Title: Encountering snakes in early Victorian London: the first reptile house at the Zoological

Gardens

**Abstract:** This paper examines the first reptile house (opened in 1849) at the Zoological Gardens

in London as a novel site for the production and consumption of knowledge about snakes, stressing

the significance of architectural and material limitations on both snakes and humans. Snakes were

both familiar and ambiguous, present at every level of British society through the reading of Scripture,

and as recurrent characters in imperial print culture. For all that snakes engendered feelings of disgust

as the most distinctive representatives of a lowly class of animals, they exerted an

equivalent fascination over diverse publics spanning the social spectrum. Building on work showing a

consideration for the multi-sensory nature of visits to menageries, this paper considers animal

display and spectacle beyond the visual. It explores the emotional economy of encountering snakes in

person and the bodily phenomena this engendered. Vicarious visits were offered up to readers

of periodicals and newspapers, and the reptile house was harnessed as a controversial pedagogical

resource for teaching moral, as well as scientific, lessons.

Keywords: animals, display, emotions, imperialism, natural history, reptile house, spectacle, zoo

1

Accounting for the "expressions and gestures involuntarily used by man and the lower animals, under the influence of various emotions and sensations", Charles Darwin illustrated his "principle of serviceable associated habits" with reference to his own body. At the reptile house in the Zoological Gardens in Regent's Park he pressed his face against the thick glass-plate of the compartment housing a puff adder "with the firm determination of not starting back if the snake struck". Blinking and withdrawing the head and body when a blow was directed towards the face could, to some extent, be prevented, if the "danger does not appear to the imagination imminent", he claimed. But coming face-to-face with an ancient adversary proved too much even for the paragon of gentlemanly reserve: "as soon as the blow was struck, my resolution went for nothing, and I jumped a yard or two backwards with astonishing rapidity. My will and reason were powerless against the imagination of a danger which had never been experienced."

Darwin's experiment was repeated by countless other visitors to the reptile house, who, far from passive bystanders, interacted with each other, the animals, and their material surroundings. To see the snakes involved active imagination and the recollection of stirring travellers' tales, the promise of extraordinary sights and emotional turmoil. Through personal adventure and bodily experience, moral lessons, as well as natural historical ones, could be learned by the exercise of the emotions. Whilst the true nature of snakes might be discovered by a trip to the reptile house, the process revealed as much about one's own character. By mid-century, social, political, and institutional developments on local and global scales provided greater opportunity than ever before for many in the metropolis to encounter corporeally what were formerly almost entirely literary creatures.

Previous work on the Zoological Gardens has emphasized their significance as both product and promoter of British imperial endeavours.<sup>5</sup> In step with Britain's activities on a global stage, animal displays on the streets alongside the new institutional menageries offered chances to encounter what were styled as savage and primitive brought under subjugation. It has become a familiar theme that representations of animals were often ideologically charged, yoked to notions of class, race,

gender, civility, and morality.<sup>6</sup> Recent species-focused accounts have shown the complexity and diversity of attitudes towards imperial animals, such as tigers, kangaroos, and elephants.<sup>7</sup> Animals have been shown to have 'afterlives' in the sense of the extension and elaboration of narratives beyond the death of individual animals, whether or not material remains were in some way preserved.<sup>8</sup> Unlike the animals mentioned above, living snakes could be found in Britain but they retained exotic connotations. They were at once immediately familiar and persistently ambiguous, culturally present at every level of society through the reading of Scripture. Serpents were widely despised not only for ancient Edenic transgressions but also for their contemporary conduct, as stranglers and poisoners. For all that snakes engendered feelings of disgust as the most distinctive representatives of a lowly class of animals, they exerted an equivalent fascination over diverse publics spanning the social spectrum.<sup>9</sup>

The first reptile house at the Zoological Gardens opened to visitors on 6 June 1849. This essay examines its promotion and reception, and why large numbers of people paid to see snakes. It shows how an important resource for scientific study was intimately connected to the worlds of commerce, spectacle, and empire, and how zoologists attempted to demonstrate their own expertise by using snakes as an object lesson. It examines the reptile house as a significant and contested site for the production and consumption of knowledge about snakes, stressing the significance of architectural limitations on both snakes and humans. Building upon work showing a consideration for the multi-sensory nature of visits to menageries, this essay considers the broader materiality of animal display beyond the visual and tries to recover the participation of audiences. 10 The snakes at the reptile house provide a lens through which to explore Victorian notions of evil and morality in relation to spectacle. The theatricality of the reptile house undoubtedly contributed to its appeal to visitors and to the readers of the popular periodicals and serialized fiction in which it became a fixture. A visit by Egyptian snake-charmers soon after it opened further heightened the drama, though it was carefully presented as a pedagogical opportunity. In some quarters though, questions were raised over the suitability and appropriateness of the lessons on offer, and even the morality of keeping snakes at all.

# **Building the collection**

The mid-nineteenth century saw an upsurge of interest across society in all things scientific, perhaps most visible in the Great Exhibition of 1851.11 Commercial showmen created and catered for a flourishing public demand for novel metropolitan amusements. 12 Natural history was particularly fashionable and displays of living animals were enduringly popular, sometimes alongside commercial displays of foreign peoples, which were of ethnographic significance for men of science in turn.<sup>13</sup> Alongside well-established permanent and travelling menageries, the 1820s and 30s saw the foundation of both metropolitan and provincial zoological gardens. The most famous and successful of these opened in Regent's Park in London in 1828 belonging to the Zoological Society of London (founded in 1826). Admission to the grounds for non-members was conditional on the payment of a shilling and the recommendation of an existing member. 14 Originally, the Gardens were intended as a site for experimental breeding and domestication of exotic game, and were "primarily canvassed as a kind of clearing house for aristocratic stock". 15 In these early years when securing patronage was a significant concern, as Adrian Desmond remarks, "taxonomists' needs came a poor second to the gentry's fancy". 16 But the profitability that came from attracting promenading visitors in turn helped to fund various museums, activities surrounding which contributed to the growing scientific focus of the Society and Gardens.

Nonetheless, by the middle decades of the century, a combination of the growing costs of sourcing and maintaining animals and declining visitor numbers left the menagerie in a precarious financial position. The requirement of a recommendation for admission was dropped. Visitor numbers rose by 50,000 in the year following this change.<sup>17</sup> This was accompanied by a policy of publicizing, or 'starring', new animals, as with the hippopotamus Obaysch, which was heralded as the first in Europe since Roman times.<sup>18</sup> The shift in strategy was largely down to the appointment of D.W. Mitchell as secretary in 1847, who retained the role for twelve years. Mitchell convinced the Society's Council to sanction an expansion in the number and range of species, and the construction of a

number of new buildings in the years 1848-9: in 1847 there were just over 300 living animals in the collection, by mid-1849 there were over 1300.<sup>19</sup> In 1849, work to convert the building formerly housing the Carnivora into a reptile house was completed.<sup>20</sup> The driving force was a special committee set up by the Council to find ways of increasing income.<sup>21</sup> The auditors of the Society's accounts declared the £240 spent on the building conversion a "judicious expenditure" which had "vastly increased the attraction of the Gardens, and been not only useful to the student of Natural History, but conducive to the healthful preservation of the specimens".<sup>22</sup> *Punch* was amongst several publications to greet the new attraction with enthusiasm, remarking that the spectacle of the reptiles "disporting themselves ... with all the innocence of lambs and liveliness of monkeys" suggested the notion of creating a "Social Reptile House" for "malicious critics, slander-mongering journalists, dishonest politicians, and other creeping varieties of the human race".<sup>23</sup>

The reptile house and other permanent buildings constructed at the same time (the first 'aquatic vivarium', or aquarium, opened in 1853) were successful in making the Gardens a more attractive proposition during the winter months and in inclement weather. Considerable efforts went into its stocking. Reptiles surviving transportation to Britain had life expectancies measured in weeks and months, frequently succumbing to starvation if not the climate. Indeed, the relative lateness of the accumulation of reptiles at Regent's Park was probably more for want of suitable accommodation than of difficulty in procurement, though in the gifting culture upon which the Zoological Society was partially reliant, donors also showed a preference for association with spectacular and beautiful animals over reptiles. Prior to 1849, it was people of more modest means, often military men and ship's captains, who were the most frequent suppliers of snakes. But that year one of the underkeepers, Henry Hunt, was dispatched to Alexandria to assist in bringing over a large collection of animals, around seventy of which were reptiles, a gift from the Khedive of Egypt, Muhammad Ali Pasha.<sup>24</sup> The animals were the result of negotiations by the British consul-general Charles Augustus Murray.

Situated in the east of the Gardens and accessed via a tunnel underneath a road, the reptile house was physically separated, the subterranean passage reinforcing the otherworldliness of its inhabitants and their isolation from other animal kinds. Proximity to the Society's natural history museum further suggested the liminal status of reptilians, which were frequently found lethargic in their glass tanks, seemingly in rehearsal for a more permanent residency in jars of alcohol in the neighbouring building. The converted structure measured seventy feet long with a gabled roof, skylights, and exposed supporting beams. The biggest attraction was a huge case, eleven feet tall, affording "the most complete opportunity for considering a python in the peculiar beauty of its natural functions which has ever been presented in a state of captivity". 25 The floor of the cages was covered with sand and hot water pipes warmed it from below. Perforated zinc plates at the bottom and top of cases allowed air to circulate, and there were doors through which food could be passed. For the venomous snakes, this door was in the roof of the case allowing food to be lowered in, and keepers used hooked sticks to move snakes around during feeding and cleaning. The cases were empty save for large branches included to allow snakes to "indulge their arboreal habits", and sometimes also blankets.<sup>26</sup> The latter were an attempt to reduce the heavy toll waged by the English climate, but they were not popular with visitors, who sometimes found that the apparently-absent inhabitant of a display-case was simply hidden under its bedding.

If the Gardens as a whole were a microcosm of Britain's colonial enterprise, then the reptile house itself was particularly potent testimony to the reach of formal and informal imperial networks. Equally, its contents were contingent upon fragile and unreliable connections, which waxed and waned in accordance with geopolitical affairs. Public acclaim encouraged even more snakes to be shipped to the Gardens by the Society's growing number of corresponding members around the world. The rapidly increasing size of the reptile collection urgently required the provision of even more room and an extra forty-two feet in length of space was given over to cases, the most that the room would allow. There was a further expansion of capacity in the following year with the construction of the 'Python House'. A report announced satisfaction with new buildings, increased visitors, animal donations, and a stabilising financial position (though there were difficult times

following the high of the Great Exhibition year). Groups of animals in specialized housing remained vulnerable to devastatingly high levels of mortality, however. In 1853-4, an unknown disease of obscure origin causing necrosis of the jaw-bones and palate, wiped out many of the reptiles, including the more attractive large constrictors, which were the most difficult to obtain.<sup>27</sup> The Council appealed to correspondents in distant lands to help restore the reptile house to its full glory promptly. Thus the permanency of the collection was illusory to some extent, since the representatives of given species were often not the same individuals upon subsequent visits.

## **Expectations and realities**

The gap between expectation and reality was significant and persistent in the world of animal exhibition. The reptile house departed from earlier modes of exhibition by placing the animals in large compartments with plate-glass. Twenty-one species were housed initially, the majority of which were snakes, including pythons, rattlesnakes, and puff adders. There were also lizards and frogs. Every visitor to the reptile house arrived with notions of snakes coloured by dramatic travel accounts. Previously, having been lured into the caravan of a travelling showman by a "gaudy painted canvass of the monster of the jungle, coiled round some Indian palm, and crushing a buffalo or a human victim in his folds", the animal was "commonly woefully disappointing ... resembling rather some long eel, as it languidly reposed within the folds of some warm English blankets."<sup>28</sup> Even at the Zoological Gardens a constrictor had been the only snake offered for public viewing prior to the reptile house, housed in a wire-covered box, "upon opening which, there was seen at the bottom a slimy mass, only partially distinguishable, and which bore little correspondence to the ideas ... formed from the narratives of travellers, of the far-famed king of the serpent tribes."<sup>29</sup> When the essayist Leigh Hunt visited in the 1830s, he found the lodgings for the animals an improvement over those at the Tower of London and Exeter 'Change menageries. But he was unimpressed with the box in which the boa was kept, which was "unconscionably small and confined ... a sorry contrast in the imagination with his native woods". 30

Regent's Park was not the only place in which to come face-to-face with snakes. Instead, the Gardens were part of a 'cultural marketplace' competing for visitors.<sup>31</sup> As early as the seventeenth century, rattlesnakes – dead and alive – were popular objects of curiosity in coffeehouses. Diarist and essayist John Evelyn recorded watching rattlesnakes bite mice and rats.<sup>32</sup> Components of snakes, including skins, rattles, vertebrae, and skulls, joined jars of snakes in alcohol in museum collections. In entrepreneurial exhibitor William Bullock's famous Liverpool Museum in Piccadilly at the beginning of the nineteenth century, elaborate taxidermy snakes could be seen artfully arranged in combat tableaux, including around a deer and a tiger. Such exhibits attempted to fashion naturalistic scenarios in addition to providing dramatic and fascinating objects.<sup>33</sup> Guidebooks produced to help explain the sights on offer liberally borrowed from the popular natural history texts of the day, and for visitors able to read and afford them, provided an enhanced experience.<sup>34</sup> More formal natural history texts in turn incorporated, often uncritically, dubious anecdotes from the published writings of travellers and explorers.

Constrictors were kept in the decrepit Royal Menagerie at the Tower of London, which was also home to over a hundred rattlesnakes in 1828.<sup>35</sup> In a review that otherwise struck a disappointed tone, an American visitor described himself as "gratified" at the sight of the snakes in the collection, notwithstanding that they were mostly kept wrapped up in blankets over a stove.<sup>36</sup> Menageries had grown in size and prominence at the end of the eighteenth century, the travelling variety catering to a wider demographic than zoological gardens because of their mobility and accessibility, and thus they were not inconsequential sites for mass zoological education, particularly outside London.<sup>37</sup> Constrictor snakes were almost mandatory denizens and encounters with them were amongst the most memorable experiences of a visit. Keepers enlivened displays by handling and draping them around themselves like scarves, whilst lecturing on origins and wild behaviour. Narratives on the routes by which menagerie animals arrived were an important part of their identity and appeal, providing bridges to exotic lands. Menagerie keepers were not always reliable, however, and it was against this kind of authority that the Gardens of the Zoological Society were cast.

Visits to living animals were of a multi-sensory nature.<sup>38</sup> In the Strand and Piccadilly, the paying public could see a number of different snake-shows, handbills for which provide rich detail of the experiences on offer. Implicitly, it was understood that subjected to a civilizing influence in their new temperate surroundings, most animals could be 'tamed'. Therefore, alongside claims to uniqueness and magnitude, proprietors boasted of the docility of their snakes and offered customers the chance to touch. One shopkeeper even advertised a free examination of a boa constrictor when his goods were purchased.<sup>39</sup> By contrast, exhibitors emphasized the deadly potential of rattlesnakes alongside descriptions of the security of the method of display. At the Egyptian Hall in the 1820s, Bullock had advertised the first living Indian cobra in Britain by emphasizing its dangerous character. But he also provided reassurance that his reptiles were well secured and safe for the timid to approach. Yet, with venomous snakes the danger was never completely eliminated. Several fatalities occurred amongst snake exhibitors, receiving considerable publicity and interest from the medical establishment. 40 In its early years, a tragic event greatly contributed to the infamy of the reptile house. In 1852, a keeper of reptiles, Edward Gurling, following a night of gin-drinking and in a moment of "rashness and indiscretion", took it upon himself to roughly handle a cobra. 41 He was bitten between the eyes and died an hour later. The death caused an outcry and led to a renewed interest in venomous snakes and attempts to find antidotes to their venom, with the snakes at the reptile house used in experiments to this end. Letters in *The Times* offered treatments guaranteed by the correspondents' time in Africa or the subcontinent, and the Zoological Society moved quickly to reassure visitors of the safety of the establishment. An account of the inquest in Charles Dickens's literary periodical Household Words (anonymously authored by Richard Owen) reflected on how an "animal devoid of limbs, no bigger than a common eel ... with a tooth inflicting a wound like a needle-prick" killed a man in full health. The devastating potency of the "compensations awarded by Nature" repeatedly humbled the "self-styled lord of creation", and explained why he had "come to regard the whole race of serpents with an instinctive fear and disgust". 42 The public interest aroused by the incident galvanized research into snake venom in the colonies.

Though pecuniary matters might have been the prime mover behind the reptile house in private, rhetoric of public and scientific good was emphasized publically. The new collection was a significant advance on the small numbers of reptiles held previously, and it was hoped would prove a valuable resource for their study. The audience extended far beyond naturalists though. The Illustrated London News hailed the reptile house as one of the most instructive features of the Zoological Gardens, as well as the most novel and original.<sup>43</sup> An accompanying woodcut showed a sunlit interior in which well-dressed visitors promenade around a largely empty space in a scene reminiscent of an art gallery (figure 1). Towards the back of the room, in front of a case containing some constrictor snakes, a gentleman gestures in front of him in a didactic manner, suggesting he is explaining some aspect of snake-life to his female companion. A lone woman examines a case to the left of the image, and in the centre of the room a young boy holds hands with a woman, perhaps his mother or a nanny. Both image and article emphasize the suitability of the venue for polite recreation for all ages and genders, with the most appropriate behaviour contemplative reflection. There was a relative surfeit of space (for both human and snake) and the plate-glass frontage provided a definitive if transparent barrier that privileged vision to the extent of almost entirely precluding the possibility of any other sensory interaction. Underscoring the sense in which the snakes were displayed like looted antiquarian treasures, the *Illustrated London News* hailed the building as doing "honour" to the acts of donation. For the potential snake donor, this was a far more fitting venue than a wooden box. The impression generated by the image and article was far removed from that on offer at menagerie and in this it was in keeping with the agenda of the Gardens more generally.

The reptile house can also be situated within nineteenth-century glass culture.<sup>44</sup> Its construction was assisted by the withdrawal of the glass excise tax in 1845. The plate glass was both a barrier and a medium. On one hand, it enabled the snakes to be viewed at close hand free from the obstruction of wire mesh yet in complete safety. On the other, the glass itself played a significant role in the experience: it could be tapped to attract attention, polished, or leant upon. One could see one's own expression and those of others in the vicinity reflected back. The reptiles themselves could see and respond to the visitors. The austere character of the cases fully exposed the snakes to the gaze of

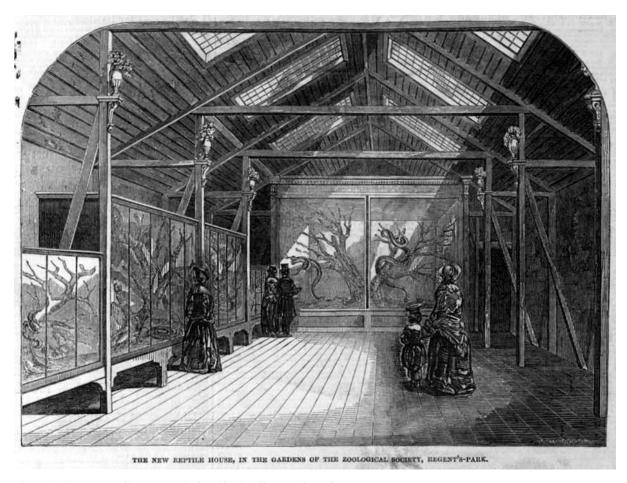


Figure 1: The new reptile room as depicted in the *Illustrated London News*.

the spectator. But whilst this suited the aims of the Zoological Society, handbills advertising earlier snake exhibitions reassuring potential visitors that "the most timid person may handle them", and the behaviour towards other animals in the Gardens (such as at the bear pit) suggest that the removal of direct haptic interaction was a significant loss. 45 Furthermore, whilst the scientific credentials of the reptile house were continually talked up, the truthfulness of these claims was not always evident. It had been designed to "reproduce, as far as can be done by artificial means, the natural conditions of reptilian existence", and the *Illustrated London News* claimed that the animals were as "healthy and vigorous" as they would appear in their native jungles and deserts. 46 Maintaining a vaguely appropriate temperature and including some objects around which the snakes could coil, it was alleged, provided sufficient similitude with nature that 'natural' behaviour could be observed. Yet, as was rather contradictorily noted, snakes preferred hiding in solitude when given a choice (hence they often frustrated the naturalist in the field) and the cases were still cramped, somewhat limiting claims to naturalism.

Model behavior on the part of reptile and visitor might have been suggested by publicity material, but both had their own agency. Zoological gardens, in common with other sites of recreational consumption, reinforced class and social distinctions. The way one behaved in the company of animals and the details one chose to communicate to others could signal one's degree of gentility. Spectators became a part of the spectacle. When the visiting restrictions were eased, anxiety over the behaviour of the working classes transposed into patronizing satisfaction that the Gardens provided a more enlightening distraction than less savoury alternatives, such as public houses and animal fights (the latter were outlawed by the Cruelty to Animals Act in 1835). Knowledge about indigenous fauna and flora was fashionable and a marker of sophistication. An episode related by the ocular surgeon William White Cooper for the literary magazine Bentley's Miscellany encapsulated both the pedagogic rationale behind the reptile house and the manner with which possession of natural historical knowledge could be a means of distinguishing between social strata. There was "no branch of knowledge" where prejudices remained with such tenacity amongst the general public as that concerning snakes, he claimed, due in part to their absence in significant numbers from public and private menageries.<sup>47</sup> He insisted nine out of ten persons were incapable of discriminating between the harmless grass snake and venomous adder, both natives of Britain. Cooper's contention was presumably based upon urban visitors and entirely occluded the extensive folk-knowledge of rural populations. On one visit to the reptile house, whilst Cooper himself was appropriately contemplating the reptile creation, a "respectable-looking artisan", accompanied by his wife and children, "began in an oracular tone to lionise his family". When a rattlesnake flicked its tongue out, the man remarked: "There! you see that! now if that snake were to touch anybody with that sting of his, he'd be dead in the twinkling of a hye! - that sting is the most venomistist thing in natur!" A member of a similar group wrongly insisted there was "nothing so deadly as the blindworm", which was sure to kill a dog upon "stinging" it. Whether these conversations were entirely apocryphal or merely embellished, the implication was that some visitors were startlingly ignorant. They also suggest that a visit might be insufficient; ideally, reading corrective descriptions of the animals written by zoologists would augment the experience.

Expectations about the behaviour of visitors rarely corresponded with the realities. The genteel scenes rendered in the image in the *Illustrated London News* (which was reproduced in evangelical weekly the *Visitor*) are highly misleading. The necessarily static form of the woodcut print was complicated and enlivened by the accompanying prose in the *Visitor*. Whilst the image gave an idea of scale, and a suggestion of appropriate behaviour for the visitors – respectful contemplation at a distance – and for the snakes – optimally stretched across the branches – the text reveals the dynamism of the reality. Snakes hid themselves under blankets or coiled up, depriving the viewer of seeing their colouration and size. At other times they angrily struck at the glass. The room was often crowded, dresses and hats impeded the view, and visitors banged on the cases and flashed coloured paper to goad the residents. As Cooper warned his readers:

An accidental push from behind, or too sharp a blow, might break the glass, and the consequence, of the escape of half-a-dozen angry Puff-Adders, a leash of lively Rattlesnakes, or even a couple of active Boa Constrictors into a crowded room, might be exceedingly unpleasant.<sup>49</sup>

A humorous and implausible scenario that might have been, but the comment perhaps betrays a repressed desire to release the violent potential of the snakes common to most visitors. Granted access in the company of naturalists when it was closed to the public at night, one can well imagine that Cooper himself indulged in all manner of provocations.

Nor did the animals assembled before them always captivate visitors in the way anticipated. Leigh Hunt imagined the ruminations of one man he observed hastily moving from one animal to another, stopping "not longer than if he were turning over a book or prints". Just as less refined readers flicked through books and gained only a superficial appreciation of their contents, the hasty visitor could not hope to fully comprehend all the lessons on offer. Ideally, the animals were to be observed for some period of time in order that their behaviour might become more familiar. Time, of course, was not a commodity available equally to all. And it was not just humans that were expected

to behave in particular ways. Hunt suggested that when faced with an inactive boa in a box, a visitor was contrasting the sight with that of "seeing him squeeze somebody", which was what many really wanted to see, and what travel accounts of the boa had normalised. Conditioned by tales of the astonishing strength of constrictor snakes and the putrefying effects of cobra bites that attracted them in the first place, visitors could be underwhelmed by the realities of the reptile house. In fact, snakes were frequently uncooperative from the perspective of both visitor and keeper. They often failed to respond to provocation, ignored proffered prey, and hid under blankets. The difficulty in getting some snakes to feed after they arrived at the Gardens took a worrisome toll. Contrary to the manner in which contemporaries sometimes described them, and images like those in the *Illustrated London News*, visits to the Zoological Gardens had more in common with the theatres of Haymarket than the art gallery. A visit to the animals was about much more than seeing – other senses were involved too – but beyond this there was a performative aspect on the part of both visitors and animals. The true characters of animals were discerned through process as opposed to static observation. One such process was snake-charming.

#### **Melodramatic antics**

The theatricality surrounding the reptile house reached an early apogee with the performances of two snake-charmers during the summer of 1850. This was a particularly successful year for the Gardens following the arrival of the hippopotamus Obaysch from Egypt. Though for a time the hippo "completely monopolized the public interest", the increasingly impressive collection of reptiles also drew appreciative notice. But at the same time as the naturalistic and educational qualities of the reptile house were being trumpeted, the Gardens hosted an activity at least as theatrical as anything the handbills from the Strand could promise. An advert in *The Times* for the hippo also included notice that the "Arab Snake Charmers, Jabar Abou Haijab and Mahommed Abou Merwan, will perform ... at half-past 4 precisely, weather permitting". 52

Representations of snake-charmers were both product and contribution to a 'theatrical East' that was widely disseminated throughout British culture. Snake-charming more generally was part of "an emerging pictorial vocabulary that organised and interpreted the regions east of Europe." Snake-charmers were popular characters in the travelogues and journals of Europeans in India and, to a lesser extent, North Africa, tropes reinforcing the difference of foreign lands. They appeared with great frequency in natural-historical accounts, in particular in entries on cobras, signifying the irrationality and antiquity of a non-specific East, which were often underscored by allusion to Biblical references to the practice. These men had considerable agency of their own though, as professional performers highly skilled at impressing their audiences to earn a living. The younger man, Mahommed, paid close attention to his extravagant costume, which was described in detail in descriptions of the performances, whilst Jabar emphasized his inheritance of the secrets of snake-charming as a member of the "Rufaiah" tribe.

Rather than colonial India, which was the source of most anecdotes about snake-charming, the men came to Britain from Cairo, possibly employed as assistants to the hippo's keeper, Hamet, and were charged with the upkeep of the reptiles donated by the late Pasha of Egypt. The reptiles and hippopotamus both arrived at Southampton docks on the *Ripon* and the snake-charmers accompanying them attracted interest immediately. *The Times* described the younger of the two as "an Arab boy of curious aspect", remarking that he fed and handled the lizards and snakes "as any one else would pet a dog, or a perfectly harmless creature". <sup>54</sup> The relationship of human to pet implied a considerable proximity of feeling. Another report was less neutral in tone, describing the boy as a "little shrivelled-faced fellow, who caused much amusement by his comic manners, his grotesque dress, and daring handling of the beasts and reptiles". <sup>55</sup> It was not only their appearance but also their aberrant conduct with the animals that was taken as representative of the Arab world. Other writers found analogies with examples closer to home, such as horse-whispering and dog training. <sup>56</sup> In addition to essentializing the snake-charmers, particular species of snake were characterized as embodying the attributes of the locales from which they originated. Snakes could be the personification of evil but they could also be metonyms for regions and for peoples. In a series of

Leisure Hour articles on the reptile house, the cobra was the first snake described and the most aggressive: "it is a high caste snake, and has much of the Arab of the desert in its temperament. If its haunt be invaded, it sallies forth and advances against the intruder, with uplifted crest, in proud defiance." For a contributor to the *Quarterly Review*, the cobra was representative of the other region with which they were associated: "The cobra at present in the collection, with its skin a glossy black and yellow, its eye black and angry, its motions agile and graceful, seems to be the very personification of India." <sup>58</sup>

Snake-charming involved a triad of participants: the charmer, snake, and audience itself. Whilst the snakes in the reptile house were visually presented as living sculptures behind glass barriers, the snake-charmers tore down the fourth wall. Audiences had to trust in the mastery of the men as they provoked and teased their animals. The charmers in London allowed thousands to witness an oft-discussed feat at first-hand. Onlookers were "astonished by the composure" of the men, "including all classes, from the titled lady to the pretty shop girl, the country bumpkin with his mouth wide open, and the London man who has jostled so effectually with the World, that were the Cobra to devour his guardian on the spot he would see 'nothing in it,' and be unable to get up a 'sensation.'"<sup>59</sup> Even Victoria and Albert watched them perform at the Giraffe House, as the former recorded in her diary:

The boy, who is 15 & was taught by his old Uncle, for years a snake charmer, did wonderful things with these snakes, pinching their tails & making them sit up & hiss, they, absolutely obeying him. When he wishes them to be quiet, he opens their mouths, spits into them & lays them down; there they remain, like dead, till he again takes them up. One, he put round his neck & it crawled into his dress, the regular Egyptian one. <sup>60</sup>

This quote ably conveys the violence of the spectacle, and also the trust placed in the ability of the men to control their charges. Unlike Darwin, the charmers were able to completely master their "imagination of a danger". But was all as it seemed?

William John Broderip, a founding Fellow of the Zoological Society, wrote up his own experience of the spectacle in an article for Tory literary journal Fraser's Magazine. 61 This early performance took place in the reptile house itself, but later proceedings took place outside to accommodate the number of observers. On this occasion, the spectators stood in a semicircle at a respectful distance: "There was not much difficulty in getting a front space, but those behind pressed the bolder spectators rather inconveniently forward." The younger of the men took out an Egyptian cobra and began provoking it to dart at him, all the time he "exercised the most perfect control of the animal". The drama increased after the elder charmer joined in, who "evidently affected the reptile more strongly than his more mercurial relative", remaining motionless but fixing his eyes upon the snake: "Suddenly it darted open-mouthed at his face, furiously dashing its expanded whitish-edged jaws into the dark hollow cheek of the charmer, who still imperturbably kept his position, only smiling bitterly as his excited antagonist." When the snakes came slithering towards the audience, the charmers keeping hold of their tails, the spectators "backed a little upon the toes of those who pressed them from behind". Yet Broderip reported his certainty that a "highly amusing and instructive establishment" such as the Zoological Gardens "would not have permitted the exhibition to take place, if there had been the least danger", claiming he had kept his own position in front throughout and had had no fear. Here then, was a demonstration of self-control by both the charmer and the spectator. His fundamental suspicion of the legitimacy of snake-charming led Broderip to describe his own position relative to the action as "very close", thereby affording him the opportunity to watch the snake's mouth, where he failed to see the projection of any fangs. The vexed question of whether performers' snakes retained their fangs and venom was a recurrent one in travellers' accounts, and particularly in memoirs of life in India, where it was shorthand for European stereotyping of locals as duplicitous.

The default suspicion towards the charmers and any deception they might be carrying out was partially resolved by an interview with the elder charmer. After one performance, the naturalist Cooper quizzed Jabar – "a most distinguished professor in the art of snake-charming" – with the hippo-keeper Hamet acting as interpreter, in order to get the truth straight from the "fountain-head".<sup>62</sup>

Jabar related his method for catching snakes by digging them up using an adze, using the same instrument to break off the fangs, and his method of dealing with snake bites using a ligature. Jabar was keen to differentiate himself from the mere jugglers who bought the snakes from him. Most crucially however, he admitted that it would not be possible to perform using venomous snakes retaining their teeth. Cooper insisted on the reliability of the answers because "the matter-of-fact way in which he *acted* as well as related the snake-charming, bore the impress of truth, and there certainly would appear to be far less mystery about the craft than has generally been supposed". This reported interview highlighted the significance of having transported the men to London where they could be reliably witnessed and interrogated (like the animals themselves). Significantly, the elder charmer claimed to have collected snakes for the French savants during the Egyptian campaign and even to have demonstrated his talents before Napoleon himself, who "watched his proceedings with great interest, made many inquiries, and dismissed him with a handsome 'backsheesh'". The superiority of the charmers reflected well on the Zoological Gardens, helping to distinguish the events from similar entertainments available in less salubrious parts of the metropolis.

### A school of cruelty?

The necessity of maintaining a collection of living snakes was not accepted by everyone. Questions were raised regarding its purpose in relation to science, suitability for the public, and the potential for cruelty. In particular, echoing earlier controversy at other menageries, the Zoological Gardens drew ire over snake-feeding and who should be allowed to see it.<sup>63</sup> The debates around the feeding of living animals to snakes demonstrate how the Zoological Society could not dictate the reasons why someone would visit the reptile house nor the lessons to be learned. At a time when the members of the Society were consolidating their positions as custodians of public zoological knowledge, the reptile house was a mixed blessing. Soon after opening, a brief notice in the *Athenaeum* titled "Whisper to the Council of the Zoological Society", described how the correspondent's visit the previous Saturday had chanced to coincide with feeding time, when to their horror the keeper opened a small door and dropped a live rabbit in with a rock snake. The correspondent insisted "such scenes ought not to be

exhibited in public under any circumstances whatever". <sup>64</sup> They were even doubtful as to whether there was "any compensating good" to come from keeping snakes, though deferred to men of science on whether they might be fed freshly killed rabbits instead. But what was particularly intolerable was that feeding take place in front of a chance audience of men, women, and children. Yet, the same account describes the assembled visitors making a "buzz and titter" at the moment of the feeding, rather than voicing disapproval, and many of them would have come especially to experience it.

Another condemnation of the feeding was reprinted in *Chambers's Edinburgh Journal*, in this case motivated by reading an account of a night-visit, rather than visiting in person:

The gratification of mere curiosity does not justify the infliction of such torture on the lower animals. Surely the sight of a stuffed boa-constrictor ought to content a reasonable curiosity. Imagine what would be felt if it a child were subjected to such a fate, or what could be answered if the present victims could tell their agonies as well as feel them!<sup>65</sup>

The imagined ventriloquism of the rabbit and the substitution of a child starkly underlined the divergent status of mammal and reptile. Although pigeons were also a major constituent of the reptilian diet, they did not evoke the same pathos as rabbits. The editor agreed that "no purpose of science can be answered by this constantly recurring barbarity". Furthermore, he remarked, such spectacles jeopardized the "elevated feelings" that zoological societies had carefully fostered. He had personally been haunted for years by recollection of a rabbit cowering in the corner of a cage. The source for this imagery could well have been an early cover of the *Penny Magazine* (figure 2).

Elsewhere, an essay in the Tory *Quarterly Review* taking the form of a promenade through the Gardens, made clear that there might be "little to amuse" the visitor to the reptile house who avoided feeding time. <sup>66</sup> The author included a graphic account of a rabbit being fed to a rock-snake without reflection on the suitability of the practice or whether it was appropriate for all audiences. Despite explicitly differentiating the purpose of the Zoological Gardens from the animal spectacle of

"debased and profligate" Ancient Rome earlier in the article, the descriptions of the animals betrayed a considerable interest in observing them feeding on other living animals. The account of a rock-snake stalking a rabbit was more melodramatic than the colourful accounts of any other animal. There was a sacrificial air about the scene with doomed rabbits and pigeons introduced to the lair of the serpents as unsuspecting victims. The innocence of the white rabbit was the perfect foil to the menace of the snake: "The keeper ... drops in upon the clattering pebbles a scampering rabbit, who hops from side to side, curious to inspect his new habitation; presently satisfied, he sits on his haunches and leisurely begins to wash his face." The snake moved over the stones like a cable, moving "by some agency from without" before seizing its meal. The behaviour of the snake during the feeding vignette exemplifies why they were so often reviled: the silence of the approach, the cowardice in attacking from behind, and the manifest unfairness of the encounter. The account became even more unsettling:

His constricting folds are twisted swiftly as a whip-lash round his shrieking prey, and for ten minutes the serpent lies still, maintaining his mortal knot until his prey is dead, when, seizing him by the ears, he draws him through his vice-like grip, crushing every bone, and elongating the body preparatory to devouring it.<sup>69</sup>

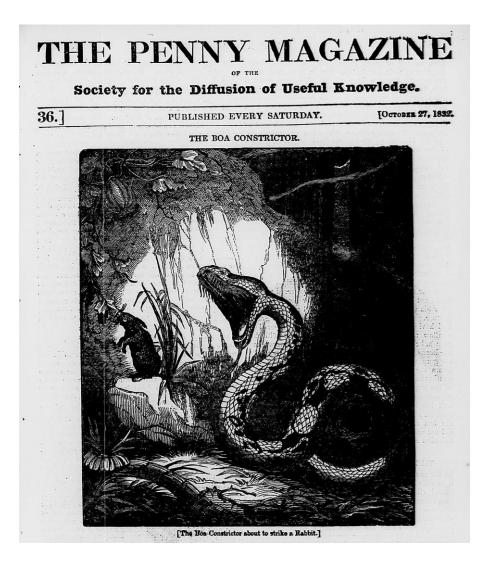


Figure 2: Boa constrictor with a rabbit from the *Penny Magazine*, 27 October 1832.

At this point, the account became more philosophical, pondering the mystery of snakes swallowing objects larger than themselves using the homely metaphor of drawing a stocking upon one's leg. But the sated snake still remained a "monster".

In the late 1860s, a series of pseudonymous letters appeared in *The Times* discussing the feeding. The first appealed to a national sense of humanity and compared the spectacle of "trembling rabbits" being devoured by monster serpents to bull-fighting and vivisection.<sup>70</sup> The correspondent suggested the cruelty of the scene was harmful to children, contradicting early life lessons on showing "tenderness to the harmless part of the brute creation". Its cessation might even diminish future acts of criminality. Instead, "a majority of the public would be contented with a stuffed boa". The paper the

next day carried a response stinging in its vehemence: man was "a vain little animal, very wise and very good in his own conceit." Despite belief in a benevolent and merciful creator, some saw fit to quarrel with the order of nature, thinking that the boa constrictor was a "cruel monster that ought never to have appeared upon the earth, or, at least, ought not to have been endowed with the faculty of swallowing harmless and innocent rabbits". And what of man himself?

Does he never fatten upon rabbits? Does he never cut the throats of sheep and pigs, poleaxe oxen, bleed calves to death, wring the necks of fowls, tear the entrails of fish with barbed hooks, and boil lobsters alive, that he may subsist upon their miserable corpses?<sup>72</sup>

Nor would a stuffed boa suffice. There were plenty, the respondent urged, happy to "rejoice in the contemplation of all God's works, and who delight even to behold the marvellous and exquisitely graceful movements of the much-maligned serpent". To his mind, the feeding of snakes was *natural* and "not more calculated to excite painful emotion" than a terrier worrying a rat, or a cat torturing a mouse.

The original correspondent was not without support, however. The respondent's argument from divine ordinance came in for attack. Dropping a rabbit into a cage with a snake was hardly fair (or natural); the rabbit was "deprived of the means of escape allotted to him by nature, and subject to the exquisite torture of terror prolonged by factitious circumstances, and enhanced by despair". Nor was there even the "flimsy" excuse of science as in the case of vivisection, claimed another contributor, whilst the sight of the "most innocent of animals" subjected to "torture of fear and horror ... [was] a school of cruelty for children". It was the morally-debilitating effect on "nursemaids and children", and the visibility of the act through a glass case as opposed to the appropriate "secret and almost inaccessible places" of the natural world, that were especially scandalous. Instead of producing morally upstanding members of society at the Gardens, the inverse was possible. Fundamentally, the correspondent urged, observing and participating in the feeding was immoral: "By Divine ordinance we have eyes; by Divine ordinance we have also minds to regulate their use."

the argument that the reptile house was a scientific resource could be sustained, it did not necessarily follow that the public needed access to the site of knowledge production.

Whether the prey was aware of its impending fate was central to the extent to which live-feeding was seen as cruel. Both of the final letters in this exchange supported the Zoological Gardens. The first, from a keeper at the South Kensington Museum, emphasized the need for snakes to prey on living animals and insisted that contrary to earlier accounts the killing was mercifully quick, with the rabbits displaying no symptoms of fear whatsoever. A second simply denied the public nature of the feedings, pointing out that they only took place at 7pm on Fridays behind closed doors with entry only by application. Apparent manifestations of human emotions leant accounts of animals much of their popular appeal. The very visible trembling behaviour that rabbits often demonstrated was taken by some to be a specific response to the snake and a prescience of impending doom, rather than the product of an unfamiliar environment. Snakes themselves generally received much less sympathy, languishing low down in the hierarchy of beings. Taken together, these letters give a sense of the deep feeling that snakes could inspire and the concerns regarding just what the purpose was of the reptile house. They reflect rising public concern with the treatment of animals, which was to become particularly visible in the vivisection debates of the 1870s and 80s. The topic of snake-feeding came to public attention sporadically even into the early decades of the twentieth century.

## Reading life lessons

As well as melodrama, the reptile house could also a stage for comedy. It was a lighter-hearted instance of feeding in the early days of the reptile house that had done much to bring it to public attention. An incident in which a boa constrictor mistakenly swallowed its blanket instead of a rabbit was entertainingly narrated in *Household Words* and excerpted in national newspapers, and received a follow-up article in the *Illustrated London News*. The snake retained the blanket for thirty-six days before disgorging it in a partially digested state. *Punch* produced a lengthy satirical piece sending up contemporary speculation on the meaning of the incident, "The Boa and the Blanket, an Apologue of

the Zoological Gardens", a humorous account of a night-time walk around the Gardens complete with illustrations, which was a burlesque of a work by lawyer and moralist Samuel Warren called *The Lily and the Bee: an Apologue of the Crystal Palace of 1851*, a poorly received commentary on the Great Exhibition, allegedly written in the style of Alfred the Great.<sup>79</sup> Rather than suggesting any deficiencies in the reptile house, the incident was reported as evidence of the shortcomings of constrictor snakes. Though the blanket-swallowing had the potential for causing the Zoological Society embarrassment, it actually marked the beginning of a fruitful and reciprocal relationship with the world of print.

The exposure of the inhabitants to the visitors' gaze provided the opportunity to reveal previously hidden aspects of reptilian life and news was widely circulated. In January 1862, a West African python surprised the keepers by laying around a hundred eggs. Over the next three months the reptile house received considerable attention within and beyond the naturalist community with updates on the progress of the incubation appearing in *The Times*, *Athenaeum*, *Gardeners' Chronicle*, and *London Review*, and in the regional papers. The administrators of the Gardens were quick to notice the financial potential and a notice was placed in *The Times* announcing that the female python could be seen incubating her eggs. A short piece appeared in the *Illustrated London News*, alongside a woodcut, and a contributor to the *Athenaeum* urged that the opportunity for careful observation during the incubation be maximised. Secretary of the Zoological Society, Philip Lutley Sclater, commissioned a thermometer from the famous manufacturers of scientific instruments, Negretti and Zambra. Its manufacture and precision was recorded in some detail in the *London Review*, suggesting that there was prestige in being attached to the 'Python experiments', which in turn provided good publicity for the firm's products. The prominent use of instruments was a further example of the Zoological Society distinguishing the reptile house as a site of scientific expertise.

The event was an opportunity to demonstrate zoological expertise by establishing whether pythons incubated their eggs. The decision to court publicity was risky, however. Sclater referenced the successful hatching of python eggs at the Jardin des Plantes in Paris in 1841, in which the temperature of the snakes had been recorded and apparently found to be warmer than the surrounding objects. At first Sclater suggested that the body of the incubating python was no greater than that of another constrictor snake in an adjoining compartment. A fortnight later, however, with the aid of the thermometer, he discovered that the body of the female python was as much as 20° warmer than that of the male in the same compartment. Ultimately, the episode ended in a sad failure when none of the eggs hatched and they had to be removed when they became putrid. The elevated temperature was subsequently hypothesised as being the result of a "feverish condition of sickness" preceding the casting of the skin. The absence of the python from her eggs during the casting was suggested as one possible cause. The eccentric naturalist Charles Waterton triumphantly reminded readers of the

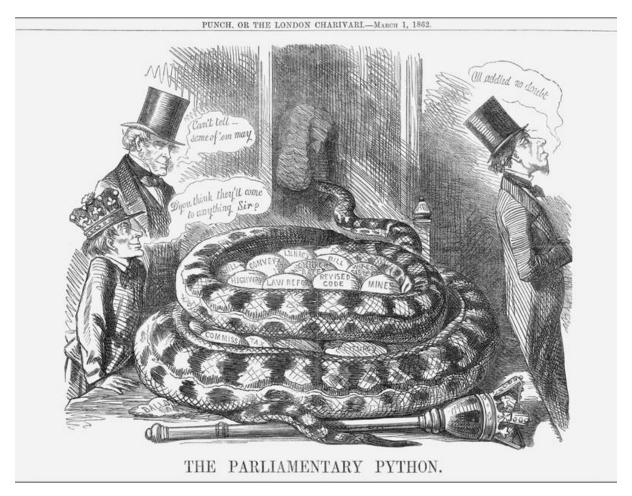


Figure 3: 'The Parliamentary Python' from *Punch*.

*Gardeners' Chronicle* that he had predicted the failure of the eggs based on his own knowledge of snakes from his adventures in the field. Unconvinced by the sophisticated thermometer, he insisted he would personally enter the python's den on any similar occasion in the future and check with his own hands for the warmth and softness that would indicate incubation.<sup>86</sup>

The events surrounding the python provided rich pickings for the satirical attentions of Punch. A celebratory poem, "Python parturiens", imagined the anatomist Richard Owen paternally recording the growth of the baby snakes. A cartoon titled the "Parliamentary Python" showed John Russell (1<sup>st</sup> Earl Russell), then foreign secretary, and Henry J. Temple (3<sup>rd</sup> Viscount Palmerston), then prime minister, at the opening of parliament examining a python guarding eggs labelled with the names of government bills, and discussing their fate, with Benjamin Disraeli facing away and commenting, "All addled no doubt" (figure 3).87 Another cartoon showed a distraught diner calling for a waiter, a python having hatched from the boiled egg in front of him. 88 Portentously, the python was humorously ventriloquized as having sent in a letter complaining of the "impertinent intrusion of Mr. Sclater upon her privacy", desiring to be left alone "without Negretti and Zambra's thermometers being thrust in upon her maternal coils". 89 In "A coil of brooding mystery", the fate of the hatched pythons was imagined in a piece that conjured up images of Britain being overrun with snakes and using veiled metaphor, referenced contemporary issues in Ireland. 90 In a poem, "Pity the sorrows of a poor pythoness", Punch blamed the failure of the eggs on the naturalists of the Zoological Society, specifically Sclater and Owen, comparing their constant examination and probing with the thermometer to "boys, who when they've sowed a seed, still of its progress doubting, will pull it up from time to time, to see if it is sprouting". 91 Other commentators employed the language of the domestic realm in somewhat facetious manner. The python was styled "her ladyship", "lady python", and "pythoness", and compared to an old hen with a brood, "puffed up by maternal pride and conceit", whilst her mate was referred to as the husband. 92 The effect was to diminish the menace of the large constrictor snakes, partially humanizing them and making them sympathetic subjects. The same could not be said for venomous snakes, which retained the potential for evil and inducing emotional turmoil.

Descriptions of the reptile house in periodicals often appeared alongside works of fiction, and attempted to replicate the feelings of dread produced by face-to-face encounter, often using firstperson narration. In tours around the glass cases, the snakes were like notorious prisoners in their cells being introduced by their jailor. Tropes and techniques from Gothic fiction and those associated with the sensation novels of the 1860s and 70s are found in abundance. Central of these are an underlying sense of menace, the unpredictability of the visit, and the evocative description of the physical surroundings. The notion of the secret lives of reptilians was perpetuated by the frequent contrast drawn between the nature of the reptile house during the regular, daytime visiting hours afforded to the public, and the exclusive nocturnal visits reported by privileged writers. William White Cooper visited at ten o'clock in the evening with a small lantern, which "imparted a ghastly character to the scene before us". 93 The darkness made the plate-glass invisible, removing a feeling of security that there was a barrier between the spectators and the snakes. At night the snakes moved "with the rapidity of lightning ... hissing and lashing their tails in hideous sport". 94 Cooper and his companions were startled by strange and menacing noises, which they felt were directed towards them, and the scene was "altogether more exciting than agreeable". The atmosphere was unsettling enough that the men unthinkingly stooped to check that their trousers were covering their ankles, and "as if our nerves were jesting", Cooper reported, there was a sensation of something wrapping itself around his legs. Here, as with Darwin, the body temporarily overruled the rational mind.

Reflecting the format of serialized fiction, the *Leisure Hour* – a "family journal of instruction and recreation" produced by evangelical publishers the Religious Tract Society – returned to the reptile house for five consecutive issues, maintaining interest through intriguing vignettes conveying the drama of the spectacle. <sup>95</sup> Visiting after hours, the author remarked upon the strange sight he found behind its doors. In a multitude of glass-fronted cases was 'an assemblage of tortuous, coiled and creeping things' that brought to his mind the "monsters, hydras and chimeras dire" of *Paradise Lost*, such that "some demon enchantress might collect around her - fit guardians of her hateful abode and of her hoarded treasures". <sup>96</sup> Snakes could be seen like creepers wound around trees, dangling from

branches, coiled like birds' nests, elevated in the shape of swans' necks, hiding amongst rocks, and moving around ceaselessly. They strongly contrasted with the "sluggish tortoises and turtles that seem indifferent to everything around them, and almost unconscious of their own existence".

Alongside the classical allusions, the religious connotations of snakes made the reptile house rich material for the didactic publications of the Religious Tract Society, which specialized in juxtaposing natural history with passages of Scripture. An article about a trip in the *Visitor* of 1850, the precursor to the *Leisure Hour*, opined that there were no animals which "men like less to encounter, and none about which they like more to hear". The "deadly powers" of many reptiles invested them with a "painful though repulsive interest, which quickens the attention of all classes of readers". Though snake anecdotes in travel accounts were of universal popularity, they could not match the experience of a "real live exhibition". It was "one thing in stepping through the forests of India to see the cobra-capella gliding across your path, while your blood curdles at the sight". It was much more comforting to see it in a secure cage, and in the Reptile House the snake received due punishment for attempting to assault the onlooker, by striking its head on the glass.

Both visits and discussion of the reptile house were suffused with religious and moral significance. At times evangelical reviewers made this context unequivocal. For the *Visitor*, the Reptile House was a museum of the physical manifestations of evil in the material world. But the essay also ended with an articulation of the scriptural lesson that could be drawn from the Reptile House. Though the piece had so far been for "the entertainment of our readers", the parting word was "more directly for their profit":

Has it occurred to any that there is a serpent more deadly than any we have described? The python's wreathing folds, the asp, and the cobra's venomed tooth are but feeble types of *his* malignity. Do you ask the name? The word of God will supply it; it is Satan, the old serpent that deceiveth the world.<sup>98</sup>

Whilst the snakes in the reptile house had the power to destroy the corporeal, Satan could ruin the soul. The reader was expected to learn, from an actual or second-hand visit to the reptile house, "the force of the illustrations which Scripture has employed to warn us against the great adversary of man".

Elsewhere, in the *Sunday at Home*, a penny magazine published by the Religious Tract Society expressly for the purpose of reading on the Sabbath, a section called "Pages for the Young" made use of an extended account of feeding at the reptile house to drive home a warning to its youthful audience of temptations lying ahead. First published in 1854, *Sunday at Home* was styled as a direct response to the proliferation of pernicious and irreligious cheap periodicals. <sup>99</sup> The author related witnessing a bold and inquisitive sparrow in the compartment of a python gradually become paralysed under the snake's stare leading to its inevitable demise. A parallel was drawn with a pious young boy sent away to school where he comes into contact with irreligious and profane older boys and slowly loses his faith leading to damnation:

The first Sabbath slighted, the first glass indulged in, the first evil companion encouraged, the first impure book read, the first scruples of religious education cast aside, the first neglect of daily prayer, - all these are just like the first tremulous advances of the foolish fluttering bird into the serpent's reach. 100

### Conclusion

In keeping with the advertised rationale behind the reptile house, naturalists such as Darwin and Owen took advantage of the opportunity to observe at close quarters the lifestyles and behaviour of the inhabitants. It opened at a time of growing interest in nervous phenomena, reflected in the work of reflex physiologists and sensation fiction. In the *Expression of the Emotions in Man and Animals* (1872), Darwin made a persuasive case for evolutionary linkage based upon common emotional responses by using anecdotal evidence to appeal to a wide audience. Seeking to understand the

mechanics of emotional expression in other animals, he had living snakes introduced into the compartment hosting the porcupines (they rattled their quills), took a stuffed snake into the monkey-house (hair was observed to rise) and also showed it to a peccary (the same result). Darwin naturalized fear as the universal reaction to snakes, one which transcended species. Developments in geology, the discovery of fossil serpents, and the findings of comparative anatomists made the story of the snake losing its legs after Eden increasingly untenable, and Darwin's conclusions on inherited memory or instinct undermined less literal interpretations suggesting the Fall as the moment when enmity between humans and snakes began. Such findings did not necessarily diminish the religious potential of snakes, however. Important life lessons could be gleaned from the activities at the reptile house.

This essay has suggested that our understanding of natural historical display and spectacle is enhanced by paying attention to bodily and sensory aspects of experiences to further understand the moral dimensions of encounter. The emotional economy of visits to living animals needs to be historicized. The specific revelation provided by the potent shock of encountering something materially for the first time was embodied in the quivering of the nerves and the rushing of the blood. The immediacy of encounter made the experience particularly unforgettable. The roles of the reptile house as a school and as a theatre were overlapping and interchangeable. The dramatic appearance of snake-charmers from Egypt at the Zoological Gardens in 1850 coincided with mid-century interest in displayed peoples and provided an occasion for enhancing this sense of emotional engagement and immediacy. At first glance, the charmers demonstrated a supreme ability to read the emotions of their snakes, enabling them to remain impassive when the snakes struck at them, where Darwin had flinched despite the glass barrier. Their fear was actually removed with the fangs they extracted. These men also facilitated the revelation of aspects of snake character which the reptile house alone could not provide. But the performances were taken to reveal as much about these men as representatives of their homelands as it did about the snakes. The reptile house was a centre of ambiguity, a mirror of wider imperial anxieties and instability in the heart of the metropolis. The

presence of exotic snakes in the heart of London contributed directly to their typecasting as villainous characters in Victorian fiction and beyond.

Charles Darwin, The expression of the emotions in man and animals (London, 1872), 27–28.

<sup>&</sup>lt;sup>2</sup> *Ibid.*, 38.

<sup>&</sup>lt;sup>3</sup> *Ibid*.

<sup>&</sup>lt;sup>4</sup> The importance of emotions in debates about experimental animals receives attention in Paul White, "The experimental animal in Victorian Britain", in Lorraine Daston and Gregg Mitman (eds), Thinking with animals: new perspectives on anthropomorphism (New York, 2005), 59–81; Jed Mayer, "The expression of the emotions in man and laboratory animals", Victorian studies, 1 (2008), 399-417.

<sup>&</sup>lt;sup>5</sup> For example, Harriet Ritvo, Animal estate: the English and other creatures in the Victorian age. (Cambridge, Mass.: Harvard University Press, 1987); Robert W. Jones, "'The sight of creatures strange to our clime': London Zoo and the consumption of the exotic", Journal of Victorian culture, ii (1997), 1–26; More recently, Takashi Ito has argued that imperial influences have been overemphasized, see London Zoo and the Victorians, 1828-1859 (Woodbridge, 2014). For an institutional history, see Sofia Åkerberg, Knowledge and pleasure at Regent's Park: the Gardens of the Zoological Society of London during the nineteenth century (Umeå, 2001).

<sup>&</sup>lt;sup>6</sup> Some of these themes are addressed in the essays collected in Deborah Denenholz Morse and Martin A. Danahay (eds), Victorian animal dreams: representations of animals in Victorian literature and culture (Aldershot, 2007).

For example, Suiit Sivasundarum, "Trading knowledge: the East India Company's elephants in India and Britain", The historical journal, xlviii (2005), 27-63; Christopher Plumb, "In fact, one cannot see it without laughing': the spectacle of the kangaroo in London, 1770-1830", Museum history journal, iii (2010), 7–32; Christopher Plumb, "'Strange and wonderful': encountering the elephant in Britain, 1675-1830", Journal for eighteenth-century studies, xxxiii (2010), 525-43; Sadiah Qureshi, "Tipu's Tiger and images of India, 1799-2010", in Sarah Longair and John McAleer (eds), Curating empire: museums and the British imperial experience (Manchester, 2012), 207-24.

Samuel J. M. M. Alberti (ed), *The afterlives of animals: a museum menagerie* (Charlottesville, 2011).

The snake in fine art and popular entertainment has been characterized as signifying "the point where beauty abuts the grotesque, testing the limits of physical expression by combining outer form with inner pain", see Alison Smith, "The 'snake body' in Victorian art", Early popular visual culture, iii (2005), 151–64, p. 153. Recent work on the scientific lives of other 'lowly' creatures includes Charlotte Sleigh, *Frog* (London, 2012); Robert G. W. Kirk and Neil Pemberton, Leech (London, 2013).

<sup>&</sup>lt;sup>10</sup> Christopher Plumb, 'Reading menageries: using eighteenth-century print sources to historicise the sensorium of menagerie spectators and their encounters with exotic animals', European review of history: Revue Europeenne d'histoire, xvii (2010), 265-86.

<sup>&</sup>lt;sup>11</sup> Bernard V. Lightman, Victorian popularizers of science: designing nature for new audiences (Chicago, 2007), pp. 1–2; Aileen Fyfe and Bernard V. Lightman (eds), Science in the marketplace: nineteenth-century sites and experiences (Chicago, 2007).

<sup>&</sup>lt;sup>12</sup> The classic work remains Richard D. Altick, *The shows of London* (Cambridge, MA, 1978).

<sup>&</sup>lt;sup>13</sup> Sadiah Qureshi, "Robert Gordon Latham, displayed peoples, and the natural history of race, 1854-1866", *The* historical journal, liv (2011), 143-66.

<sup>&</sup>lt;sup>14</sup> Ritvo, *Animal estate* (ref. 5) 213.

<sup>&</sup>lt;sup>15</sup> Adrian Desmond, 'The making of institutional zoology in London 1822-1833', *History of science*, xxiii (1985), 153–85, 223–50, p. 225. <sup>16</sup> *Ibid*.

<sup>&</sup>lt;sup>17</sup> Athenaeum, 16 June 1849, 621.

<sup>&</sup>lt;sup>18</sup> For details of Obaysch and the resultant 'hippomania' see Andrew J.P. Flack, "'The illustrious stranger': hippomania and the nature of the exotic", Anthrozoös, xxvi (2013), 43–59; Robert W. Jones, "The sight of creatures strange to our clime" (ref. 5).

<sup>&</sup>lt;sup>19</sup> Athenaeum (ref. 17).

<sup>&</sup>lt;sup>20</sup> Reports of the Council and Auditors of the Zoological Society of London (London, 1850), 32.

- $^{21}$  Archives of the Zoological Society of London, Minutes of Council of Zoological Society of London IX, 4 July 1849.
- <sup>22</sup> Reports of the Council and Auditors of the Zoological Society of London, 1850, 32.
- <sup>23</sup> "Punch's reptile house", *Punch* 16 June 1849, 241.
- <sup>24</sup> Ref. 21.
- <sup>25</sup> "The new reptile house", *Illustrated London news*, 2 June 1849, 384.
- <sup>27</sup> Reports of the Council and Auditors of the Zoological Society of London, 1854, 12.
- <sup>28</sup> "A visit to a reptile-room", *The visitor, or monthly instructor*, 1850, 361-365, p. 361.
- Leigh Hunt, "A visit to the Zoological Gardens'" *New monthly magazine*, xlvii (1836), 479–91, p. 482.
- <sup>31</sup> Aileen Fyfe and Bernard V. Lightman (eds), *Science in the marketplace* (ref. 11), 1.
- William Bray (ed), *Diary and correspondence of John Evelyn, F.R.S.*, (Vol. 1, London, 1850), 322.
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- <sup>39</sup> "Just arrived from Java, the great boa constrictor serpent alive!!" (London, c. 1825), Animals on show 2 (80),
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- <sup>42</sup> "Poisonous serpents", *Household words*, xvi (1852), 268.
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- <sup>50</sup> Hunt (ref. 30), 481.
- <sup>51</sup> Cooper (ref. 47), 274.
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