

This article was downloaded by: [York University Libraries]

On: 29 December 2014, At: 13:20

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



International Journal of Heritage Studies

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/rjhs20>

Competing Natural and Historical Heritage: The Penguin Pool at London Zoo

Andrew Shapland^a & David Van Reybrouck^a

^a UCL Institute of Archaeology

Published online: 30 Nov 2007.

To cite this article: Andrew Shapland & David Van Reybrouck (2008) Competing Natural and Historical Heritage: The Penguin Pool at London Zoo, *International Journal of Heritage Studies*, 14:1, 10-29, DOI: [10.1080/13527250701712026](https://doi.org/10.1080/13527250701712026)

To link to this article: <http://dx.doi.org/10.1080/13527250701712026>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

Competing Natural and Historical Heritage: The Penguin Pool at London Zoo

Andrew Shapland & David Van Reybrouck

Zoos are complex social representations of the natural world. They are not just about animals but equally about cultural attitudes towards animals. This nature–culture duality poses formidable challenges when it comes to appreciating historical zoo architecture today. Many old animal enclosures are artistic highpoints, but modern standards of animal welfare as well as contemporary visitors’ expectations often make them ill-suited, or at least ill-reputed, as buildings for housing animals. Taking the recent removal of penguins from Lubetkin’s Penguin Pool (1934) in London Zoo as a point of departure, this article highlights the complexities of reconciling natural and cultural heritage in the zoo today.

Keywords: Penguin Pool; London Zoo; Lubetkin; Modernism

Introduction

‘We’re kind of caught in a cleft stick’, observes London Zoo Director Chris West.¹ In the spring of 2004 he decided to remove the penguins from their famous Penguin Pool. It was a controversial decision. Built by Russian émigré architect Berthold Lubetkin in 1934, the Penguin Pool is beyond doubt the zoo’s most popular building (see Figure 1). For decades it has been acknowledged as an apex of early modernism in the world.² ‘Yet’, suggests the Director, ‘iconic and incredible as it is structurally, it isn’t appropriate to put penguins in today.’

Contemporary animal welfare standards inevitably differ from those of the 1930s. Lubetkin relied on the best available expertise, but 70 years of research has provided many new insights into the ways of keeping penguins in captivity. The Director lists them as follows:

Andrew Shapland, UCL Institute of Archaeology and David Van Reybrouck. Correspondence to: andyshapland@hotmail.com



Figure 1 Lubetkin's Penguin Pool in 1934. (RIBA Library Photographs Collection.)

These penguins are used to burrowing and to a certain amount of space for territorial behaviour. So the Lubetkin pool really doesn't provide for the known behavioural requirements. The depth of the water, the temperature control of the water, the hardness of the concrete substrate where we're seeing arthritic changes in joints, sore joints. The original nest areas that Lubetkin designed were too close for the penguins. All of those issues are about their humane³ management.

Management increasingly needs to be seen in context of species conservation as well as the penguins' welfare needs.⁴ Given that conservation relevance is today the key criterion for London Zoo's animal policy, keeping penguins successfully is important as a means of population support, but even more so as a way to raise awareness about problems in the wild. 'We can't be asked to compromise about the animal welfare standards that we're now fully aware of,' says the Director, 'so it's difficult to see how we can ever put the penguins back in the Pool.'

This is one side of the coin, the most visible one. There is also another side: the Penguin Pool is worth conserving too. As a Grade I-listed building in Britain, the Pool enjoys the highest monument status in the UK. The only other Grade-I building at the Zoo, Lubetkin's Gorilla House, until recently figured on the *English Heritage Buildings At Risk Register*, a 'red list' of all protected buildings which are either in a poor state of repair through neglect, or are in danger of becoming so because of functional redundancy.⁵ The gorillas have long since been removed, and it is a building that the

Zoo has struggled to use for other animals. Its current function of housing small primates, aye-ayes and lemurs does not take advantage of its innovative design features.

As an open-air structure the Penguin Pool presents more limited options for re-use, although it can still function as an enclosure for animals. Yet the reason Lubetkin's buildings are listed is that they are recognised as important examples of the Modern Movement whose conservation raises particular issues.⁶ In particular, authors appeal to the 'ideology', 'idea' or 'intention' of the design as central to the conservation of modernist structures, even if this is at the expense of function or utility.⁷ As Henket asks:

In the case of the Modern Movement relics isn't the authentic idea of its social, technical and aesthetic presence the most important value? Isn't the representation of that idea the most important aspect of a conservation act?⁸

In the case of the Penguin Pool, the central idea is, to use Gruffudd's term, 'penguinness'.⁹ Its exemplars, the penguins, however, can no longer inhabit an enclosure which the Zoo regards as unsuitable for them. Keeping other animals in the Pool, as with the Gorilla House, would allow it to carry on functioning as an enclosure (and so be a part of the Zoo's wildlife conservation mission) but obscure the idea which is central to its conservation as an example of modernist architecture. Indeed, recent cosmetic changes to the Pool have also obscured its iconic form. But how do we balance natural and, equally legitimate, cultural heritage claims?¹⁰

With its exceptional artistic qualities and its immense popularity, the Penguin Pool is perhaps the most paradigmatic case of a heritage challenge that is faced by many zoological gardens today.¹¹ It is worth taking a closer look at it in order to explore the dilemma of reconciling landmark, often listed, architecture with current animal needs and visitor expectations.

Before the Penguin Pool

From its opening, in 1828, until 1940 the architectural development of the Zoo was in the hands of nine architects who provided 'a fascinating microcosm of 150 years of British architecture, from Regency and Classical styles to Neo-Gothic Revival, from Victorian Functional to Neo-Renaissance through to Italianate simplicity'.¹² But the prevailing architectural climate prior to Lubetkin's involvement in the Zoo was less a reflection of British architecture than the landmark Tierpark of Carl Hagenbeck at Hamburg opened in 1907. Admired by Chalmers Mitchell, Secretary of the Zoological Society of London (ZSL) from 1902 to 1935, Hagenbeck's naturalistic rocky panoramas in concrete were the inspiration for the 1914 Mappin Terraces.¹³ The Mappin Terraces are also listed (Grade II) but have proved easier to adapt than the Penguin Pool: they have been used to display a variety of animals and the visitors' pathway along the top tier has been closed, but they are still in use. Between the building of this structure and Lubetkin's Gorilla House the only other animal building added was the 1927 Reptile House, an elegant brick and iron structure. Its incorporation of modern technological ideas has made it one of the very few buildings built before the Penguin Pool which is still used for its original purpose. But it was in the shadow of the craggy Mappin

Terraces that first the smooth, streamlined Gorilla House, and then the Penguin Pool were built, both designed by Lubetkin's firm Tecton.

Lubetkin's building did not mark the start of the history of penguins at the Zoo. Known and consumed by British seafarers for centuries, the first ones to be exhibited in London arrived around 1900. Black-footed penguins (*Spheniscus demersus*) have since been a constant in the Zoo; as warm-water penguins they were relatively easy to exhibit in a temperate climate. Other species were sometimes shown as well, such as the yellow-crowned penguin and the king penguin, but these proved much more difficult to keep.¹⁴ Before the Penguin Pool, the birds were housed in different places such as the Sea Lions' Pond (before the sea lions began eating the penguins¹⁵) or the Mappin Terraces. Easy to move, the penguins were the most itinerant animals in the gardens.

From the beginning these animals enjoyed a peculiar status in London. Early Zoo guides did their best to describe their social and intellectual faculties, but popular writers acknowledged that they were simply 'among the most comical' animals of the Zoo. The well-known naturalist E. G. Boulenger noticed in 1926 that the penguin was 'certainly the most popular with the general public' but stressed that its comical appearance only referred to its terrestrial habits: 'Although ashore he is a distinctly clumsy and ungainly creature, and a subject for mirth, afloat or under the surface of the water he cuts a very different figure.'¹⁶ This dichotomy was at the heart of Lubetkin's design.¹⁷

The penguins' bipedal stance and humanlike gait triggered considerable anthropomorphic projection. Today we may be over-acquainted with the image of penguins as tuxedoed waiters, but in the years preceding the First World War military metaphors dominated. A popular book on London Zoo said: 'Erect of carriage, with his stumpy, fin-like wings kept strictly at "attention," the Penguin reminds all who see him of a diminutive soldier, for he has a jaunty look in his eye and his black and silver plumage might well be taken for a regimental uniform.' The only specimen of the king penguin in the Zoo, 'their gorgeous General', was later nicknamed 'Napoleon'. It led to a most remarkable encounter during an imperial visit shortly before the outbreak of the First World War. 'The Kaiser even, when visiting the Gardens, had nothing but admiration for this Napoleon.' The German emperor is even said to have attempted a 'royal caress'.¹⁸

In the 1930s several leading zoos in Berlin, New York, San Diego and London sought to replicate the breeding successes of Edinburgh.¹⁹ Adored by the public, penguins became a real must for any self-respecting zoo and even started to permeate popular culture.²⁰ And when the Londoner Allen Lane launched the world's first collection of pocket-sized novels in 1935, one year after the opening of Lubetkin's Penguin Pool, he easily found a totem for his small, friendly editions: the Penguin paperback was born.²¹ There is, then, a cultural history of penguins as well as a natural history, both of which are relevant to the heritage of the Zoo.

Lubetkin's Rational Manifesto

That such comical creatures would draw the attention of one of the more austere architects of the 20th century reveals something of the potential relevance of zoo architecture as a cultural statement. For Lubetkin, it was to become a test case for his ideas.²²

Born in Georgia in 1901, Berthold Lubetkin witnessed the important debates surrounding Soviet architecture as a student. The resulting Russian constructivism was an attempt to apply progressive techniques and forms to large-scale building projects where the living conditions of an urban and industrial proletariat could be improved. After prolonged stays in Berlin and Paris, where Lubetkin acquainted himself with the tradition of European classicism and the burgeoning modernism, he settled down in Britain in the early 1930s to found Tecton, the single-most influential architects' office in the interwar period in England.

Lubetkin's architecture was imbued with Russian constructivist ideals and modernist principles. His was an architecture that was highly intellectual, clearly aware of historical traditions and present-day politics and radically committed to a programme of social reform. Rejecting the nihilism of the Dadaists, he wrote that in the aftermath of the First World War 'the old order had to be replaced by a new order, not disorder'.²³ Architecture, in his view, had to function as a social weapon for the betterment of society. Like many of his radical contemporaries, his thinking integrated a rationalist view of humanity, a staunch belief in the emancipatory power of sciences like biology, physiology and psychology, and a political agenda that was clearly on the left. In his writings and buildings Lubetkin sought to dialectically transcend the existing dichotomies between constructivism and classicism, formalism and functionalism, tradition and progress. His work has therefore been aptly described as a form of 'radical classicism'.²⁴

It may come as a surprise that for someone so much dedicated to social reform in an age of economic depression, his first assignments involved luxury apartments, private villas and zoo enclosures. It is no accident, however, that Geoffery Vevers, Superintendent of London Zoo, and Sir Peter Chalmers-Mitchell, Secretary of ZSL, decided to commission Lubetkin's zoo buildings in the early 1930s and themselves live in Lubetkin's Highpoint One flats, since these progressive buildings, whether for animals or humans, reflected their socialist ideals. Julian Huxley was another of Lubetkin's advocates, although he ultimately failed to convince the Council to build Lubetkin's proposed Elephant House (1937) as modern architecture fell out of favour at the Zoo.²⁵ He believed that zoos could become a showcase for architects, writing that 'I am sure that Lubetkin's beautiful penguin pool, with its intersecting spiral ramps, has encouraged various exciting plans for public buildings.'²⁶

The Penguin Pool was only one, if certainly the most spectacular, in a series of Zoo buildings, which also included the Gorilla House in London Zoo (1932), the first modernist building in the UK, several constructions for Whipsnade Zoo (1934) and the design of an entire zoo at Dudley Castle (1937).²⁷ Lubetkin, however, was very clear about his purpose:

We always managed to persuade ourselves that even if we were designing a reptiliary [the simplest construction in Dudley Zoo], we were doing something of social importance, because its demonstration of clarity of thought could trigger the emotional response to rationality.²⁸

Not only were the zoo buildings for millions of visitors the first and most direct experience with modernist design but they also embodied the rationalist ideals which

Lubetkin sought to disseminate. His Penguin Pool has therefore rightly been described as ‘a manifesto’.²⁹ Just as modernist housing had to break away from the convoluted illusions of bourgeois architecture, zoo buildings had to be clear, transparent and rational. Zoos were, quite simply, about keeping animals in captivity and about showing them to a human audience. This he described as the ‘geometric’ approach to zoo design, in contrast to the ‘naturalistic’, as employed by Hagenbeck, concerned with imitating the animals’ natural habitat. As with the Gorilla House, Lubetkin took great care to adapt his design to the penguins’ needs. Known for his dispassionate attitude to his farm animals, numbering them rather than naming them, there was perhaps a hint of affection towards the animals which graced his most famous building.³⁰ His daughter recalls the numerous penguins which adorned his home, given by admirers of the pool.³¹ Lubetkin was greatly concerned about animal welfare, but sentimentality did not befit his rationalist approach, nor did romanticism. For him the quality of life in captivity did not depend on the quality of imitating the natural environment. The honesty of a plain and elegant artefact was far superior to the deceit and *kitsch* of a hyperrealist replica of the wild.

A Poem in Concrete

From the winding paths and picturesque elements of the Victorian zoo³² to Hagenbeck landscape evocations, zoo architecture has generally stressed the romantic, subjectivist experience of nature. The Penguin Pool constituted a radical rupture with that tradition. Despite a prior announcement promising ‘rockwork’,³³ it was opened, ahead of time, on 25 May 1934—without rockwork, of course.

The form inspired by an egg, the concrete double helix in the centre by a warship’s propeller, their realisation was an exploration of the potential of reinforced concrete.³⁴ Working with Ove Arup, Lubetkin produced two elegant interlocking spiral ramps whose substantial concrete buttresses were successfully hidden from view.³⁵ David Hancocks, a noted zoo architect, describes it as ‘concrete poetry, playing with the plastic possibilities of what was then a new material’.³⁶ While the nest boxes and textured walkways were designed to meet the penguins’ needs, this feat of engineering was also a piece of theatre to display the penguins to the public (see Figure 2). John Allan, who worked with Lubetkin on a refurbishment of the Pool in 1987, wrote that it could be equally ‘enjoyed as a zoological exhibit, an aquatic sculpture or an engineering capriccio—its success deriving largely from the inseparability of these qualities’.³⁷ The azure water in the Pool and the brilliant white walls were a formalist solution to the exhibition of penguins, in contrast to Hagenbeck’s panoramic artifices; Lubetkin’s only concession to naturalism was the saving of a nearby tree to act as a foil to his abstract design.

The readiness to welcome a genuine novelty in zoo architecture seemed to have been fairly widespread in 1930s, considering the virtual absence of any explicit critiques of the construction. Though the *Annual Report of the Zoological Society* in 1934 hinted at some resistance in the margin, it reflects the general satisfaction both with the design and on welfare grounds:

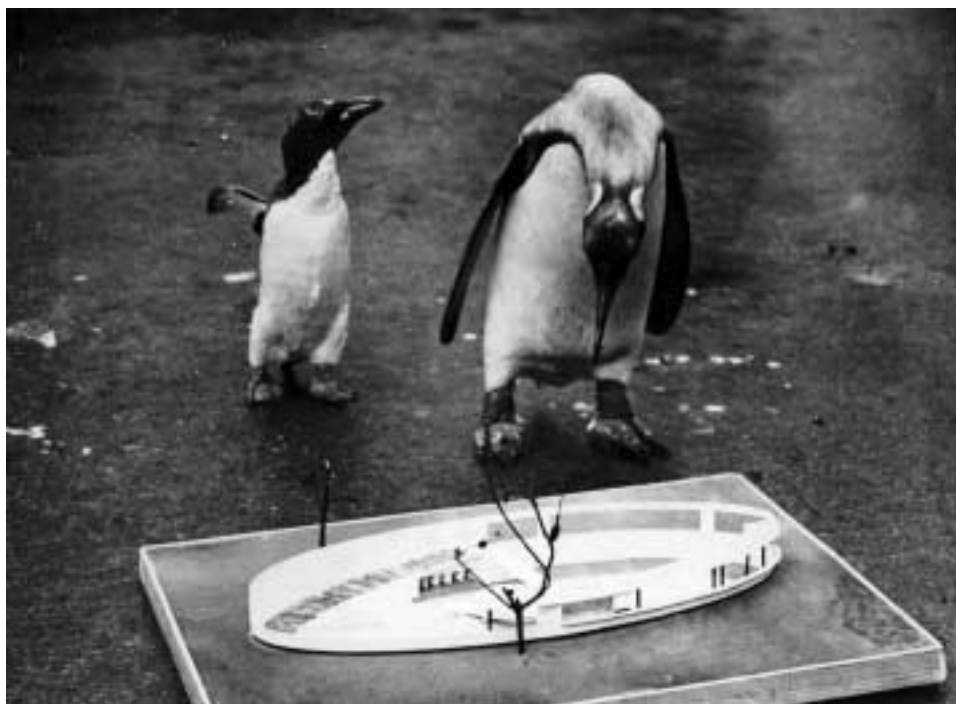


Figure 2 An environment adapted to their needs? (RIBA Library Photographs Collection.)

[The Pool] is constructed in modern reinforced concrete, and the architects, Messrs. Tecton, have taken full advantage of the plastic possibilities of the material. Without doubt it has proved extremely satisfactory for the penguins, and has the advantage of being easy to keep thoroughly clean. The general public have showed their appreciation by making it one of the most popular exhibits in the Gardens. As always happens in the case of new forms of artistic beauty there have been unfavourable criticisms, but it has received great and flattering attention in technical architectural publications in this country, Europe and America, and the Society has been congratulated as a pioneer in artistic and practical architecture.³⁸

The reception in the specialist press was indeed unanimously positive. Reports focused on how the Pool was adapted to the needs of displaying penguins, and, as would be expected, on the engineering involved. The technically audacious ‘cork-screw promenade’ received critical acclaim, as well as the careful attention to exhibition demands and welfare concerns.³⁹ *Architect and Building News* suggested that ‘[i]n designing this pool the architects studied the requirements of their clients very fully, and have produced an aquatic auditorium admirably suited to their histrionic ability’.⁴⁰ *The Architects’ Journal* meanwhile continued the dramaturgical metaphor, praising the ‘theatrical quality’ of the ramps, concluding that: ‘The pond, in fact, exploits the characteristics of the penguins and “produces” them to the public ...’⁴¹ At the same time the penguins’ welfare is considered: the report mentions how the

varied surfaces of the Pool preserved the birds from boredom, and also that they appeared to spend more time in the water in this new enclosure. In sum, architects and engineers agreed it was ‘a brilliant and pleasant design and excellently adapted to the penguins’.⁴²

In artistic circles, too, there was considerable interest in Lubetkin’s realisations. In 1936, the Museum of Modern Art in New York commissioned the Hungarian-born avant-garde artist László Moholy-Nagy to produce a short movie about Lubetkin’s work. The resulting *The New Architecture at the London Zoo* was a beautiful composition showing the geometric forms inhabited by the penguins.⁴³

The enthusiasm about the Penguin Pool, as it became known, despite the lettering on the canopy reading ‘Penguin Pond’ (see Figure 3), was not limited to zoo directors, architects, or artists; it also pervaded the popular press. The day after its opening nearly every newspaper carried a picture of the Penguin Pool, almost invariably showing keeper and penguins on one of the ramps, ‘like self-conscious chorus girls on a “joy plank”’.⁴⁴ The papers that devoted column inches to it described the ramps and the appearance of the enclosure without any hint of surprise at its far from rocky form.⁴⁵ Newspapers were clearly not the space for sophisticated discussion of Lubetkin’s merits, as the main focus of attention was on the penguins and how they reacted to their new surroundings. *The Illustrated London News* noted that ‘[a]t first the birds were inclined to be shy of the broad concrete spirals, the new ledges and the stairway down to the water’, whereas *The Telegraph* reported that at first they ‘looked upon the ingenious contraptions with something of a “wild surmise”’.



Figure 3 Penguin Pond shortly after opening. (RIBA Library Photographs Collection.)

Throughout, there was a distinctly positive appraisal for the modernity of the design. Apart from the ramps, the separate diving tank and the vivid blue of the Penguin Pool's bottom were highlighted. 'For as these "Dominicans in feathers" have to dive for their food', *The Telegraph* said, 'there will be all the more interest in seeing their black-and-white antics arrayed against a basin of almost cerulean blue'. Modernity was sensed in even the minutest detail, such as the use of the 24 hour clock. *The Mirror* wrote: 'Beside the special diving tanks are printed the feeding times. These do not read "Noon and 3pm". Nothing so old fashioned. They read "12 and 15".' The Penguin Pool was more than an elitist experiment with form, more than an artistic *Spielerei* flirting with the intellectual fashions of the time. It became a token of modernity: it suggested a sense of possibility, of innovation and beauty in a world that had been devastated by war and depression. Years later, *Mother and Child* magazine wondered: 'How many citizens of London have brooded over the railings of that pool, envying the penguins as they streak through the blue water or plod up the exquisite incline of the ramp—and have wondered sadly why human beings cannot be provided, like the penguins, with an environment so adapted to their needs?'⁴⁶

So inviting was the building that it instilled a desire to join the penguins inside their enclosure. This became a privilege that was only granted to the Zoo's most distinguished visitors. A British Paramount newsreel from 1938 shows Princess Elizabeth and Princess Margaret leaning against the parapet inside the Pool while a procession of king penguins—'old favourites of the Princesses' as the voiceover says—waddles by. Walt Disney, too, was once allowed to walk hand in hand with two king penguins along the perimeter of their pool and film them standing on one of the ramps (see Figure 4).

Self-effacing Architecture

Given the overall appreciation of the building in the first decade after its inauguration, it is intriguing to observe how serious doubts emerged after the Second World War. The removal of the progressive Julian Huxley from the post of Secretary in 1942, who championed Lubetkin's designs,⁴⁷ marked a change of attitude. This culminated in 1950 with an announcement that the penguins were to be removed, and the Penguin Pool adapted for seals.⁴⁸ The Superintendent of the Zoo, George Cansdale, made his views clear in response to a letter protesting about the decision:

Perhaps it has not occurred to you that we are not so much interested in this structure as a piece of modern architecture, as in its value for housing penguins. In this respect it has failed dismally, in fact the only point in its favour is that it allows a good view of the birds. The concrete base is very unsuitable for them to stand on, and in hot weather it is an airless heat trap.⁴⁹

Other reasons he cites include the cost of maintaining the pool and its contamination by penguin droppings, perhaps an allusion to respiratory diseases such as aspergillosis. Yet after 'strong and effective opposition' the Penguin Pool was reprieved.⁵⁰ Cansdale's objections were not enough to result in the removal of the penguins from the Pool. His comments were made in private letters and his tenure ended in 1953; although he was in charge of the running of the Zoo, strategic decisions were made by the Council.



Figure 4 Walt Disney filming penguins. (Science and Society Picture Library.)

From 1955 to 1977 Solly Zuckerman returned to the Zoo as Secretary of ZSL: as an employee of the Zoo in the 1930s he had introduced Lubetkin to the Zoo authorities.⁵¹

Nor did the flashpoint of 1951 seem to affect the public's affection for the Penguin Pool. The birds were still 'everyone's favourites', 'the clowns of the bird world', and 'delightful caricatures of ourselves', and the feeding times still attracted huge crowds on peak days.⁵² Meanwhile the debate about modernist architecture continued: one historian of the Zoo derided 'these ultra-modern blots upon the Zoo landscape', giving them the derogatory label 'rotatory architecture'.⁵³ The conservation authorities took a different view, however, with the Grade-I listing of the Penguin Pool in 1970. Not all welcomed the decision, among them Lubetkin himself, who could no longer see the place of such rational buildings in an increasingly irrational world:

[T]heir preservation seems to me to be a bit of a paradox inasmuch as they are uncompromisingly inimical to the state of mind of our society as we know it ... The logical thing would be to blow them up.⁵⁴

Architecture at the Zoo became increasingly inimical to Lubetkin's original conceptions. John W. Toovey, the zoo's main architect of the 1970s and 1980s, though recognising the Pool 'as a pioneering structure of the Modern Movement', suggested that it was 'not ideal for penguins'.⁵⁵ Toovey was the architect responsible for reintroducing

Hagenbeck's principles into London Zoo, developing in the New Lion Terraces (1972–1976) the craft of producing an illusionary wilderness where buildings were 'deliberately obscured in favour of landscaping that was intended as an improvement in the display and welfare of the animals'.⁵⁶ Toovey's realisations embodied the new tendency in zoo architecture that strived for naturalistic habitat design where cages and pavilions were turned into 'non-buildings'.⁵⁷ Clearly, such a self-effacing architecture is diametrically opposed to Lubetkin's structures, confident in their constructedness.

Since the 1980s, this neo-Hagenbeckian philosophy has become the new orthodoxy in zoo design. The longing for a pristine environment, no matter how artificial, was further fuelled by public opinion on the global ecological challenge and a tendency towards 'Disneyization' inside zoos.⁵⁸ It became *en vogue* for penguin displays too when in 1983 Sea World in San Diego opened its 'Penguin Encounter'. Containing 400 penguins, 600,000 litres of water, and processing 2,000 visitors per hour, this \$7.5 million exhibit involved a dramatic evocation of an Antarctic biotope.⁵⁹ Twenty years on, it is still the paradigmatic penguin display for many zoos in the USA, Europe and Japan.⁶⁰ Typical characteristics include: a preference for indoor displays; the use of widescreen acrylic windows; the possibility of underwater views; the use of synthetic rocks; *trompe l'œil* painting; temperature and humidity control; and behavioural enrichment devices.

The reasons for evicting the penguins from the Penguin Pool must be seen against the backdrop of this new philosophy. Refurbishment in 1987, at the time when Lubetkin's work enjoyed a revival among architects, was not just cosmetic, with the diving pool remodelled and the nest boxes enlarged. As John Allan, who worked on the refurbishment with Lubetkin, points out, the work demonstrated that 'it is quite possible to reconcile the need for change with heritage considerations, provided this is undertaken with historical understanding and sensitivity'.⁶¹ Yet this work, and another upgrade he undertook in the 1990s, could do nothing but highlight the stark contrast between this simple, if elegant, building and the complex, state-of-the-art exhibits elsewhere. In 1993, a heritage expert reported that 'the Penguin Pool has been criticised as unsuited to its purpose, although the birds are said to breed successfully'.⁶² Breeding success, however, is no longer seen as the sole marker of good animal husbandry (see the Director's comments above). The nesting slots which were part of the original design were replaced for most of the Pool's life with wooden kennels around the sides: although easily accessible for the keepers, the slots were apparently too close together for the penguins' territorial instincts. Ironically, the rubber slabs designed to stimulate the penguins' feet had long been removed.⁶³ In July 2000, Zoo Director Jo Gipps still sought to 'make the building work successfully for penguins without compromising its qualities', but the hypernaturalistic trend could no longer be reversed.⁶⁴

Without prior announcement, the penguins were removed in the spring of 2004. A sign by the Pool revealed only where the penguins had been moved to, and not why: it was only upon writing to the Director that one of the authors was told that a fox problem has necessitated the move, although underlying problems including the water quality and depth were cited as reasons why penguins would not be reintroduced.⁶⁵ Soon after, the story appeared in two national newspapers:⁶⁶ here the Zoo focused on

the unsuitability of the Pool for the penguins, causing them aching joints, and their preference for their new pond, where they could burrow. A newspaper article in 2006 also mentioned that the penguins were suffering from a 'fungal infection', presumably aspergillosis, before moving to their new pool.⁶⁷

Yet what attracted the strongest criticism in the press were the changes made to the Pool to accommodate two rather elusive Chinese alligators, in which the Zoo's fundamental preference for neo-Hagenbeckian principles over modernist cage design was clearly apparent. Described by *The Sunday Times* as 'a weed-ridden swamp', the perimeter was covered with wood chippings, potted tropical plants and tree logs were introduced, as well as algae and pondweed to make the water look murky. In addition, the steel supports of the visitor's canopy were camouflaged with bark and reed (see Figure 5). This provoked a robust protest from the Twentieth Century Society, an architectural lobby group in the UK. Its press release, drawing attention to the move, argued that Lubetkin's 'modernist icon [was] to be robbed of life' by removing the penguins. The Society was 'deeply disappointed that the Zoo [was] not prepared to compromise', yet suggested a consensus solution 'with the penguins in the pool part of the year or in reduced numbers'.⁶⁸ The Zoo, however, was not ready to compromise and referred to the existing heritage regulations as a fundamental problem. Curator of Birds at London Zoo, John Ellis argued that, 'Because of the listing protection afforded to the pool's structure, the changes that would be needed to update the Lubetkin pool to a viable penguin environment became unfeasible so the decision was made to move the colony to another location.'⁶⁹

Although the alligators were hardly ever in evidence in the reconverted Penguin Pool, the (non-structural) changes made clear what the new zoo philosophy was all about. As if to emphasise the preferred aesthetics, the penguins' new home was a converted wildfowl pool whose only architectural feature is an unremarkable concrete pond surrounded by plants and wood chippings (see Figure 6). Arguably, visitors have a better view of the penguins now, with a glass frontage and viewing platform, but this pond is unlikely to resonate with them as the Penguin Pool did, or be remembered in 70 years' time.

Discussion

Confined neither to the Penguin Pool nor London Zoo, the dilemma we have been illustrating occurs in many historical zoos around the world, particularly in Western Europe where many gardens date back to the 19th century. In essence, it comes down to the question: how do we deal with buildings in an environment where we no longer want to see buildings today?

Before answering that question, we may wonder why we no longer want to see buildings in the zoo. The spontaneous answer would almost certainly refer to animal needs (cage size, habitat structure, behavioural repertoire, etc.). But is that so? It may be advisable to draw a neat distinction between animal needs and 21st-century visitor expectations. The latter are influenced by natural history documentaries, portraying wildlife in unspoilt ecological habitats.⁷⁰ That these are equally carefully crafted



Figure 5 Alligator Pond in 2004. (Andrew Shapland.)

illusions of wilderness, shot in artificially protected reserves and composed according to specific genre conventions, does not seem to diminish their objectivist appeal. The global wildlife crisis has further stimulated the notion that zoos should be devised, and even designed, as sanctuaries of a vanishing reality. Finally, contemporary visitor expectations are equally indebted to the processes of sentimentalisation in our attitude towards animals that took place during the 20th century.⁷¹

In response to a highly critical and sensitive public opinion, many historical zoos have incorporated the neo-Hagenbeckian ideal of self-effacing non-architecture. Often, the model for this has come from the landscape immersion habitats that existed in large-scale North American zoos such as the Bronx, Seattle and San Diego.⁷² Yet the sheer size of these institutions, and their much more recent origin, largely frees them from the heritage dilemmas observed in historical zoos. With his background in American zoo architecture Hancocks is critical of London Zoo's historical buildings:

Too many somber and dreary buildings accumulated over a hundred and fifty years or so have created a generally depressing atmosphere at London Zoo. A stultifyingly large number of its built forms are now on heritage conservation lists, frustrating any possibility for the Zoo ever to remake itself.⁷³

While London Zoo will never emulate the Bronx, Hancocks' pessimism raises an important question: why should it?

It is clear that in a modern zoo animal welfare standards cannot be compromised, but it would be erroneous to assume that these standards can be met only in hyper-realistic habitat replicas. John Allan argues that this time there 'appears to have been



Figure 6 New Penguin Pond in March 2006. (Andrew Shapland.)

... a distinct reluctance to consider the perceived current problems with the pool as something that might be susceptible to resolution through the engagement of professional design skills.⁷⁴ If the penguins in Regent's Park had to be evacuated because of a fox then the problem is not the Pool but the fox—or, rather, the fence. If

penguins in captivity regularly suffer from aspergillosis,⁷⁵ what guarantees are there that this will not be the case in their new enclosure too? Indeed, there were few complaints from the general public about the penguins being in the Pool. According to the Director, there was praise from some animal welfare lobbyists when they were removed,⁷⁶ but the Penguin Pool never figured on the campaign list of British animal right societies like Born Free and CAPS (Captive Animals' Protection Society). So why anticipate public disapproval if there is 70 years of visitors' enthusiasm?

Yet assuming that the Pool is indeed no longer suitable for penguins, what options have we got? The bricolage with potted plants and wooden logs was a temporary arrangement which could not entirely satisfy the Zoo either: in the autumn of 2004, the alligators and their props were removed. The suggestion, made informally by some social scientists, to replace the existing penguins with robotic counterparts, possibly giving the visitors a chance to handle them through remote control devices, sounds intriguing, though it runs the risk of drawing the attention away from animals and architecture towards a technological fad.⁷⁷ Among suggestions made to the Director were Lego or sculptural replacements. In the short term his preferred solution was indeed to use it as a space for art installations. But as the Pool stood empty through the winter of 2004/2005, no sculptures were introduced. Then, in an echo of the previous year, the Pool was filled with sand, foliage and wooden shelters brought back in, and a colony of porcupines introduced. There was no press reaction this time, but the visitor reaction was the same: where are the penguins?⁷⁸

Although the Zoo saw listing as an impediment, Cherry noted in an English Heritage conference on conserving recent architecture that it is concerned with managing change rather than preventing it. 'It provides the opportunity to explore all possible means of maintaining an historic building in viable use without compromising its historical and architectural character.'⁷⁹ Given the historical and architectural prominence of the Pool, there are opportunities for foregrounding this, showcasing the idea of penguinness, rather than hiding it beneath the bark chippings.

A longer-term option puts Lubetkin's masterpiece again at centre stage and starts from the premise that historical heritage in zoos does not need to be an obstacle but can be an asset. The Zoo has recently been considering the possibility of restyling the Pool and its adjacent Penguin Shop into a heritage attraction, where historical footage and photos from the Zoo's very rich archive and possibly from visitors could be shown. Lubetkin's Gorilla House too has been mooted as a possible heritage centre. Positive experiences in 2003 with the projection of Moholy-Nagy's short movie *The New Architecture of the London Zoo* on the white walls of the Penguin Pool, as part of a film festival on architecture, showed that there was ample scope here for reusing Lubetkin's construction in an innovative, non-disruptive and meaningful way.⁸⁰ In this context it would be worth considering whether the visitors, after 70 years of standing against the parapet and longing to go in, should not finally be granted the opportunity to explore the inside of the building. Allowing visitors to step back into the past in these ways could add an extra dimension to their zoo experience. Penguins would remain central to the idea of the Pool, but rather than real penguins with arthritic joints, the Pool could be a location for penguins as remembered in photos, virtual penguins projected

onto the walls, or people empathising with penguins inside the Pool. If the Penguin Pool is no longer adapted to the penguins then it is up to the Zoo to ensure that the visitors stay adapted to the Penguin Pool.

Acknowledgements

The authors wish to thank Chris West, Paul Pearce-Kelly, John Allan and Sasha Lubetkin for their readiness to discuss the Penguin Pool, and who supplied us with invaluable material. Thanks too to Bonnie Hallman, Cornelius Holtorf and Susie Jones for reading a draft of the manuscript, and to the staff of the ZSL and RIBA library for their help.

Notes

- [1] Chris West, interviewed on 2 September 2004.
- [2] It was feted at the 1937 'Modern Architecture in England' exhibition in the Museum of Modern Art, New York, as an illustration of the pre-eminence of British modernism. Steiner, 'For the Birds', 7.
- [3] Humane might equally be used to describe the modernist project, with no attempt made to replicate natural environments in improving people's and animals' living conditions. See Anker, 'Bauhaus at the Zoo', 916.
- [4] IUCN 2004, *2004 IUCN Red List of Threatened Species* [accessed 10 January 2005], available from www.redlist.org on; of the seventeen extant species, ten are classed as vulnerable and three endangered. This has not, however, been cited as a factor in the penguins' removal from the pool.
- [5] Accessible via www.english-heritage.org.uk
- [6] DOCOMOMO, the DOcumentation, CONservation of buildings, sites and neighbourhoODs of the MOdern MOvEMENT was founded in 1990 in order to focus attention on the issues surrounding modernism in particular (www.docomomo.com). The Eindhoven Statement sets out its aims. Cunningham, *Modern Movement Heritage*, 163 (Appendix A).
- [7] *Ibid.*, 7; Henket, 'The Icon and the Ordinary', 16; Saint, 'Philosophical Principles of Modern Conservation', 20–22.
- [8] Henket, 'The Icon and the Ordinary', 16.
- [9] Gruffudd, 'Biological Cultivation', 229.
- [10] See Lowenthal, 'Natural and Cultural Heritage' for further discussion of these terms.
- [11] Shapland, 'Endangered Species or Endangered Buildings?'; Shapland, 'The Changing Nature of the Monkey Temple at Bristol Zoo'.
- [12] Toovey, '150 Years of Building at London Zoo', 180. See also Guillery, *The Buildings of London Zoo*, 2–24.
- [13] For Hagenbeck: Rothfels, *Savages and Beasts*. Mappin Terraces: Toovey, '150 Years of Building at London Zoo', 185; Baratay and Hardouin-Fugier, *Zoo*, 249.
- [14] Based on an analysis of Peter Chalmers Mitchell's annual *Guide to the Gardens and Aquarium—Regent's Park* (published by the Zoological Society of London) from 1903 to 1934.
- [15] Edwards, *London Zoo from Old Photographs*, 59.
- [16] Roberts, *Zoo Folk*, 119; Boulenger, *A Naturalist at the Zoo*, 75.
- [17] 'The penguins' amusing gait out of water was contrasted with their dexterity underwater, and an assembly of ramps, steps, pond and diving tank ensured an exciting spectacle' (Reading and Coe, *Lubetkin & Tecton*, 57).
- [18] Roberts, *Zoo Folk*, 118; Pocock, *Highways & Byways of the Zoological Gardens*, 40.

- [19] Oehler, 'Penguin', 983.
- [20] Including a detective movie set in New York's Battery Park Zoo. Its popularity in England could explain why the Penguin Pond soon became a pool. IMDb 2005, 'Penguin Pool Murder (1932)' [accessed 11 January 2005], available from <http://www.imdb.com/title/tt0023327/>
- [21] An office junior was sent to London Zoo to draw a penguin for the logo. Baines, *Penguin by Design*, 13.
- [22] Anker, 'The Bauhaus of Nature', 236–38.
- [23] Quoted in Coe and Reading, *Lubetkin and Tecton*, 26. For Lubetkin's early career: Allan, *Berthold Lubetkin*, 129–58; Coe and Reading, *Lubetkin and Tecton*, 17–43. For his zoo buildings: Allan, *Berthold Lubetkin*, 199–250; Coe and Reading, *Lubetkin and Tecton*, 44–68, 111–61.
- [24] Allan, *Berthold Lubetkin*, 243.
- [25] *Ibid.*; Reading and Coe, *Lubetkin & Tecton*, 97.
- [26] Huxley, *Memories*, 233. See also note 47.
- [27] Dudley Zoo has also encountered dilemmas with the conservation of Tecton's buildings. Heath, 'Tecton Buildings, Dudley Zoo'.
- [28] Quoted in Allan, *Berthold Lubetkin*, 135.
- [29] *Ibid.*, 239.
- [30] *Ibid.*, 199–201.
- [31] Sasha Lubetkin, pers. comm., 3 August 2004.
- [32] For the significance of circulation at the Zoo see Steiner, 'For the Birds'.
- [33] Zoological Society of London, *1933 Annual Report*, 39 (1934).
- [34] Gruffudd, 'Biological Cultivation', 228. An editorial in *Concrete Quarterly* 157 (April–June 1988: 1) describes it as 'one of the most important landmarks in the history of reinforced concrete in this country'.
- [35] Allan, *Berthold Lubetkin*, 211.
- [36] Hancocks, *A Different Nature*, 76.
- [37] Allan, *Berthold Lubetkin*, 209.
- [38] Zoological Society of London, *1934 Annual Report*, 43 (1935).
- [39] Brightwell, *The Zoo You Knew?*, 234.
- [40] 'The New Penguin Pool in the Zoological Gardens, London', *The Architect and Building News*, 1 June 1934, 254–55.
- [41] 'Penguin Pool, Zoological Gardens: By Lubetkin, Drake and Tecton', *The Architects' Journal* 79, no. 2056 (1934): 856–59.
- [42] Macneice, *Zoo*, 56.
- [43] Felix Film Festival 2003, *Wild Walls London* [accessed 11 January 2005], available from <http://www.felixfilm.com/e-penguin.htm>; Anker, 'The Bauhaus of Nature', 235–36.
- [44] *Daily Mirror*, 26 May 1934, 13.
- [45] *The Daily Telegraph*, 26 May 1934; *The Illustrated London News*, 2 June 1934; *Daily Mirror*, 26 May 1934.
- [46] Quoted in Guillery, *The Buildings of London Zoo*, 17–18.
- [47] In a 1937 memorandum to the Council he fended off criticisms of Lubetkin's work by quoting glowing reviews from architectural critics, concluding that: 'the Society will be earning the gratitude of later generations by giving a lead in the matter of modern construction'. RIBA archive LUB/1/4; Allan, *Berthold Lubetkin*, 237–43, charts the growing disenchantment of ZSL with Tecton.
- [48] *Architects' Journal*, 28 December 1950.
- [49] Letter dated 19 December 1950, in reply to a concerned human resident of one of Lubetkin's buildings, Highpoint. RIBA archive LUB 1/7/1. An almost identical letter to a different protestor mentions the droppings (1/7/2). The incomplete set of correspondence in the archive was part of a campaign to save the Penguin Pool; Robert Browning, editor of *Architects' Journal* suggests to an unknown correspondent that plans involve the demolition of the ramps (1/7/3), and petitions the Secretary of ZSL to reconsider the decision (1/7/4).

- [50] Reading and Coe, *Lubetkin & Tecton*, 58.
- [51] Guillery, *The Buildings of London Zoo*, 18; Allan, *Berthold Lubetkin*, 202.
- [52] Street, *The London Zoo*, 102–4.
- [53] Brightwell, *The Zoo Story*, 215–16.
- [54] Quoted in Lambert, 'Historic Pioneers', 594–95.
- [55] Toovey, '150 Years of Building at London Zoo', 187.
- [56] Guillery, *The Buildings of London Zoo*, 54.
- [57] Mullan and Marvin, *Zoo Culture*, 53.
- [58] Beardsworth and Bryman, 'The Wild Animal in Late Modernity', 83.
- [59] Cherfas, *Zoo 2000*, 123–24.
- [60] Oehler, 'Penguin', 986.
- [61] John Allan, pers. comm., 31 March 2005. An account of the refurbishment is given in Allan, 'Tectonic Icon Restored' and 'Landmark of the Thirties Restored'.
- [62] Guillery, *The Buildings of London Zoo*, 85.
- [63] Allan, 'Tectonic Icon Restored', 32.
- [64] *The Independent*, 17 July 2000.
- [65] Letter from Chris West to Andrew Shapland, 18 June 2004.
- [66] *Sunday Times*, 27 June 2004, 8; *Guardian*, 3 July 2004, 10. See also *Building Design*, 9 July 2004.
- [67] *Daily Mail*, 1 November 2006.
- [68] The Twentieth Century Society, 2004, 'Modernist Icon to be Robbed of Life: Penguin Pool Loses its Inhabitants' [online, no longer available].
- [69] J. Ellis, 'Lubetkin Lives On', *Lifewatch (Zoological Society of London)*, Autumn/Winter 2004, 18–19.
- [70] Turner, 'Nostalgia for the Primitive', 64–71; Mitman, *Reel Nature*.
- [71] Franklin, *Animals and Modern Cultures*; Franklin and White, 'Animals and Modernity', 219–20.
- [72] Ratajszczak, 'Immersion-effect Exhibitory', 604.
- [73] Hancocks, *A Different Nature*, 51.
- [74] John Allan, pers. comm.
- [75] Oehler, 'Penguin', 986.
- [76] Chris West, pers. comm.
- [77] E-mails from Kathryn Denning, Cornelius Holtorf, Sarah Cross to David Van Reybrouck, July 2004.
- [78] Overheard on a visit on 9 July 2005. A sign entitled 'Penguins on the Move' continues to direct people to the new Penguin exhibit, illustrating that this is a frequent question (as of 30 March 2006).
- [79] Cherry, 'Listing Twentieth-century Buildings', 5.
- [80] Felix Film Festival 2003, *Wild Walls London* [accessed 11 January 2005], available from <http://www.felixfilm.com/e-penguin.htm>

References

- Allan, J. 'Tectonic Icon Restored'. *RIBA Journal* (February 1988): 30–32.
- . 'Landmark of the Thirties Restored'. *Concrete Quarterly* 157 (April–June 1988): 2–5.
- . *Berthold Lubetkin: Architecture and the Tradition of Progress*. London: RIBA, 1992.
- Anker, P. 'The Bauhaus of Nature'. *Modernism/Modernity* 12, no. 2 (2005): 229–51.
- . 'Bauhaus at the Zoo'. *Nature* 439 (23 February 2006): 916.
- Baines, P. *Penguin by Design: A Cover Story, 1935–2005*. London: Allen Lane, 2005.
- Baratay, E. and E. Hardouin-Fugier. *Zoo: A History of Zoological Gardens in the West*. London: Reaktion, 2002.

- Beardsworth, A. and A. E. Bryman. 'The Wild Animal in Late Modernity: The Case of the Disneyization of Zoos'. *Tourist Studies* 1, no. 1 (2001): 83–104.
- Boulenger, E. G. *A Naturalist at the Zoo*. London: Duckworth, 1926.
- Brightwell, L. R. *The Zoo You Knew?* Oxford: Basil Blackwell, 1936.
- . *The Zoo Story*. London: Museum Press, 1952.
- Cherfas, J. *Zoo 2000: A Look beyond the Bars*. London: BBC, 1984.
- Cherry, M. 'Listing Twentieth-century Buildings: The Present Situation'. In *Modern Matters: Principles and Practice in Conserving Recent Architecture*, edited by S. Macdonald. Shaftesbury: Donhead, 1996: 5–14.
- Coe, P. and M. Reading. *Lubetkin and Tecton: Architecture and Social Commitment*. London: Arts Council of Great Britain; Bristol: University of Bristol, 1981.
- Cunningham, A., ed. *Modern Movement Heritage*. London: Spon, 1998.
- Edwards, J. *London Zoo from Old Photographs 1852–1914*. London: John Edwards, 1996.
- Franklin, A. S. *Animals and Modern Cultures: A Sociology of Human–Animal Relations in Modernity*. London and New York: Sage, 1999.
- Franklin, A. S. and R. D. White. 'Animals and Modernity: Changing Human–Animal Relations, 1949–98'. *Journal of Sociology* 37, no. 3 (2001): 219–38.
- Gruffudd, P. 'Biological Cultivation: Lubetkin's Modernism at London Zoo in the 1930s'. In *Animal Spaces, Beastly Places: New Geographies of Human–Animal Relations*, edited by C. Philo and C. Wilbert. London: Routledge, 2000: 222–41.
- Guillery, P. *The Buildings of London Zoo*. London: Royal Commission on the Historical Monuments of England, 1993.
- Hancocks, D. *A Different Nature: The Paradoxical World of Zoos and their Uncertain Future*. Berkeley and London: University of California Press, 2001.
- Heath, D. 'Tecton Buildings, Dudley Zoo'. In *Modern Matters: Principles and Practice in Conserving Recent Architecture*, edited by S. Macdonald. Shaftesbury: Donhead, 1996: 58–64.
- Henket, H.-J. 'The Icon and the Ordinary'. In *Modern Movement Heritage*, edited by A. Cunningham. London: Spon, 1998: 13–17.
- Huxley, J. *Memories*. London: George Allen & Unwin, 1970.
- Lambert, S. 'Historic Pioneers'. *Architects' Journal* 151, no. 10 (1970): 594–97.
- Lowenthal, D. 'Natural and Cultural Heritage'. *International Journal of Heritage Studies* 11 (2005): 81–92.
- Macneice, L. *Zoo*. London: Michael Joseph, 1938.
- Mitman, G. *Reel Nature: America's Romance with Wildlife on Film*. Cambridge, MA: Harvard University Press, 1999.
- Mullan, B. and G. Marvin. *Zoo Culture*. 2nd ed. Urbana and Chicago: University of Illinois Press, 1999.
- Oehler, D. A. 'Penguin'. In *Encyclopedia of the World's Zoos*. Vol. 2, edited by C. E. Bell. Chicago and London: Fitzroy Dearborn, 2001: 983–88.
- Pocock, C. I. *Highways & Byways of the Zoological Gardens*. London: A. & C. Black, 1913.
- Ratajczak, R. 'Immersion-effect Exhibitory'. In *Encyclopedia of the World's Zoos*. Vol. 2, edited by C. E. Bell. Chicago and London: Fitzroy Dearborn, 2001: 604–6.
- Reading, M. and P. Coe. *Lubetkin & Tecton: An Architectural Study*. London: Triangle Architectural Publishing, 1992.
- Roberts, W. J. *Zoo Folk*. London: T. Werner Laurie, 1911.
- Rothfels, N. *Savages and Beasts: The Birth of the Modern Zoo*. Baltimore and London: Johns Hopkins University Press, 2002.
- Saint, A. 'Philosophical Principles of Modern Conservation'. In *Modern Matters: Principles and Practice in Conserving Recent Architecture*, edited by S. Macdonald. Shaftesbury: Donhead, 1996: 15–28.
- Shapland, A. 'The Changing Nature of the Monkey Temple at Bristol Zoo'. *Anthrozoös* 17, no. 3 (2004): 194–209.

- . 'Endangered Species or Endangered Buildings? The Problem with Conservation'. In *Our Precious Past: Sharing Responsibility for our Archaeological Heritage*, edited by D. Barrowclough. Cambridge: Red Dagger Press, 2004: 69–80.
- Steiner, H. 'For the Birds'. *Grey Room* 13 (Fall 2003): 5–31.
- Street, P. *The London Zoo*. London: Odhams, 1956.
- Toovey, J. '150 Years of Building at London Zoo'. In *The Zoological Society of London. 1826-1976 and Beyond*, edited by S. Zuckerman. Symposia of the Zoological Society of London 40. London: Zoological Society of London, 1976: 179–202.
- Turner, G. 'Nostalgia for the Primitive: Wild Life Documentaries on TV'. *Australian Journal of Cultural Studies* 3, no. 1 (1985): 64–71.