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The public face of zoos: Images of entertainment, education, and conservation

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Abstract: The contemporary justification for zoos is based on their ability to act as sites of wildlife conservation. Alongside this is the reality that zoos have historically been defined as sites for the entertainment of the general public and continue to be dependent on the revenue raised through visitor receipts. Consequently, zoos are, today, identified as sites of conservation, research, education, and entertainment. In recognition of this the aim of this paper is to assess the image that zoos are currently portraying to the general public to see how the different roles are advertised and how they sit alongside one another. The data for the research on which this paper is based was gathered via a content and semiotic analysis of the websites of 54 zoos spread throughout the world.

The results indicate that the image zoos present to the public whilst incorporating a strong conservation message lacks depth. In addition, the image zoos present via their websites has a strong emphasis on entertainment. Based on the results of this paper it is suggested that zoos need to present their conservation credentials in more detail and ensure the entertainment message does not adversely affect transmission of the conservation or education one whilst at the same time continuing to attract sufficient visitors to ensure the economic viability of zoos. In addition, it is recognized that changing public perceptions of zoos requires these institutions to act together rather than independently when determining the overarching theme of the ‘zoo’.

Keywords: Zoo, image, conservation, entertainment
Introduction

It is difficult to give a precise date to the origin of the zoo as it has changed in nature and meaning throughout time. However, if a zoo is taken to encompass the collecting and displaying of live wild animals, as noted by Benbow (2004), then the earliest forms can be traced back over 4500 years to historic civilisations such as the ancient Egyptians, Chinese, and Romans. This broad definition of a zoo incorporates entities such as menageries, wildlife parks, safaris, and zoological gardens, amongst others.

The common theme throughout the histories of the zoo is of it as a place of human entertainment and leisure. The forebears of the modern zoo tended to be status-symbols of the rich and powerful though they were sometimes open to the public for entertainment purposes. The dual purpose of zoos as sites of entertainment and displays of power and wealth was prevalent in the medieval and early modern menageries of Europe. The late 18th and early 19th century witnessed an important milestone in the evolution of the zoo with the creation of zoological societies such as the Zoological Society of London that gave a scientific raison d’être for zoos and opened the first truly public zoos (Turley 1998). Whilst stressing the scientific importance of zoos it is thanks at least in part to the efforts of zoological societies that these places have become a mass tourism and leisure experience (Mullan and Marvin 1999).

Today, zoos open to the public can be found in virtually every country in the world. The World Association of Zoos and Aquariums now consists of more than 1,200 institutions which together attract over 600 million visitors per annum (Holtorf 2008). The initial zoos of the
modern era followed in the footsteps of their predecessors and were created with an emphasis on allowing the public to see the animals rather than on the needs of the animals and with little or no concern given to animal rights or conservation; two issues which have not reached the public agenda till relatively recently in comparison with the age of zoos. Consequently, the conceptualisation of zoos in the modern era has built on their historic construction as places of human entertainment; places to be visited during leisure time where the animals are presented for the amusement of visitors (Turley 1998; World Association of Zoos and Aquariums, 2005). This view is mirrored in the UK’s Zoo Licensing Act (1981) which defines zoos as establishments “which keeps wild animals (those which are not domesticated to the country) in captivity for the purposes of exhibition to the general public” (Dibb 1995, p. 261).

In contrast to the original image of zoos as primarily sites of entertainment, according to contemporary socially/morally acceptable public opinion zoos exist to aid the conservation of species under threat of extinction. This is a view widely espoused by those involved with zoos such as the World Association of Zoos and Aquariums (2005) and supported by academics such as Reade and Waran (1996, p. 109) who have stated that “conservation is generally considered to be the main role of the zoo today.” As part of this focus Dibb (1995) has recognized that the role of at least some zoos in conservation has increasingly been pushed to the fore in their publicity material.
The shift to the presentation of zoos as sites of conservation and away from them as spaces of entertainment has been identified as a “structural and ideological transformation” by Beardsworth and Bryman (2001, p. 83) that can be traced back to the 1960’s (World Association of Zoos and Aquarium, 2005) though the potential of zoos to aid conservation and research into animals was noted in the late 1800s’ (Broad and Smith 2004). This transformation is arguably still an ongoing process that has been led by a recognition of the rights of animal by the general public and an associated growing dislike of the capturing and presentation of animals in stark cages (Turley 1998). “In such a situation, the zoo as a … location for the indulgence of an unashamedly recreational gaze upon its captive inmates, becomes less and less appealing, and more difficult to justify” (Beardsworth and Bryman 2001, p. 89; Dibb 1995). Consequently, Holtorf (2007, p. 8) has stated that “zoos, once doomed, are popular again because they present themselves as conservation centres.” An integral component of conservation efforts in the modern zoo is the conducting of research on animals (Jamieson 1985; World Association of Zoos and Aquariums 2005). Furthermore, conservation encompasses captive breeding programs of endangered species to ensure their survival and/or for release into natural habitats and protection/rejuvenation of such environments (Puan and Zakaria 2007).

In addition to being defined as centres of conservation, modern zoos have been constructed as places where members of the public can learn about animals and how they can contribute to the survival of endangered species (Serrell 1981; Smith and Broad 2008; Ballantyne, et al. 2007).
Indeed, the World Association of Zoos and Aquarium (2005, p. 13) has stated that “zoos and aquariums, because they are popular visitor attractions, have unique opportunities to introduce their visitors to a wider world and to explain the issues of international conservation.” Consequently, the World Association of Zoos and Aquarium sees education as a central component of the modern zoo. Support for this view is provided by Falk, et al. (2007) whose study showed zoos can enhance visitors’ understandings of wildlife and conservation.

The potential of learning experiences in zoos is related, according to educational theorists, to the fact they are offered in an informal and unstructured manner rather than a structured traditional schoolroom setting (Reade and Waran 1996). In particular, it has been suggested that where active educational opportunities that facilitate interaction, be it physical and/or emotional, with animals are offered a successful transfer of conservation messages to visitors is more likely to occur than where only passive educational experiences are offered via animal viewing and notice boards. Active learning opportunities may be facilitated by, amongst other things, the provision of animal demonstrations, volunteer or animal handler talks, touch tables, direct contact by visitors with animals, and multimedia factual information (Swanagan 2000; Lindemann-Matthies and Kamer 2006; Smith and Broad 2008; World Association of Zoos and Aquarium, 2005; Ballantyne, et al. 2007). It has also been suggested that the potential for learning in zoos is heightened if animals are housed and fed in as natural/realistic a manner as possible (Ballantyne, et al. 2007; Smith and Broad 2008; Fernandez, et al. 2009). The key to the success of the transfer of conservation messages rests with the informal learning
environment of the zoo that enables individuals to freely choose what and how to learn in a process that has been called ‘free-choice learning’ (Falk 2005).

The modern zoo is, therefore, portrayed to the public as being a site of education, research, and conservation. One of the earliest proponents of this integrated vision of zoos was Gerald Durrell who stated in 1976 that:

“The purpose of keeping any collection of wild animals in confinement should be threefold: first, to conduct as complete as possible a biological study of every species,…; second, to aid severely endangered species by setting up, under ideal conditions, protected breeding groups and, eventually, a reintroduction programme, so helping to ensure their future survival; thirdly, by the display and explanation of this work to the public, to persuade people of the vital necessity and urgency for the overall conservation of nature” (p. 108).

However, whilst Durrell (1976, p. 109) clearly believed research, education, and conservation should be the cornerstones of the ethos of all zoos he stated that the reality in many zoos around the world fell far short of these ideals. In particular, he castigated zoos for a lack of scientific rigour where animal record systems were either not kept at all or only in a poor, unscientific manner. This led Durrell (1976, p. 109) to say “let us be clear on this; one would not expect science in the fairground, circus or other zoological extravaganza, but one does expect a modicum of it in any reputable zoological garden or other collection of wild animals that lays claim to be anything other than a sideshow.” The views of Durrell have been
reinforced by the World Association of Zoos and Aquarium (2005, p. 11), which has stated that zoos must aim to “integrate all aspects of their work with conservation activities.”

Whether zoos are really capable of aiding conservation in a meaningful manner has been a contentious issue. For example, Conway (2003) has noted that zoos rarely participate in habitat and/or species restoration projects or provide funding for conservation efforts in the natural environment. Jamieson (1985) has also questioned the ability of zoos to make a significant contribution to the breeding of endangered species due to their limited size in proportion to the requirements of larger animals. In addition, zoos have faced a barrage of criticism about animal welfare and animal rights in the last 30 years that have questioned their ability to act as productive agents of conservation (Mason 2000; Spedding 2000; Davey 2007) and had a negative impact on their public image (Holtorf 2008). This situation may not be helped when it is recognized that the majority of animals in most zoos are not endangered and therefore arguably not in need of conservation at the present time (Benbow 2004). A common call from the animal rights lobby who question the value of zoos has been that “both humans and animals will be better off when they [zoos] are abolished” (Jamieson 1985, p. 117).

One of the most problematic issues that zoos have faced in recent years is that alongside the desire to see zoos as sites of conservation, research, and education is the reality of the need to ensure they gain the financial income to allow them to keep operating (Dibb 1995). The most common source of income has traditionally been the paying visitor (Turley 1998; Davey 2007;
Hosey 2008). The need to attract visitors is a concern for zoos and their conservation, research, and education efforts when set alongside the traditional image of zoos as sites of entertainment for members of the public in a manner more akin to traditional animal circuses than places of learning and science. While the vast majority of zoos may now decry the image of a zoo as a site simply of entertainment at the expense of animals they only have themselves to blame for the creation of these images (Durrell, 1976). Yet, as Fernandez, et al. (2009) and Turley (1998, p. 341) note “zoos cannot perform their more socially acceptable functions without satisfying the needs and requirements of day visitors, who by definition are on a recreational excursion.”

The historic images of zoos as sites of entertainment, and the desirability of this amongst the public, are not issues that are easily consigned to the past. Rather, it is arguably still the case today that the predominant image of zoos in the eyes of the public is one of a place of entertainment (Benbow 2004). This view is reinforced by Puan and Zakaria’s (2007) study of zoos in Malaysia which found that people are primarily motivated to visit zoos for recreation. Similarly, Sickler and Fraser (2009) have noted how visits to the zoo are often described as ‘fun’. Furthermore, although public opinion may appear more enlightened today concerning animal rights, what most people are entertained by and how they view animals may not actually have changed that much. Consequently, Beardsworth and Bryman (2001, p. 90) have claimed that the shift in emphasis in zoos from entertainment to conservation may be “as much for the benefit of human visitors’ sensibilities as a response to animals’ needs;” a view expanded to encompass humanity in general by Holtorf (2008).
Despite the questionable morality of zoos as sources of entertainment it is vital today to engage the interest of potential visitors and ensure they have a ‘good time’ during their visit to a zoo. This is necessary as visiting zoos, especially outside of formal school trips, occurs during leisure time and utilizes discretionary income. Both this time and money are keenly sought by a vast array of competing attractions of which zoos are only one (Davey 2007). Consequently, zoos must recognize that visitors want to be entertained and failing to provide this will undermine zoos’ gate receipts as people decide to undertake their leisure experiences elsewhere (Tomas, Crompton and Scott 2003). The pressure to provide entertainment has, according to Dibb (1995), seen a number of zoos begin to offer entertainment attractions in addition to the chance to see ‘wild’ animals. These offerings are set against declining visitor numbers to zoos between the early 1970s and mid 1990s which arguably spurred zoos to reinvent themselves and reinvigorate their entertainment attractions (Turley 1998). That zoos recognize the importance of the leisured visitor to their survival is demonstrated by the propensity of these establishments to advertise themselves as destinations for tourists (Beardsworth and Bryman 2001).

Entertaining visitors is arguably necessary to ensure effective learning experiences, especially when these are aimed at children and people who feel they are visiting zoos as part of a leisure experience. Indeed, Puan and Zakaria (2007, p. 232) have stated “It is undeniable that effective education can only be gained if the desire of visitors for enjoyment is met.” Consequently,
Jamieson (1985, p. 110) has noted that “some [zoo] curators see baby elephant walks, for example, as a necessary evil, or defend such amusements because of their role in educating people, especially children, about animals.” However, it may also be claimed that as leisure sites, at least in the eyes of the general public, zoos are inappropriate places for learning as visitors do not come prepared to be educated but instead have an expectation to be entertained. Indeed, Tomas, Crompton and Scott (2003) and Reade and Waran (1996, p. 110) have claimed that “zoo visitors are more socially or entertainment oriented than learning or goal-oriented.” Furthermore, it has been stated that there is little evidence of the ability of zoos to educate general visitors about the need for conservation through informal learning mechanisms though more formal educational programs within zoos do appear to have some success (Swanagan 2000). Indeed, Smith and Broad (2008, p. 227) have stated that “there is a distinct lack of evidence to support attitudinal or behavioral change through informal zoo education.”

Consequently, rather than providing a true learning experience about the value of and need for conservation, zoo educational experiences, particularly informal ones, may actually do little more than provide a socially acceptable veneer to the entertainment on offer. Based on this suggestion it has been claimed that “it is time for zoos to stop arguing that exciting children in New York or Tokyo about the plight of Gorillas in Cameroon or the Democratic Republic of the Congo is responsive conservation. This process is too indirect, too slow, too far away and too unlikely to affect the real issues.” (Conway 2003, p. 12). Alternatively, it may be argued that there is a need to further distance zoos from their traditional image as sites primarily of
entertainment for human visitors if they are to be able to educate visitors about the need for conservation. Whichever view is correct the concern is that attempting education in an entertainment setting can lead to the message of the former being subsumed under the reality of the latter. The potentially mixed message of education and entertainment is exemplified by Swanagan (2000, p. 30) who, in his work on zoo visitors conservation attitudes and behaviour, reported that “most elephant exhibits and shows [in zoos] offer abundant zoological information, yet the animal routines resemble a circus show.”

The World Association of Zoos and Aquariums (2005) point out that mixing education and entertainment is not in itself problematic. Indeed, Sickler and Fraser (2009) have suggested that the distinction between education and fun and enjoyment is blurred and that learning can be fun and therefore sought after as a form of entertainment. Similarly, Packer (2006, p. 329) has stated that what many visitors to zoos seek “is not so much to learn something as to engage in an experience of learning that is inherently valuable or enjoyable in its own right.” Following on from this, the World Association of Zoos and Aquariums (2005, p. 45) has argued that “fun and conservation [within zoos] are not mutually exclusive,” a view supported by Ballantyne, et al. (2007). The struggle zoos face, according to Sickler and Fraser (2009: 313), is how to balance their image as places of “fun, recreation or entertainment with their missions of education.” This means the emphasis within zoos needs to be on developing methods that provide learning opportunities to visitors at the same time as they have fun and portraying this hybrid entertainment/education image effectively to the public.
It is clear that the modern zoo must perform four roles in order to be seen to be socially acceptable and to be economically viable. These roles are conservation, education, research, and entertainment (Jamieson 1985; Reade and Waran 1996; Turley 1998; Fernandez, et al. 2009). Based on this reality Turley (1998, p. 340) has stated that “zoos must balance carefully the demands of the paying visitor with those of maintaining credibility as conservation and education-oriented organisations.” Recognizing the multiple roles of zoos in contemporary society, the aim of this paper is to assess the image that zoos are currently portraying to the general public to see how the different roles are advertised and whether they sit comfortably alongside one another. In particular, the paper examines how the socially/morally acceptable face of zoos as sites of conservation sits alongside the less morally acceptable, but economically necessary, entertainment side of zoos. The need for this work is supported by Turley (1998, p. 352) who has stated that “zoos might do more to enhance their credibility. Awareness, among visitors and the public at large, of their conservation and educational responsibilities could be improved. Furthermore, where appropriate, charitable status might be better promoted.” Similarly, the World Association of Zoos and Aquariums (2005) has noted that zoos need to “promote a clearer view of their unique role and the contribution they can make as part of a global conservation coalition.”

**Method**

In order to meet the aims of this paper a content analysis of the websites of 54 zoos spread across the UK (10), USA (24), New Zealand (3), Australia (7), Canada (6), South Africa (2),
China (1), and Singapore (1) was conducted in 2007. A detailed discussion of content analysis as a research tool is provided by Krippendorff (2004) and Wimmer and Dominick (2006), amongst others. The zoos studied in this paper represent a convenience sample of zoos with English-language websites from around the globe.

The nature of the data counted during the content analysis process on which the research for this paper is grounded reflects a series of questions Gerald Durrell (1976) identified that all visitors to zoos should ask of the operators as well as other relevant issues noted during analysis of appropriate zoo focused literature. Consequently, each zoo website was examined to see whether the types of information presented in the analysis section of this paper was represented. These information types reflect the contemporary view that zoos should encompass conservation, education, research, and entertainment themes within their ethos. The focus of the content analysis was on the presence or absence of specific types of information on zoo’s websites rather than on the quantity of information provided on particular topics. The decision to focus the research in this manner allowed for comparison across diverse topics and, as a result, identification of the relation between and emphasis on the entertainment, education, research, and conservation faces of zoos. In addition, focusing on the presence or absence of specific types of information allows for the development of a foundation of knowledge from which further work can be conducted that examines in detail both the quality and quantity of specific types of material presented by zoo’s on their websites.
In addition to a content analysis of the zoo websites, a semiotic analysis of the homepage of each zoo was conducted. This analysis was undertaken “to get at the underlying message” (Clark, et al. 1998: 107; Dann 2005) or primary image being portrayed by the homepages of the zoos studied. This entailed the authors of the paper examining the nature of the ‘messages’ zoos portrayed to the public on these sites through a combination of the content of the text, links, pictures, and photographs presented. Indicators of the focus of the image of a zoo being presented on the homepages included whether conservation, entertainment, research, and/or education links were present in the primary menu bar, whether there was any additional text noting education, entertainment, research, or conservation aims, and whether any ‘news updates’ noted conservation, research, entertainment or education issues. In addition, any pictures on the homepages were examined to determine if they were of exotic or local animals, animated or real, depictive of conservation, research, or, education or simply intended to seem fun/entertaining. Based on analysis of the presence and predominance all of these different types of information the authors determined whether the image presented on each website was mainly focused on education, conservation, research, or entertainment, or a mix of two or more of these.

The decision to utilise zoos’ websites in order to assess the nature of the image they present to the public is a reflection of the significance of the Internet in contemporary society and the potential it gives to zoos to reach potential visitors before they arrive at the entry gate and the general global population. This view is supported by the World Association of Zoos and Aquariums (2005, p. 39), which states that “The use of the Internet is expanding rapidly, and
provides a huge opportunity for zoos and aquariums to disseminate their message globally, even to non-visitors.” Furthermore, unlike more traditional forms of advertising which offer highly limited space in which to get a message across websites offer unlimited space and hence provide zoos with the ability to put a much more detailed image of themselves to the public. The decision not to analyse the image zoos present to visitors at the zoo front gate was based on a combination of the obvious cost of visiting numerous zoos and the desire to assess the image as potentially seen by the public in general and not just people who have already made the conscious decision to visit a zoo.

Despite the importance of the Internet as a means of enabling zoos to portray themselves to the public it is important to note that what is presented, and consequently analysed in this paper, does not necessarily equate to what is actually occurring in zoos. Furthermore, website representations of zoos remain just one of many means by which the image of zoos in the minds of individuals is constructed and/or altered. The level of funding that has been provided to create websites and the aims of the sites are also specific to each zoo and will, as a consequence, potentially impact the nature of the image they portray to the public. However, the individual zoo websites and the images they purvey do not exist in isolation. Rather, they interact with one another and the homogenised images highlighted by organisations such as the World Association of Zoos and Aquariums to influence public perceptions not just of the individual zoo but of zoos in general.
Results

Zoo image

The dominant image from the homepages of the zoos studied is of the zoo as a place of entertainment. Yet despite most of the primary menu bars of the zoo homepages featuring a variety of topics related to entertainment, the word ‘entertainment’ itself is not typically used. Other words are used instead such as ‘attractions’, ‘encounters’, ‘what to do’, ‘feeding’, ‘visit the zoo’, ‘what’s on’, and ‘fun zoo’. This may be indicative of attempts in recent decades to move away from the imagery of zoos as places of human entertainment yet the underlying dominant message of the homepages is still one that associates zoos with human fun. The dominance of entertainment in the image offered by the homepages may also reflect the recognition of the need to attract paying visitors to zoos to ensure their economic viability and the suggestion that in order to do so zoos must present themselves as entertaining destinations for leisured people (Dibb 1995; Turley 1998).

Despite the dominance of entertainment in the image being portrayed by the information, links, and pictures presented on the homepages of the zoos studied the overall images tended to reflect the recent history of zoos to portray themselves as conservation centres and places of learning. Indeed, it was rare to find a homepage that dedicated itself solely to providing a message promising entertainment for visitors, though a small number did exist. Rather, it was common to see messages of education and conservation included in the image of zoos presented on their homepages. However, where messages of education and/or conservation
were presented on homepages they were given at most equal billing to the entertainment image, or, more commonly, were secondary foci. The relative dominance of the conservation and education messages fluctuated across the zoos studied, with one or the other sometimes missing from the homepage entirely.

The rarest zoos were those whose dominant message on their homepage was not, or did not include as an equal component, entertainment. Only three such zoos were identified and the dominant image their homepages presented was of zoos as places of conservation. Perhaps not surprisingly given the ethos of its founder, Gerald Durrell, Durrell, which deliberately does not use the word ‘zoo’ in its name, presented a strong conservation message through its homepage and in contrast offered little in the way of an entertainment image. Beyond the homepage of all the zoos studied there is a variety of information, the nature and extent of which can help to reinforce, or indeed contradict, the homepage imagery.
## Conservation content

### Table 1

Zoos self-advertised conservation efforts

<table>
<thead>
<tr>
<th>Conservation efforts</th>
<th>Number of zoos self-advertising conservation efforts</th>
<th>% of zoos studied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoo does not take animals from the wild</td>
<td>50</td>
<td>92.6</td>
</tr>
<tr>
<td>Targeted Animal Conservation Campaigns</td>
<td>44</td>
<td>81.5</td>
</tr>
<tr>
<td>External conservation programme(s) supported</td>
<td>38</td>
<td>70.4</td>
</tr>
<tr>
<td>Scientific research conducted on zoo animals</td>
<td>37</td>
<td>68.5</td>
</tr>
<tr>
<td>Animals being actively bred</td>
<td>33</td>
<td>61.1</td>
</tr>
<tr>
<td>Research undertaken in collaboration with external agencies</td>
<td>30</td>
<td>55.6</td>
</tr>
<tr>
<td>List of research publication provided</td>
<td>10</td>
<td>18.5</td>
</tr>
<tr>
<td>Treatment of sick or injured wild animals</td>
<td>9</td>
<td>16.7</td>
</tr>
<tr>
<td>Targeted Landscape Conservation Campaigns</td>
<td>7</td>
<td>13.0</td>
</tr>
<tr>
<td>Future research agenda available</td>
<td>3</td>
<td>5.6</td>
</tr>
<tr>
<td>Breeding success rates published</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
The results in table 1 show the diverse range of conservation efforts that the zoos studied in the research on which this paper is based stated on their websites that they were engaged in. That almost all the zoos reported they did not take animals from the wild as a conservation policy reflects a change in attitude toward the populating of zoos and a significant attempt to present themselves as research and conservation centres rather than sites primarily for the benefit of human entertainment. Table 1 shows that of the 54 zoos studied the most commonly noted ongoing conservation effort was the targeting of conservation efforts towards specific animals. It is, however, important to note that almost 20% of the zoos studied did not state that they engaged in this behaviour. Other commonly advertised conservation efforts included the undertaking of research, both independently and with organizations external to the zoo and active breeding programs. In comparison, information about landscape conservation efforts and research publications was far less prevalent on the websites studied. In particular, despite being described as a key ingredient of a conservation oriented zoo by Durrell (1976) none of the zoos studied published the success rates of their breeding programs on their websites. Likewise, only 3 zoos placed their future research agenda on their websites despite such a document arguably giving an image of forward thinking and professionalism which could aid the public in recognizing the long term commitment of zoos to conservation.
Table 2
Zoos who state which funds generated by the general public are directly employed to aid conservation

<table>
<thead>
<tr>
<th>Source of generated funds</th>
<th>Number of zoos using funds to directly aid conservation</th>
<th>% of zoos referred to by ‘n’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bequests fund conservation (n = 38)</td>
<td>26</td>
<td>68.4</td>
</tr>
<tr>
<td>Adoption costs fund conservation (n = 45)</td>
<td>25</td>
<td>55.6</td>
</tr>
<tr>
<td>‘Friends of zoo’ costs fund conservation (n = 49)</td>
<td>24</td>
<td>49.0</td>
</tr>
<tr>
<td>Bequests fund scientific research (n = 38)</td>
<td>8</td>
<td>21.1</td>
</tr>
<tr>
<td>Adoption costs fund research (n = 45)</td>
<td>6</td>
<td>13.3</td>
</tr>
<tr>
<td>‘Friends of zoo’ costs fund scientific research (n = 49)</td>
<td>6</td>
<td>12.2</td>
</tr>
<tr>
<td>‘Friends of zoo’ costs fund breeding programs (n = 49)</td>
<td>6</td>
<td>12.2</td>
</tr>
<tr>
<td>Bequests fund breeding programs (n = 38)</td>
<td>5</td>
<td>13.2</td>
</tr>
</tbody>
</table>

The results highlighted in table 2 show the percentage of zoos who stated the funds they raised from bequests, adoptions, and ‘friends of zoo’ programs were used to aid conservation. Stating this clearly on the website is arguably an important way of reinforcing the notion that zoos are dedicated to conservation and that funds gained by zoos are being directly utilised for this purpose. However, as the data in table 2 demonstrates, only around half of the zoos who stated
they had such fund generating programs in place said the money went to aid conservation efforts. Very few zoos stated that the funds were used to aid scientific research or breeding programs despite both issues being fundamental to successful conservation plans (Durrell 1976; Tudge 1992).

**Education content**

<table>
<thead>
<tr>
<th>Type of formal educational experience</th>
<th>Number of zoos that provide formal educational materials</th>
<th>% of zoos studied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational material for primary schools*</td>
<td>33</td>
<td>61.1</td>
</tr>
<tr>
<td>Primary school age vacation education</td>
<td>29</td>
<td>53.7</td>
</tr>
<tr>
<td>Teacher education opportunities</td>
<td>23</td>
<td>42.6</td>
</tr>
<tr>
<td>Secondary school age vacation education</td>
<td>18</td>
<td>33.3</td>
</tr>
<tr>
<td>Guest speakers/public seminars</td>
<td>16</td>
<td>29.6</td>
</tr>
<tr>
<td>Educational material for pre-school age*</td>
<td>11</td>
<td>20.4</td>
</tr>
</tbody>
</table>

*(accessible without a trip to the zoo)
Table 3 shows that despite contemporary zoos being associated by the general public and a number of academics with education about wildlife and conservation (Serrell 1981; Smith and Broad 2008) a significant number of those surveyed do not advertise themselves as having educational programs for primary or secondary school age children or teacher education programs and public guest seminars. Consequently, positioning of conservation education as a cornerstone for the justification of the relevance and morality of zoos is somewhat undermined by the apparently limited provision of formal learning opportunities in many zoos. Amongst the zoos studied the dominant focus of any formal educational programs advertised appears to be the primary school age with only one third of the zoos offering vacation period educational programs for secondary school age children in comparison. If guest speaker seminars in zoos that are open to the general public are an indication of formal attempts by the zoos to engage the adult population in learning about wildlife and conservation then it is appears that few of the zoos studied are targeting this population.

The pattern outlined in table 3 appears to reflect traditional notions of education as something for children; ignoring the potential need for and benefits of the raising of awareness of conservation issues through education amongst adults. The data highlighted in table 3 also confirms the view that zoos do less to provide educational opportunities for pre-schoolers than children in primary or secondary schools (Cain and Merrit 2008). This finding stands in contrast to the apparently high proportion of pre-school age children amongst the zoo visitor population (Cain and Merrit 2008)
### Entertainment content

#### Table 4

<table>
<thead>
<tr>
<th>Entertainment opportunities</th>
<th>Number of zoos providing entertainment opportunities</th>
<th>% of zoos studied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birthday parties offered</td>
<td>35</td>
<td>64.8</td>
</tr>
<tr>
<td>Weddings catered for</td>
<td>31</td>
<td>57.4</td>
</tr>
<tr>
<td>Night stays in the zoo offered</td>
<td>29</td>
<td>53.7</td>
</tr>
<tr>
<td>Children play areas in zoo</td>
<td>27</td>
<td>50.0</td>
</tr>
<tr>
<td>Opportunities offered to interact with animals</td>
<td>26</td>
<td>48.1</td>
</tr>
<tr>
<td>Feeding times advertised</td>
<td>25</td>
<td>46.3</td>
</tr>
<tr>
<td>Petting zoo</td>
<td>14</td>
<td>25.9</td>
</tr>
<tr>
<td>Camel rides offered</td>
<td>4</td>
<td>7.4</td>
</tr>
<tr>
<td>Elephant rides offered</td>
<td>1</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Based on the recognition that zoos are generally not publicly funded institutions and must therefore generate sufficient income to maintain themselves and engage in research and/or conservations efforts it is not surprising to see in table 4 that a wide array of diversions and events are highlighted in the zoo websites to attract paying visitors. The data in table 4 shows
that many of the traditional entertainments associated with zoos, such as the chimpanzee tea party, have been abandoned but that new ones have taken their place. The extent to which zoos offer the opportunity for people to have birthday parties on their premises and the fact that 50% of those studied advertise on their websites that they have a children’s play area point towards the fact that young families, and particularly their children, have traditionally been viewed as the dominant visitor market for zoos. Other attempts to entice in this market are, therefore, presented on the websites studied and include the provision of petting zoo, advertising of feeding times – recognizing that it is during these times that animals are likely to be the most active and hence interesting – and night stays. Indeed, Tuan (1998) has noted the feeding time of the mega carnivores as one of the most popular zoo events. What all of the opportunities highlighted in table 4 offer to the public are entertainment opportunities beyond the chance to simply come and see the animals. It is interesting to note that, in an era of growing concerning about animals rights and welfare, four of the zoos advertised on their websites that they offered camel rides whilst one offered elephant rides. The increasing trend towards marriages taking place outside of churches and other religious sites and the growth of civil unions has led to an increasing demand for alternative marriage sites. As table 4 shows many zoos have responded to this market demand and now offer their sites for marriage ceremonies and associated celebrations.

Whilst advertising entertainment opportunities available within zoos may attract paying visitors to these institutions, doing so can lead to a dominant image of zoos as entertainment
sites that overrides other messages of conservation, research, and education. It is therefore arguably vital that where entertainment images are presented they are tied into other messages of conservation and/or education.

<table>
<thead>
<tr>
<th>Mixed education and entertainment opportunities</th>
<th>Number of zoos advertising mixed education and entertainment opportunities</th>
<th>% of zoos referred to by ‘n’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is feeding time advertised as having an educational component (n = 25)</td>
<td>20</td>
<td>80.0</td>
</tr>
<tr>
<td>Are 'learn about animals' talks advertised as part of the zoo visit (n = 54)</td>
<td>32</td>
<td>59.3</td>
</tr>
<tr>
<td>Is an educational component clear in the night stays (n = 29)</td>
<td>13</td>
<td>44.8</td>
</tr>
<tr>
<td>Do the activities in the kids zone on the zoo website incorporate a clear conservation message (n = 21)</td>
<td>6</td>
<td>28.6</td>
</tr>
</tbody>
</table>

Table 5 shows that in the case of the feeding times there is a clear attempt amongst the majority of the zoos studied to ensure that they are seen not just as an entertainment experience but also as a learning opportunity. However, whilst the image zoos proffer to the public
regarding feeding times incorporates a strong educational message the extent to which the zoos studied did the same when advertising night stays and visits to the zoo in general was far more limited. Furthermore, while 21 of the 54 zoos examined provided dedicated ‘kid zones’ on their websites; only 28.6% of this group took the opportunity to insert a clear conservation message in these zones. This is especially concerning as it ignores the concept that high quality experiential learning experiences occur most readily in unstructured spaces outside the traditional classroom (Lai, 1999; Stainfield et al. 2000); a theory on which the justification of the potential for educational experiences in zoos is based.

**Conclusion**

It is important to stress that it is not the intention of the research on which this paper is based to assess the actual conservation, research, and educational efforts of zoos or the extent of their provision of entertainment opportunities. Rather, the focus of this paper has been on the image that zoos provide through their websites to the general public of themselves as sites of entertainment, research, education, and conservation. It is recognised that the websites offer only one avenue for the presentation of an image of zoos to the general public and that this may not even be the premier reason why zoos establish websites. Furthermore, the Internet offers the potential to present an image in a very different manner to more traditional media outlets. Despite these points, as the World Association of Zoos and Aquarium (2005) has noted, the Internet does represent an important medium through which zoos can disseminate an image of themselves to the public.
Whilst there may be a significant difference between the image portrayed to the public and the reality of what occurs within zoos it is the image of zoos not the reality of what they do that is vital if the public are to be convinced of the need for the continued existence and support of zoos, especially in an era of increased concern about animal rights. Consequently, if there is a gap between the image and the reality of zoos it is the responsibility of these institutions to rectify this situation. This paper has focused on the collective image of the zoo rather than the images of individual zoos. This reflects the fact that the popular definition of a zoo is the product of all zoos and is something which the individual zoo must reconcile itself with.

The results highlighted in this paper suggest that zoos, as an institution rather than necessarily individually, are portraying an image to the public through their websites that suggests they are venues of conservation, learning, research, and entertainment. With more zoos advertising that they had targeted animal conservation campaigns than anything else it may be suggested that they are primarily trying to identify themselves as conservation centres. However, there is a general lack of depth to the image of zoos as conservation centres with the detailed information about scientific research and breeding programs called for by Durrell (1976) generally missing from websites. In addition, there are clearly a variety of zoos that suggest through the lack of information about conservation, learning, and research on their websites that these are not issues central to their conceptualization of the term ‘zoo’.
Furthermore, the results highlighted in the paper suggest that zoos, as a whole, are less interested in forwarding their role as formal educational sites than in conservation though some efforts are made to present this as a component of the image of the contemporary zoo. This may reflect a recognition of limits of the potential of structured educational opportunities in zoos versus their potential as free-choice learning venues. The challenge, of course, is that while providing an image of a place that offers structured learning opportunities is relatively easily established providing evidence to support the concept of zoos as free-choice learning destinations may be significantly more difficult.

Despite the images of conservation, education, and research present on the zoo websites a strong message is provided, especially on most of the homepages studied, that zoos are a place of entertainment. This may reflect both the historic roots of zoos and the financial reality that necessitates the attraction of paying visitors. The need to advertise zoos as an entertainment attraction can become problematic if the strength of this vision begins to overshadow conservation, research, and education messages. The potential for this may be seen in the fact that more zoos advertised themselves as birthday party venues than provided education materials/opportunities, and many of the conservation and research issues noted in table 1.

The problem with the various messages portrayed by zoos on their websites is that it can make it hard to discern whether zoos are primarily places of entertainment or serious, viable wildlife conservation tools. In a positive sense these multiple images suggest zoos are for everyone and
will attempt to educate all visitors about conservation whilst aiding endangered species.

Indeed, following on from the concept that conservation, learning, and fun are interrelated rather than distinct entities, as suggested by the World Association of Zoos and Aquariums (2005), it could be argued that in a free-choice learning environment an image of entertainment is crucial. However, in order for this conceptualisation to gain credibility zoos must, arguably, present images of themselves to the public as venues where entertainment, conservation, and education are balanced. Whilst some of the zoos studied are clearly attempting to do this others are clearly biased towards emphasising the message of entertainment.

To those individuals and organisations opposed to zoos the dominance given to entertainment in the images presented on the homepages and websites studied in this paper provides ammunition for the argument against zoos; suggesting they are places primarily of human entertainment. The problem for those zoos who have committed to defining themselves primarily as sites of conservation is that to the general public they may still be viewed as sites of entertainment due to the more entertainment dominated images presented by the other zoos.

The results of this paper call for a twin track approach to successfully re-define the image of zoos that balances entertainment and conservation. At the individual zoo level there is a need to ensure that accurate and detailed information about conservation and research efforts are publicized on the Internet. In addition, zoos need to actively engage all population groups through education programs and raise awareness of these efforts through their websites.
Furthermore, there is a need to promote the image of zoos as places of free-choice rather than just structured learning opportunities. At the institutional level, there is a need for zoos to move forward in a manner that has at its heart a uniform perspective on the role of zoos as centres of conservation, research, and education that recognises the potential benefits of entertainment to processes of education as well as the financial viability of zoos and their conservation programmes. In this manner the four components of the contemporary zoo should be viewed as integrated and equal parts of a cohesive conservation strategy.

The viability of a uniform approach to the definition of zoos is problematic given the place specific nature of the cultural values regarding animal rights. Consequently, an image that may be desirable for one zoo in order to conform to the values of the society in which it is situated and meet the desires of its visitors may not be appropriate for another zoo in a different location. The answer to this issue is situated in the debate about whether the rights of animals are subordinate to the place specific cultural values of humans; a question that is beyond the bounds of this paper.

Whilst based on analysis of a convenience sample of 54 zoos spread throughout a variety of countries there is clearly a need to expand the work of this paper to determine whether the results presented in it are replicated across all zoos. In addition, there is a need to identify the nature of the material presented on zoo websites where languages other than English are utilised. Furthermore, it would be useful to undertake research that examined what the general
public see as being the messages portrayed in zoo’s homepages. This would add to understandings of the perception of zoos by the public and provide a means of validating the results of the semiotic analysis presented in this paper. There is also a need to ask zoos why they have constructed their websites in a particular manner. This should include an examination of the reasons behind any differences between the reality of what zoos do and the images they present of themselves to the public through the Internet and other marketing outlets. As part of this there is a need to expand on the work presented in this paper to examine the quality and quantity of the specific type’s information presented on zoo’s websites. Finally, work needs to be undertaken to assess how zoo websites influence the general publics’ image of these institutions.

References


Holtorf, C. 2007. *Archaeology is a brand! The meaning of archaeology in contemporary popular culture*. Walnut Creek: Left Coast Press Inc.


