

The accessibility of street furniture at Chester Zoo

An Interview with Professor Geoff Hosey

As part of his PhD programme of research, Michael Richards interviewed a number of prominent zoology experts to gather their views on the accessibility of street furniture in zoological gardens. In his article, Michael details an interview with Professor Geoff Hosey conducted earlier this year at the University of Salford. During his interview, Michael used photo elicitation whilst examining the accessibility of the zoological street furniture. Here he shares his findings.

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Introduction

Professor Hosey is an eminent zoologist, having published papers in Applied Animal Behaviour Science and Zoo Biology, amongst many other publications. Now retired, he was formally employed by the University of Bolton. His knowledge of zoology is extensive, so his feedback was extremely useful as detailed in this article. He is familiar with Chester Zoo as he has conducted research there in the past and was doing so at the time of the interview. Hosey was shown sixty photographs of street furniture from Chester Zoo and these images are used to structure the article, though only those which prompted relevant feedback are featured within this article.

Directional signage

Hosey was positive about the image above, stating that he felt that the imagery used in the signage is universally comprehensible. He believes that in



A wooden directional sign including pictograms suggests what species visitors might find at the zoo

most cases images of this nature do not need to necessarily represent a particular species, rather they can depict a genus, and therefore visitors will know what kind of animals they can expect to see. This lack of specificity is not an issue in his opinion, as he feels that typically visitors do not need to know which specific species they are viewing until they are at an enclosure. Additionally he believes it is important that pictogram design takes into account what people think of when they imagine the silhouette of a species or genus. Moreover, he feels there is no

need to standardise this kind of information across different sites, as this eradicates the individuality of different sites or organisations.

For zoological directional signage, Hosey feels that information provision is species-dependant and each solution will be different. For instance, visitors should be directed specifically to a giant panda (*Ailuropoda melanoleuca*) enclosure, rather than follow a generic bear sign, but for species of lion, a generic image will be sufficient as the type of lion can be specified at the enclosure. Overall, he suggested that iconic animals are less likely to need a species-specific sign, although there are exceptions to this rule. He listed species of gorillas and chimpanzees as iconic animals, while suggesting that what is iconic can change over time, highlighting the increased popularity of meerkats (*Suricata suricatta*) in recent years, due to media attention, as a case in point. He also noted that what is iconic at one site might not be at another, due to localised popularity, advertising, and / or novelty.

Expanding upon the topic of directional signage, Hosey stated that in more recent years zoological gardens have moved away from locating species based upon taxonomy and now typically present regional collections, and this of course influences signage. In his view, developments such as this mean that standardising signage across different organisations is a thankless task as what may be appropriate for one site may be irrelevant for another, due to how the animals are located. For example, telling all zoological gardens to use a pelican pictogram for aquatic birds would only be fitting for sites with species of pelican housed close to other aquatic birds.

Hosey questioned the value of using photographs rather than pictograms on directional signage, as he feels the additional species specific data may not be understood by some visitors. He stated that while most visitors will recognise a polar bear (*Ursus maritimus*) they probably would not recognise a sun bear (*Helarctos malayanus*). To summarise, he stated that due to a lack of visitor knowledge, both a pictogram and a photograph would serve a similar function with regards to most species. From an inclusive / universal design perspective (and in the author's opinion) the additional information provided by photography increases comprehension

for some people, while not impacting comprehension for others, hence photographs could be deemed more inclusive.



This tall wooden directional signage can be viewed from a distance but conveys a lot of information

With regards to this photograph, Hosey felt that the signage displayed too much information and that having more signs for a specific genus, rather than for individual species, would solve this issue. He also felt that the sign should have been supported by a map in close proximity. This, he stated, is in part due to the fact that most zoological gardens have a very irregular path pattern, which can result in visitors going away from an enclosure to ultimately reach it, therefore maps are especially important.

Colour-coding zoological signage to indicate a classification is in Hosey's opinion, not particularly useful and if it is to be done he feels that it should be clearly explained to visitors. He stated that one example of a time when it is potentially useful is for school visits, when children can be informed that different colours specify a class, such as, red for Mammalia (mammals). In general, he pointed out that it is important that signs cater for both individual visitors and organised groups. Conversely, he said that not all signs require comprehension by young children as guardians or teachers can explain what is necessary. Equally, he assumes that a high percentage of disabled people with perhaps complex impairments will visit with an organised group or with support, therefore other people can assist with comprehension of signs. This comment although valid, conflicts with the concept of promoting autonomous use.



Artistic signs such as this can highlight an animal of specific interest

This photograph presents an example of an artistic impression being used on zoological signage, and Hosey stated that he enjoys signs of this nature, as imagery can be manipulated to help point out what the zoological gardens might want people to view; for example, isolating a specific animal to make it stand out. He was surprised that this image uses a species of cheetah. This is an animal he feels most people associate with Africa, rather than Asia. This comment raised a relevant point, suggesting that zoological signs should play on what is most familiar to people already to increase sign comprehension.



This tiger trail sign includes the zoo's logo signifying organisational ownership but there is a view that this may not be necessary on such signage

Conversation was focused upon zoological logo design when discussing this image due to the Chester Zoo logo being displayed in the bottom left corner of the sign. Hosey commented that he has heard reports that people generally do not like the current logo (or more accurately logotype) used by Chester Zoo. Although many items of zoological street furniture display logos, Hosey sees little value in displaying these once visitors are on site. He feels that logos should be used to illustrate ownership outside of the zoo setting, such as, when staff members are giving presentations at external conferences.

Hosey agrees completely with the author, that all zoological logos should have an animal image as their focal point. Preferably, in his view, the animal displayed on a logo should be associated with the zoological garden in question. Furthermore, he pointed out that this kind of design is universally comprehensible, especially for foreign tourists.



The Realm of the Red Ape wooden sign provides directional information for visitors but also suggests several species may be viewed in this area

The Realm of the Red Ape sign shown in this image offers an example of how a sign can encompass more than one species by referring to a region, in Hosey's opinion. He feels this is a particularly good name for a regional display, as it is evocative. It was also mentioned that naming an exhibit after a location, rather than a species, helps to prime people that a range of species will be on display. Although the author was critical of the wording 'red ape' as being

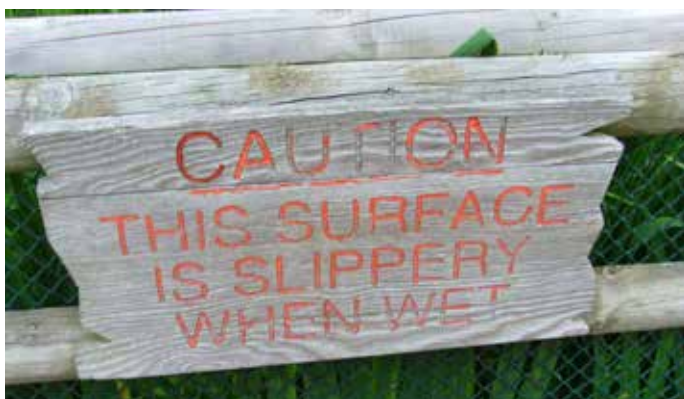
unclear, Hosey feels that more people understand this term now than in the past due to its use in the media, and added that apes as a group are intrinsically of more interest to the public than many other animals.

Regulatory signage



This sign warns visitors to be aware of deep water nearby – an animal barrier often found on zoological sites

The value of signs such as the one shown in this photograph was questioned as it was stated that water is an animal barrier rather than a people barrier, and that physical barriers such as fences will be in place to stop people entering water. With safety risks such as this, Hosey agreed that standardisation was useful as these are universal concerns that are dangerous at all zoological sites, albeit to varying degrees. He added that litigation is usually the primary driver concerning warning signs and this can result in too much signage.



This sign has been stylised but still conveys an important message of caution to visitors to be aware of slippery conditions

Although the author was critical of the signage shown in this photograph for not following standard regulatory signage guidance, Hosey understood why the sign was designed in the way it was, stating that its rustic stylistic was fitting given the context. He explained that a standard regulatory sign might not have been in keeping with the naturalistic locale. Equally, he thinks that ambiance must sometimes be sacrificed when it is important for health and safety messages to be made clear. He believes in a balance being struck which takes into account the specific nature of each location and feels that people are aware that a zoological garden is a recreational experience, and so aiming to achieve an immersive naturalistic ambiance is sometimes unnecessary and unrealistic. To clarify, he feels that unless imagination can be used, standardisation is useful for regulatory signs, while for informal signs a rustic approach can be beneficial to ensure ambiance is maintained.



A familiar sign asks visitors not to feed the animals

When discussing feeding restriction signs, Hosey pointed out that humour can be used effectively, describing an example of a sign he had seen which says 'do not feed your fingers to our animals'. He felt that his example conveyed a message that was not offensive to visitors, while making a very clear point. Humour, he said, can soften a message and make a sign interesting. This he feels is important as people go to zoological gardens to enjoy themselves and they do not wish to be told what they can and cannot do too vigorously. He feels it is important for messages to focus on the negative impact that erroneous feeding can have upon animals, so people

know the reason behind any restrictions. Conversely, Hosey does see the value in some regulatory messages being standardised, especially for health and safety concerns, but feels that humour and a soft approach is usually best. In all instances, he agrees with the author that both imagery and text should be used, rather than text in isolation. His feeling is that images not only increase comprehension but that they also attract people's attention. While discussing feeding restrictions, Hosey pointed out that these are best positioned at the entrance to a zoological garden, with symbiotic signs elsewhere on a site acting as a reminder of the original message. He also stated that feeding by the public is one of the biggest problems many zoological organisations face, as the consequences of this practice are catastrophic.

Enclosure signage



Signs such as this can share interesting facts about animals but need to be as legible as possible

While discussing enclosure signs, Hosey detailed the development of this type of sign, stating that in antiquity they were very simplistic, then they offered too much information, and now they tend to present short facts about a species. With specific reference to this photograph, Hosey questioned the value of using any form of imagery on these signs, as they are positioned at enclosures where people can view the real animal instead. He feels the exception to this rule is for multi-occupancy enclosures, such as aviaries or aquariums, as in this context imagery can help visitors to distinguish between different species. When enclosure signage imagery is used, he feels that photographs are the best choice as they offer a completely realistic image for visitors. He also feels that imagery can draw people's attention

to supporting text, but was concerned that the text shown in this photograph was too small for many people to read.

Hosey elaborated further, stating that most people do not read the text on enclosure signs and that text about a species should be separate from species identification data. He anticipates that signs of this nature will develop in the future to experiment with different ways to engage with visitors. He predicts that technology will greatly influence how information about animals is conveyed to visitors and although he accepted that technology can alienate some users, he feels that as time passes and more people are familiar with new developments, this will be less of a problem. In fact, he pointed out that interactive touch screens can be more inclusive than traditional signs as they allow users to select information which is relevant to their reading age and personal interests.

Due to Hosey's interest in conservation, his view is that signs, such as the one shown in the last photograph should have more of an emphasis upon what a site is doing to conserve each species, and that simply stating that a species is 'threatened' is generally not enough. Biological information about a species is secondary to conservation information in his opinion. Although conservation is his focus, Hosey feels it is useful for zoological gardens to personalise enclosure signage by telling visitors about the particular animals in the enclosure they are looking at by naming animals and telling visitors about their history; for instance, where a particular animal came from, how old it is and describing its ancestry within the zoological community. Doing so, he believes, raises awareness of how captive breeding programmes function and can positively influence donations by the public.

During the interview, I proposed that imagery could be integrated into the International Union for Conservation of Nature (IUCN) Red List scale to increase comprehension.

The IUCN Red List records the 'global conservation status of animal, fungi and plant species', and provides details such as, population size, geographical data and the habitat requirements of particular species.

Hosey's main concern with regards to this notion is that some of the species which would be most fitting to display for certain categories, may not be familiar to many people. For 'extinct in the wild' (a categorisation used by the IUCN), he stated that the scimitar-horned oryx (*Oryx dammah*) would be a suitable selection, but that many people may not know what it was. He elaborated, stating that deserving species may be visually unappealing such as the giant ditch frog (*Leptodactylus fallax*), (which is categorised as 'critically endangered') therefore, it would not engender empathy and passion for conservation. In addition, both parties agreed that an image of a type of frog would pose confusion, as people would think that frogs are abundant. Due to the issues discussed, he did not feel that imagery inclusion on the Red List scale would be useful, as species selection would be too complex.

The complexities of habitat map provision were discussed during the interview, with a number of relevant points being raised. The last photograph shows a Bactrian Camel (*Camelus bactrianus*) and as a result, Hosey was not at all surprised that a habitat range map was not shown as this species is domesticated. This fact highlighted why complete standardisation with enclosure signage is not possible, as for some species, a map is useful while for others it is irrelevant. He also pointed out that habitat range maps can be misleading as they can indicate that a species is more prevalent than it actually is; for instance, if a species has pockets of population but a sign shows one large area to encompass its range, or if its range is wide, but its numbers are limited within this range. His main concern was inadvertently giving a mixed message, if a large habitat range is shown but an animal is under threat in terms of population numbers. He offered an illustrative example, mentioning that the different subspecies of lion are found in a much wider range than the ring-tailed lemur (*Lemur catta*), but from a conservation perspective both are threatened. Despite these concerns, Hosey acknowledged that well-designed maps can be educational, but species-specific issues must be taken into consideration.

Touching upon language provision on zoological signs, Hosey believes there is little value in UK sites offering information in additional languages, in most instances. He went on to say that this issue is location-specific, so for some zoological gardens,

offering additional languages will be relevant due to the visitor demographic, while for others it would be superfluous. English, in his view, is an almost universal language; therefore, its provision alone will often suffice.



Tactile signs can trigger interest whilst also imparting information in an accessible and interactive manner

Hosey has observed that tactile signs, such as that shown in this photograph, are more common now than they were in the past, and he is also aware of olfactory displays at some sites. From an accessibility perspective, these additions are evidently useful. He feels these interactive signs help visitors to engage with animals in different ways, beyond just viewing them in their enclosures.

Maps

The hand drawn map image prompted a positive response, as Hosey feels that maps of this nature are useful for visitors. His main concern was that for the more knowledgeable visitor, these types of maps lack sufficient information prior to arrival at a specific enclosure. It is clear from the more detailed image that it would not be possible for people to tell if the image depicted a Bornean orangutan (*P. pygmaeus*) or a Sumatran orangutan (*P. abelii*). In fact, Hosey stated that this image was poor, as while its coloration is visually descriptive, its physical characteristics make it look more like a type of chimpanzee than a type of orangutan. Also, the map only offers images of the more popular species, so using this map to find less popular species means relying upon text alone. As an aside, Hosey agreed



Hand drawn maps are attractive but may not communicate sufficient detail to all visitors

with the author that the text on the map was not as clear as it could be had a different font been used. In terms of map numbering, Hosey stated that most zoological gardens attempt to list the numbers on a map in an order which replicates a logical visitor journey, although this is a difficult task due to the idiosyncratic nature of each visitor's wayfinding choices.

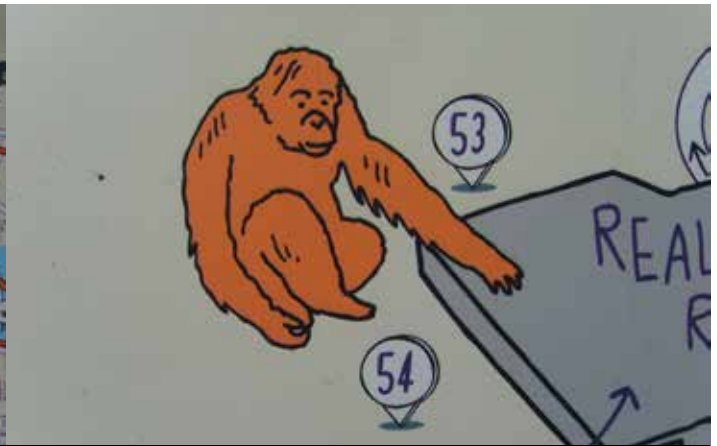
Litter bins

In relation to litter bin provision, Hosey stated that for him personally, the shape of a litter bin is usually enough to make its purpose clear, therefore a litter disposal pictogram is not necessarily required. He was however concerned that the bin shown in the photograph could allow litter to be removed quite easily and noted the increased prevalence elsewhere of banks of recycling bins which typically resolved this issue, with lids. Hosey feels that the rustic look of this receptacle is positive in terms of ambiance.

Seating



Providing accessible seating at regular intervals across large sites will be of huge benefit to many visitors



A wooden bin typically used at Chester Zoo

Both parties agreed that in general, Chester Zoo offers functional, accessible and abundant seating. Hosey stated that this is not always the case as some sites offer very poor seating. He agreed that seating should be provided at regular intervals, incorporate backrests, and that it should be comfortable to use. In his experience, seating in zoological gardens can often be positioned poorly, for instance looking directly into strong sunlight. He believes that most visitors want to sit in a shaded location with good views of the animal residents. With relevance to animal welfare, he is concerned that street furniture can be positioned in a location where it influences animal wellbeing, although each issue is species specific. For example, he stated that people sitting eating food can be stressful for some primate groups, and therefore grounds staff should position seats accordingly.

Summary

My interview with Professor Hosey provided an informed perspective on many key issues associated with zoological street furniture accessibility. Professor Hosey was happy to take part in this process as he believes in the value of this research. In doing so, he expanded my knowledge by discussing new considerations, and made an extremely useful contribution to my research. Most useful in these conversations were his contributions relating to issues that are only applicable to zoological gardens, for example, Hosey's views on the IUCN Red List. The Professor's contributions were positive in light of such a topic being under-represented in current literature.

Michael is currently conducting his PhD programme of research at the SURFACE Inclusive Design Research Centre at the University of Salford.

For further details about SURFACE, visit the University of Salford website

<http://tinyurl.com/SURFACE-Uni-of-Salford>

For further information about Chester Zoo, visit the Chester Zoo website

<http://www.chesterzoo.org/>

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