subscription for the new zoo was Hfl. 25, a month's wages for a skilled labourer. This artisan class therefore could only visit the zoo during the 14 days of the year that they could enter for a modest entry fee. For the rest of the year the zoo was the preserve of members and their guests from outside Rotterdam.

The centrepiece here too was the clubhouse, dating from 1872. The grand hall where concerts were given could hold up to 1000 people and was decorated

²⁸ Furnée, Vrijetijdscultuur, 242.

²⁹ It is interesting to note that around this time the desirability of having a country estate zoo was discussed at the annual Country Estate management Congress (see reports of 1852-1855). The idea was to build an annex to Artis. When the idea was mentioned again in 1879, The Hague zoo was not mentioned.

³⁰ This limited assortment was also because in Amsterdam and Rotterdam there were many shipping companies which from time to time brought animals with them from the colonies and other regions which were donated to the zoos there. A.C. van Bruggen, 'Van Z.M. den Koning, een casuaris voor de diergaarde. Aantekeningen over aanwinsten van de Hollandse dierentuinen in de 19^e eeuw' *Holland, regionaal-historisch tijdschrift* 20 (1988) 223–237.

³¹ There were, in fact, three successive elephants named Betsy. See G.J.M. van Baarsel, 'De Haagse dierentuin', *Holland, regionaal-historisch tiidschrift* 20 (1988) 238–250.

³² These were 21 worthy gentlemen with distinguished name such as Mees, Van Vollenhoven, Ruys and Van Rijckevorsel: Van Doorn, *125 jaar*, 3. They issued Hfl. 300,000-worth of shares.



The Rotterdam Zoo 1925 (source: Geillustreerde Wandelgids by K. Kuiper, collection author)

as a winter garden. There was a Floral hall with a cupola and a greenhouse for the Victoria regia lily. In the new Blijdorp, Van Ravesteyn would bring all of this together in the Riviera hall. In 1922 the zoo had 8000 members who paid Hfl. 45 per year. At this price, exclusivity could be preserved. Although the social background of the members has not been investigated, we may assume that the Rotterdam public will have been similar to that of The Hague, but then perhaps even more distinguished overall, although with less old money.

I do not have time to go into the acquisition policy in any depth in this presentation. But, as you might imagine, it was somewhat random in nature. Zoos were very much dependent on donations and what was offered by animal merchants. Orders could be placed which could steer them to some extent. But an expedition organised for this purpose could also fail. Added to this, the mortality among the animals was high. The apes in particular, the big crowd pullers, usually did not live long.

This coincidental supply, fed by the high level of mortality, probably had an impact on what form the zoos took. It was of no use to exhibit a complete overview of the animal kingdom, even though this had long been the ambition of a number of zoos, particularly those in London and Berlin. There they aimed to show all four of the ape species then known, Bengal, Sumatran and Siberian tigers, Asian and African elephants, white, black, Indian, Javan and Sumatran rhinoceroses, and two tapir species, etc. In Artis too, there was a whole range of pens for bovine species. But ultimately this complete range could only be displayed in the natural history museums which the major zoos also generally had.

In the zoo itself, merely the suggestion of completeness was sufficient. And because the animals did not have to be presented to the members in this way, they could be exhibited in a park-like setting, usually in the English landscape style.³³ The visitors were familiar with city parks and saw the cages with wild animals as an exciting added feature. But by around 1900 that was no longer sufficient.

The wilderness in the city

Around 1900 a new attitude arose alongside the utilitarian and arcadian view of nature. Industrialisation and urbanisation had reached such proportions that some people began to see them as a threat to what was left of 'unspoilt nature'. In many countries, nature conservation organizations were set up which were intended to preserve the last areas of outstanding natural beauty and people began to take an interest in living nature. I have termed this new view of nature as nature-empathic. People wanted to get to know nature by spending time there, both literally and figuratively.³⁴ In the Netherlands this vision of nature was propagated by the educators Jac. P. Thijsee and Eli Heimans. In 1896 they set up the journal *De levende natuur* [Living Nature] with the subtitle *Tijdschrift voor natuursport* [Journal for outdoor pursuits].

The question is, of course, what did this mean in relation to zoos, which had thus far been so closely linked to an arcadian-paradisiacal view of nature. The first and the third issues of *De levende natuur* give a rather unfortunate response to this. Thijsse reports in this issue that in 1894 he went to Texel with curator P.L. Steenhuizen of Artis to collect material for a diorama on Dutch fauna. And this is what he further wrote:

'I had not gone far when some lovely white birds flew up, slightly larger and more slender than lapwings, with long slate-grey legs and a slender upturned beak. "Kloot, kloot, kloot" were their short and loud calls as with their rapid wing beats they quickly swept upward....They were not at all timid - on the contrary. One came right at me, not at full speed, but with small jerky movements, as if he wanted to take the time to take a good look at me. Even his "kloot, kloot, kloot", sounded inquisitive. It was a dead easy shot, a child could have taken it. He dropped to the ground instantly, as if hit by lightening, this splendid bird, and not a spot of blood marred the immaculate white of his plumage. Steenhuizen was polite enough to applaud and I was pleased that it had been approved for the collection so that, for the time being at least, no more avocets had to be shot."

Here we catch a glimpse of the other side of the great nature conservationist. It also shows, however, that the new nature-empathic view, in which living nature is sought out, still has some rather less 'pure' elements to it. But this equally applied to the nature conservation movement, which in the Vereeniging tot Be-

³³ Annette Graczyk, 'Der Zoo als Tableau', in Ash, Mensch, Tier und Zoo, 97-111.

³⁴ Kooij, Mythen van de groene ruimte, 8.

³⁵ De levende natuur, year 1, issue 3 May 1896, 44.

houd van Natuurmonumenten [Society for the Conservation of Natural Heritage] founded in 1905, mainly bought up country estates, cultivated land, in other words.

Incidentally, Thijsse came about in the end. He was actively involved in the founding of the Nederlandse Vereeniging tot Bescherming van Vogels [Netherlands Society for the Protection of Birds] in 1899 and henceforward, like Steenhuizen, stuck to shooting birds with a camera. Naturally support for this nature-empathic movement grew out of the public support for animal protection, as well as the Nederlandsche vereeniging tot Bescherming van Dieren [Netherlands Society for the Protection of Animals] founded in 1877, even though this society was primarily aimed at pets.³⁶

To be able to fit in with this new attitude towards nature, the zoos had to demonstrate their intention to show living nature. In a time when people could hardly travel to other continents to see the living nature there, it therefore had to be brought to them. This led to the construction of natural environments which appeared to have been imported from elsewhere. The individual who wanted to patent this was Carl Hagenbeck, who in 1896 had already applied for one for a 'Naturwissenschaftliches Panorama' [Natural Science Panorama],³⁷ in which the bars had been removed and, through a combination of terraces which were separated from one another and the visiting public by concrete walls and moats, a number of animals could be placed together which 'in reality' also belonged together without giving them the opportunity to eat one another. This plan was grafted onto the living raree shows which Hagenbeck took to world fairs, exhibitions and other events. The polar region, for example, was very successful. In the centre of Hamburg he had just such a panorama which was connected with his animal trading business.

In 1907 Hagenbeck opened a zoo in Stellingen, on the north side of Hamburg, in which he put these principles into practice. It was an immediate success.³⁸ There were already more than a million visitors in 1909. That may also have had to do with the fact that, as a true showman, Hagenbeck presented extra attractions. Every summer there was a human show, in which a different part of the world was presented each time, such as Nubia, Burma, the America of the Indians. Against a backdrop of suggestive scenery, natives of these regions, who lived temporarily in the park, presented a show a couple of times a day.³⁹ And in between there were also the trained animal demonstrations and fairground attractions, such as merry-go-rounds. Hagenbeck thus represented the dilemma of

³⁶ See for animal protection: Karel Davids, *Dieren en Nederlanders. Zeven eeuwen lief en leed* (Utrecht 1989). The national society grew out of a number of local ones, the first of which was set up in The Hague in 1864.

³⁷ Lothar Dietrich & Annelore Rieke-Müller, Carl Hagenbeck 1844-1913. Tierhandel und Schaustellungen im Deutschen Kaiserreich (Frankfurt am Main 1998).

³⁸ Matthias Gretzschel, Klaus Gille, Michael Zapf, *Hagenbeck. Ein zoologisches Paradies. Hunden Jahre Tierpark in Stellingen* (Hamburg 2007).

³⁹ Human shows were very popular at the time. They were exhibited in many places. See Patrick Allegart, Ben Sliggers (eds.) *De exotische mens. Andere culturen als amusement* (Tielt 2009)

the 20th-century zoo. The creation of a natural environment was not enough to attract a large audience. To do this additional elements of entertainment were necessary which, however, have to be measured in such a way that the zoo does not become a theme park.⁴⁰ It did indeed to some extent cut both ways with Hagenbeck, as it did with Heimans and Thijsse, in fact. Heimans, for example, in order for them to get to know living nature, took his students to the Sarphatipark in Amsterdam - in the eyes of modern-day nature purists a rather moribund city park.



The old entrance of Hagenbeck Hamburg 2008 (photo Anje Kooij)

The zoo without bars, as demonstrated for the first time by Hagenbeck, became the norm. Existing zoos had to adapt or they were doomed to disappear. Even in Hamburg, this was so. Since 1863 this is where the Zoologischer Garten Hamburg [Hamburg Zoological Gardens] had been situated. The first director was the systemist and encyclopaedia author, Alfred Brehm, who collected as many different species as possible. This principle lost out to the dioramas of fel-

⁴⁰ Even in most 19th-century zoos there were already discussions about whether the playground equipment which had been provided for children should not be removed, not least because of the amount of noise made by the children.

low Hamburger, Hagenbeck. The zoo closed in 1930.41 In Munich's Hellabrun Hagenbeck's concept was adopted almost immediately and he was consulted during the planning of the zoos in Elberfeld and Neurenberg. In Rome too, where a zoo was set up in 1909, he acted as an advisor and in the 1920s his son Heinrich was involved in the construction of the zoos in Seattle, Detroit and Chicago. 42



A typical Hagenbeck panorama, Hamburg 2008 (photo: Pim Kooij)

⁴¹ In all fairness, it should be said that considerable war damage as well as excessive animal mortality played a part in this.

42 Gretzschel, Gille, Zapf, *Hagenbeck*, 63.

In the Netherlands the architecture without bars was also widespread. The new zoos were all set up along these lines. These were Burgers Zoo, founded in 1913 in 's Heerenberg and which moved to Arnhem in 1923⁴³, Ouwehands Dierenpark in Rhenen which was created in 1932 from a poultry farm, the Noorder Dierenpark in Emmen dating from 1935, Dierenpark Wassenaar, which existed from 1937 to 1985 and took over the role of The Hague Zoo, and Dierenpark Amersfoort, which was set up in 1948 by former employees of Wassenaar Zoo. It is striking to note that these zoos were all set up by generally wealthy private individuals⁴⁴ and thus can clearly be recognised as a bourgeois echo of the royal menageries.



Tiger in Burgers Zoo, 1987 (photo Pim Kooij)

The established Dutch zoos also adopted the Hagenbeck concept. Artis created the Kerbert terrace for lions and the new Blijdorp by Van Ravesteyn was a faithful translation of the Hamburg example.

These Freisichtanlagen [unobstructed views] did indeed conjure up the suggestion of living nature, but that did not mean that Hagenbeck could be seen as a

⁴³ From 1932 to 1946 Burgers Zoo had a branch of sorts in Tilburg. In that final year it was transferred to new ownership and closed in 1973.

⁴⁴ Johan Burgers began a pheasantry behind his butcher's shop. Cornelis Ouwehand had a cigar factory for a while, just like his father, but later started breeding rabbits and chickens. Willem Oosting began the zoo in the garden of his wealthy parents' house in the centre of Emmen and Pieter Louwman of Wassenaar had a car dealership and also initially bred birds.

sort of Africa or Asia in miniature. There was too much showmanship for that, with his human exhibitions, an ostrich farm where feathers were harvested for ladies hats and even a touring circus. Furthermore, there were a great many other animals which were kept in cages, such as the apes, although a baboon rock was soon provided, which then appeared in almost every other zoo. But the greatest transgression was indeed the odd mix of animals. Hagenbeck became famous, among other things, for his trained animal acts in which different sorts of animals worked together, such as lions and tigers, or bears and dogs. This peaceful co-existence was also applied in his zoo. For example, his *Raubtierschlucht* [predatory] lions and tigers lived together, sometimes producing strange off-spring, while on the ungulate field, ruminants from all over the world strolled around together.⁴⁵

Ludwig Heck, the director of the Berlin zoo, therefore thought it was non-sense. He preferred a zoo based on sound academic principles and not the outward show that was aimed only at satisfying the public's desire for sensation. Heck was actively involved in the protection of animals threatened with extinction, such as the European bison, of which there were only 24 remaining in 1924. But when he stepped down in 1931, his son Lutz who succeeded him, soon had concrete terraces built. Hagenbeck, for that matter, also contributed to the conservation of rare animals. In 1925 he bought 25 Przewalski horses in Mongolia, of which there were almost none to be found in the wild anymore. From these animals, some of which were sold on to other zoos, a viable population was bred, part of which has been released into the wild again.

The self-image of zoos: a first reflection.

The conservation of rare animals was a new element. In the 19th century what zoos amounted to for rare animals was more a road to the museum, as happened to the last quagga, which had lived in Artis and was then stuffed and mounted in 1883. To determine when this aspect became a marketing element in zoos as a means of attracting the public, I undertook a small study of some 50 guidebooks for zoos in Germany, Belgium, France, the Netherlands and the United States covering the period 1925–2000. ⁴⁸ These are the main findings:

The guidebooks from the period between the wars mainly emphasise the variety of species and the spaciousness of the quarters. But while Hagenbeck draws attention to the terraces, the Berlin Zoo takes pride in its exotic-looking housing

⁴⁵ Carl Hagenbeck had intended to organise the park into geographical zones. For example, the Africa and Polar panoramas were completed during his lifetime: he died in 1913. Gretzschel, Gille, Zapf, *Hagenbeck*, 106. According to the Hagenbeck guidebook of 1938 that was the case 'only' since 1924.

⁴⁶ Gretzschel, Gille, Zapf, Hagenbeck, 102. This criticism dates from 1929.

⁴⁷ Lutz Heck was also active in the field of rare animals. Like his brother Heinz, director of Hellabrünn near Munich, he tried to breed back the aurochs, which led to Heck cattle that are now widely deployed in nature reserves as an extensive grazer.

⁴⁸ The older guidebooks I received as a gift from archaeologist Piet Kooi, whose father collected them. I am extremely grateful to him for this. The more recent ones I collected myself.



The Egyptian Temple in Antwerp Zoo 1992 (photo Pim Kooij)

which is suitable for the animals, as is the case with Antwerp too, where the large African animals are housed in a sort of Egyptian temple and in Artis the ungulates were kept in the Minangkabau house from Sumatra. London says it has the largest collection of animals and Berlin claims to offer a systematic overview.

After the Second World War, the German guidebooks were rather glum. Hagenbeck's zoo, as well as the Frankfurt, Münster and Berlin zoos were almost completely destroyed. In the 1950s, Berlin and Frankfurt started to compete with one another about which was the oldest and which has the most animals.⁴⁹ The Dutch Burgers and Ouwehand zoos also report enormous war damage.⁵⁰ Among these tales the presentation of the American zoo forms a positive contrast. San Diego, New York and Chicago are proud of their spacious housing and the wealth of species, the influence of Hagenbeck has clearly been felt here. The guidebook for the New York Zoo in Central Park opens in 1956 with a photo of the African savannah, which has been very realistically laid out, in which the lions have a constant view of the antelopes and zebras, and vice versa. Around this time, many zoos set up a children's zoo, in which suitable animals can be touched or seen at eye level. The American zoos too, advertise their wealth of species - San Diego has koala bears - and a large collections of apes, which is also the pride of Frankfurt, where there were already bonobos in 1956.⁵¹

In the 1960s and 70s the geographical context became the common theme, although there were also zoos which continued to work with predator houses and ape houses in which animals from different continents are placed side by side. In the early 1970s the Noorderdierenpark in Emmen reports in successive guidebooks a complete restyling with the Africa savannah as its highpoint. In other zoos too, savannahs and flight cages are reported. The example from London that in the period between the wars already used the Whipsnade site as a combined breeding centre and safari park, was copied elsewhere, such as in Belgium where the Planckendael estate became an annex to the Antwerp zoo in 1956. In addition, dedicated safari parks were created, as well as parks devoted to only one animal species, such as apes or sea mammals. All zoos present themselves in this period as guardians of rare animals. The Antwerp Zoo for example, which describes itself as a living museum, reports in 1970 the presence of okapis, white rhinos and European bison.⁵²

In the 1980s and 90s the guidebooks provide a lot of information on the con-

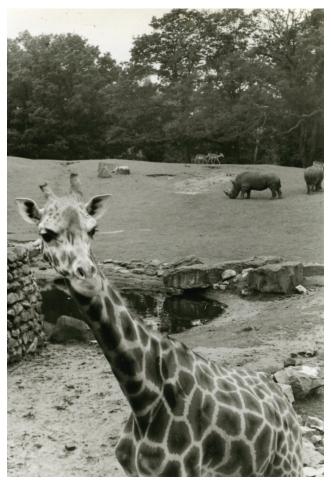
⁴⁹ In fact the Berlin Zoo dating from 1844 is the oldest, but Frankfurt, dating from 1858, describes itself as the oldest in the Federal Republic.

⁵⁰ Robert Jan de Boer, *Ouwehands. Een dierenpark in oorlogstijd* (Amsterdam 2004).

⁵¹ München-Hellabrunn (guidebook 1955) is an exception. The director, Heck, primarily wanted to show the animals which everyone should know, and only afterwards the rare animals. He worked with geographical zones.

⁵² The first Okapi had already been brought to Antwerp from the Congo in 1919. Baeten, *Roep van het Paradijs*, 182.

The Africa savannah in Emmen, 1980 (photo Pim Kooij)



servation of species. Here emphasis is put on the fact that the zoos have become increasingly self-sufficient, so that no more animals have to be caught in the wild.⁵³ The educational function for children is also emphasised. But first and foremost it is stated that zoos are fun. The piece about the history of zoos, which in previous decades the guidebooks opened with, is now at the back. The zoo is now extolled as an adventure park, where people can stand face to face with rare animals in a natural setting. This is very explicitly done by a number of American zoos and by the Dutch Burgers Zoo, which built a number of huge indoor climate zones, in which the suggestion of a rainforest or a desert is created. Many zoos also report the redesign of their aquaria, where people can effectively walk around among the fish and other sea life.

⁵³ In the period between the two world wars, even zoo directors had no scruples about shooting dead a rhinoceros mother in order to take her young: Lutz Heck, *Tiere. Mein Abenteuer* (Vienna 1952)

From menagerie to a perceptive experience

As the guidebooks clearly show, in the space of 100 years zoos had moved from being just menageries to a perceptive experience. In this way the dilemma that zoos have faced right from the outset has become even greater. On the one hand there is the academic ambition to preserve and study the wealth of species and to contribute to their conservation. On the other, there is the general public which seeks entertainment and is increasingly used to getting it, and the gap between the two is only getting wider. In the 1970s the public believed in the important role played by zoos in protecting animals threatened with extinction. The zoo as Noah's Ark was already a known metaphor reflected in the title of many a bestseller.⁵⁴ And they could also demonstrate the success of this function by pointing to the salvation of the European bison, the Pater Davids deer, the Przewalski horse, the Oryx, the Congo peacock, the Hawaii goose, the Bali starling, the condor and the Golden Lion Tamarin. 55 The rarity of animals appears to be less and less of a motive for most people to visit a zoo. In Berlin, Knut the cute polar bear cub managed to enthral more visitors than the grumpy giant panda a little further along.

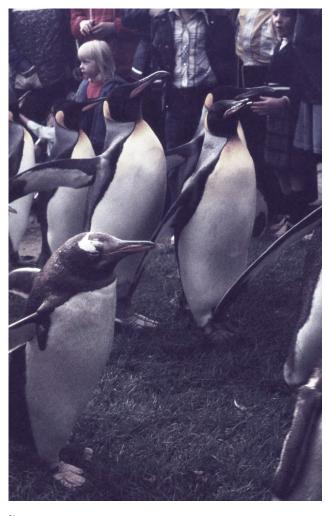
This also has to do with the fact that living nature in the wild could now also be experienced in person. Safaris, expeditions through the rainforest, and even excursions to the Galapagos islands, have now surpassed the zoo panoramas. To be able to attract large numbers of visitors and at the same time be a credible partner in nature conservation, the zoos had to be resourceful. What by now had become plain was that a nature conservation role was difficult to combine with forms of entertainment that were once offered in zoos, such as a ride on an elephant or a camel. And feeding the animals was also no longer allowed. Even the animal feeding time shows became suspect, because of the animal training elements in them. Even the names had to be different. Familiar names for elephants such as Jumbo, Betsy and Coba became taboo. They were now called Mingalar Oo, Thong Tai or Htoo Kin Aye, names which are difficult to pronounce and therefore create more distance once more. Only the penguin parade in the Edinburgh zoo in which people and penguins walk around side by side has withstood the tide of criticism, but here the penguins appear to enjoy this even more than the visitors.

As an alternative to safaris and expeditions, under the nature-empathic approach, natural sensations were created in which entire biotopes were imitated. It is indeed a remarkable experience to stand on a little bridge in Burgers Bush and suddenly see two enormous manatees surfacing beneath your feet. But other

⁵⁴ A.C.V. van Bemmel, Een moderne ark van Noach. De dierentuin als redding voor bedreigde diersoorten (Amsterdam), Gerald Durrell, Stationary Ark (1976), Blunt, The Ark in the Park.

⁵⁵ Colin Tudge, *Last animals at the zoo. How mass extinction can be stopped* (Oxford 1992). An important element in this was the setting up of breeding registers. This was intended to promote pure breeding and prevent inbreeding. Because these were set up per animal and a different secretary was appointed for each register, this led to a lot of cooperation between zoos and to the movement of animals to places where new blood was needed.

than that, the animals should be left in peace and the excitement furnished elsewhere, beyond them. This leads in the first place to enormous playgrounds. In Emmen they take this even further - there a new zoo is being built around a large theatre, actually a 19th-century concept in a modern form. In anticipation of this a large Chinese light show was set up in 2009 which the giraffes and rhinoceroses on the Africa savannah did find rather odd. This would appear to be one side of the spectrum. On the other side is Gerald Durrell's zoo on Jersey which is entirely dedicated to the conservation of threatened animal species, with training programmes and a summer school for future animal conservationists. ⁵⁶



The penguin parade in Edinburgh Zoo 1978 (photo Pim Kooij)

⁵⁶ Durrell, *Stationary Ark*. With his many popular and appealing books, including *My family and other animals*, Durrell, who started out as an animal trapper, managed to reach an audience of millions which created a lot of goodwill for his Jersey wildlife preservation trust.

These sorts of dilemmas have been major topics at conferences held in recent years on the future of zoos. The volumes published in connection with the 250th anniversary of the Vienna Tiergarten Schönbrunn and a conference in London in 2004 would seem to me to be representative examples.⁵⁷ Here the professionals speak, who see the zoo of the 21st century first and foremost as an instrument for the conservation and breeding of threatened animal species. The public, of course, must also support that, which won't be achieved with playgrounds. Education is the magic word. That was what it was all about right from the outset under the nature-empathic view. But the first animal conservationists focused mainly on those people who were already open to this. Now the general public has to be addressed and specifically with the intention of bringing about a change of attitude and the development of certain values.⁵⁸ Unfortunately, the few impact measurements that there have been show that visitors are difficult to influence – it is with children that they succeed best.⁵⁹

Most experts are in agreement that the zoos alone will never manage to bring a threatened population out of the danger zone. There have been a few success stories, such as the Oryx which has been released into the wild again in Oman, the Brazilian Golden Lion Tamarin and the Californian condor, but these are the exceptions. One of the great benefits of zoos is that the animals no longer have to hunt or forage, so that they only need a much smaller habitat, which is more often extended than reduced. What appears to be most successful are the joint ventures between wildlife reserves in situ and zoos. The cooperative ties between the Bronx Zoo in New York and the Congo are exemplary. In the Congo gorilla forest in the zoo, money is collected for the protection of the gorillas in their natural habitat. There is a similar association between the Zurich Zoo and the Masoala Park in the north of Madagascar. 60 The zoo architecture plays a vital role in this. In both cases the original habitat is copied, which provides an impetus for the public to make an emotional and financial commitment. This is also the case with the orang-utan quarters in the Frankfurt and Munich zoos, which have ties with the Bukit-Tigapuluh park on Sumatra. But the most spectacular orang-utan housing is in Hagenbeck's, a sort of spaceship with a typical primeval jungle biotope, where separated from one another in a natural way, yet still close

⁵⁷ Ash, Mensch, Tier und Zoo, Alexandra Zimmermann, Matthew Hatchwell, Lesley A. Dickie, Chris West (eds.) Zoos in the 21st century. Catalysts for conservation (Cambridge 2007).

⁵⁸ Eleanor Sterling, Jimin Lee, and Tom Wood, 'Conservation education in zoos: an emphasis on behavioral change', in Zimmermann, Hatchwell, Dickie, West, *Zoos in the 21st century*, 37–51. In the Netherlands there has been an education tradition since the period between the wars, particularly with the radio talks by A.F.J. Portielje, who also put together five popular Verkade albums on Artis. On TV more and less cuddly animals were presented by Han Rensenbrink of Artis and Willem Duys together with Aleid Renssen from the zoo in Emmen. The director of Burgers Zoo, Anton van Hooff, also regularly appeared on television, as did Hanneke Louwman of Wassenaar Zoo. Empathy played an important role in these programmes.

⁵⁹ Richard P. Reading and Brian J. Miller, 'Attitudes and attitude change among zoo visitors', in Zimmermann, Hatchwell, Dickie, West, *Zoos in the 21st century*, 63–92.

⁶⁰ Matthew Hatchwell and Alex Rübel, 'The Masoala rainforest: a model partnership in support of in situ conservation in Madagascar', in Zimmermann, Hatchwell, Dickie, West, Zoos in the 21st century, 205-220.

to each other, an orang-utan family and human families happily potter around.

It is interesting to note how few references are made to Dutch zoos in international fora. I did not come across them at all in the volumes to which I referred. And yet Artis and Blijdorp play a central role in a number of breeding programmes, and with advanced architecture on a relatively small site Emmen has for some time created a huge amount of space for itself, while in 1988 the Burgers Zoo already presented the zoo of the 21st century with impressive perceptive experiences. Burgers Zoo also showed that zoos can support animal-keeping in ways other than just financial. Here, for example, research was done by Frans de Waal and others from 1971 on the social hierarchy of chimpanzees and how this is maintained. This turned out to be of great importance when approaching groups in the wild. The behaviour of zebras and wolves was also studied.

The urban wilderness

Some zoos were, right from the start, located in city centres, often close to a station, as in Antwerp, Berlin and Emmen and initially in Rotterdam. They were also sometimes established in a park, as in London or Rome. Other zoos were specifically built away from the city because there was space and the land could be bought cheaply. This was the case with Hagenbeck's and Blijdorp, for example. But over the course of time, these zoos too became enclosed by the urban sprawl so that they are now more or less in the centre. In this way, both sorts of zoos have come to resemble each other. Initially, the central zoos were mainly an urban meeting place, while the decentralized zoos offered more in the way of relaxation, the purpose of a day trip. But in the meantime most have become city parks, albeit exotically furnished city parks, but hardly something strange. Even in the ordinary city parks there is plenty of exotic flora and fauna to be found; for example, some parks are full of screeching 'parrots', escaped ringnecked parakeets, while in zoos a sort of concrete encroachment has taken place, which in turn makes them very urban. The Riviera hall in Blijdorp in Rotterdam, for example, has been used for years as an examinations hall by the university, for bridge drives, trade fairs and other events because there was no other large hall available.

That the contrast is not that great is also shown by the fact that zoos in the city can disappear. The South Holland Provincial Government Building now stands where The Hague Zoo once was. The old zoo in Rotterdam has also completely disappeared. And no one anymore can see that the city park in Hamburg was once Brehm's Zoo. Perhaps the wilderness that the zoo offers and the urban wilderness are a match for one another.

The term 'urban wilderness' was used in 1972 as the title of a book by the American urban historian Sam Bass Warner. 61 Large cities appeared to him to be

⁶¹ S.B. Warner, The urban wilderness (New York 1972).

like a wilderness, in which he found it difficult to find his way. The book describes an attempt to apply some sort of system to this wilderness by identifying the ordering mechanisms. That led him to write an urban history of the United States which, among other things, looked at planning, economic development, social structures and changes in structures, migration and the development of the economic and social infrastructure. He does not mention zoos in this book, but they must have occurred to him as examples of order and regularity in this urban jungle, through a gate carefully drawn back, full of signposts and route descriptions and with a fixed content which is neatly kept in place by means of all sorts of clever devices.

This experience of the urban wilderness had already been chronicled long before Warner did so. Already since the end of the 19th century references have been made to this urban wilderness. The city landscape was seen as a version of the wild, natural landscape. Smoking chimneys and factory sounds were compared with the din of wild animals and the new trams were seen as a wild animal which chased through the streets roaring and raging, just like a tiger. In such visions zoos were indeed often referred to as oases, where the wilderness was presented as manageable, domesticated or somewhat approachable. At the same time, however, the zoos offered wild vistas, which people knew to be hidden behind what was presented. According to Christina Wessely, it is the interchange between nature and culture, the strange and the familiar, wildness and control, which has made the zoo such an enduring success. It has now also become sufficiently clear that the ratio between these elements in terms of their nature and extent has constantly varied over time.

Any decent city has a zoo. And any decent zoo has tigers. So we know that in any city of substance, there are tigers walking around. It does not disturb us. They are part of a big city. Just like the tram.

⁶² Christina Wessely, 'Lesarten des Natürlichen. Tiergärten und urbaner Raum in Vergleich', in Ash, Mensch, Tier und Zoo, 133-151.

⁶³ See note 62.