

# Gender representation in the natural history galleries at the Manchester Museum

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## Abstract

A feminist critique of the natural history galleries at the Manchester Museum revealed androcentric biases in the displays. Male specimens dominated female specimens with respect to number, the postures and positions in which they were displayed, and in the quantity and style of language used in interpretative text. The explanations for these biases were various, reflecting both historical and current views of gender within the museum and society beyond. In response to these findings, and the reactions they elicited in museum colleagues, the museum staged an 'intervention' on the natural history galleries, exposing the biases found within.

**Key words:** Natural history, gender, feminism.

## Introduction

It is widely recognized that in most human societies, past and present, men have dominated women and that male, or patriarchal domination, has been expressed in a wide range of ways and across a panoply of institutions including households, classrooms, factories, offices and museums. Of course, the question of patriarchy's universality, and the way in which gender relationships may vary across time and space, are matters of debate. However, since the late twentieth century a growing body of feminist research in science studies has suggested that the universalism to which the European Enlightenment gave birth was rooted in gender inequality. Thus feminist critiques of science have suggested that its epistemology, its way of knowing, is gendered and that its claim to universalism masks particularism (Keller 2001: 101-102, Tuana 1989a: 169). Some feminist thinkers regard science as a primarily male construct (Birke 1994: 6, Rosser 1989: 3) while others regard science and natural history in general with a sense of cynicism (Tuana 1989b: vii).

It would be unfortunate if public institutions such as museums perpetuated a feeling of disenfranchisement amongst their female visitors. However, although feminist critiques of museum displays have highlighted how women have been misrepresented (if represented at all) in a range of contexts such as social history, anthropology, archaeology and art (e.g. Porter 1996, Jones and Pay 1990, Duncan 1989), there has been little work linking the representation of women to the representation of females of other species (and humans) in natural history exhibits.

As well as being classified taxonomically and geographically as they are displayed in most natural history galleries, animals can also be categorized according to differences of sex. One of the characteristics of all vertebrates is that individuals are either male or female, both sexes being required for reproduction (although advances in reproductive technology mean this is no longer strictly true in some exceptional cases). Sexual dimorphism varies amongst species so that in some cases males and females are very different in their appearance and behaviour, while in others the sexes are indistinguishable except for their genitalia. These alternative evolutionary strategies are linked to other aspects of species biology and behaviour, such as the distribution of parental care between the sexes. Therefore, if museum visitors are to see animal diversity properly represented, one might expect to find that female and male animals are proportionately shown in museums. However, a casual stroll through an average natural

history gallery soon makes it apparent that this expectation is not fulfilled. Males are often (but by no means always) larger or more colourful than females, and both of these qualities appear to have been attractive to the hunters, collectors and museum visitors of the nineteenth and early twentieth centuries (Haraway 1984: 36). In that respect it may be the case that contemporary museum collections merely reflect the aspirations and tastes of the past which will remain incarnate in installations until such time as the resources permit change. However, what I try to argue here is that a closer examination of representations of female animals at one museum suggests that the reasons behind (mis)representation may not be entirely historical in that they flow from contemporary museum practice.

Natural history galleries are usually regarded as places of learning and facts, of science and biological truths. Yet a more critical look at their displays and textual information reveals that they are better described as fora for story-telling, and indeed myth-making. Haraway's view (Haraway 1989: 289, 377) of the importance of telling and retelling stories in the history of primatology and anthropology can be applied to the visions of nature projected by museum displays. My concern is that old-fashioned and sometimes outdated theories of human evolution (Tanner 1988, Fedigan 1992), the social lives of animals and biological determinism may stand unquestioned and uncriticized in contemporary museum displays. In what follows I report findings from a feminist investigation and critique that I conducted in November 2005 at the natural history galleries of the Manchester Museum in the UK. My object was to arrive at an understanding of the gendered stories that were told through exhibition of animals and with particular reference to the display of female animals.

### ***The Manchester Museum – a case study***

The Manchester Museum, which forms part of the University of Manchester, plays a part in university teaching and learning and is very popular with the public, receiving over 172,000 visits in 2007. The museum houses a range of collections covering humanities and science disciplines. The zoology galleries in the Manchester Museum were designed by Alfred Waterhouse (1830-1905) and constructed between 1882 and 1888. The display cases and much of the internal architecture are listed (ie subject to conservation law), so the galleries retain their Victorian grandeur despite various updating of displays, most recently in 1991. The zoology collections of the Manchester Museum comprise over 600,000 specimens, representing a range of preservation methods and taxonomic groups. The galleries consist of the mammal gallery on the first floor, from which the visitor can look up to the suspended sperm whale skeleton, and to the bird gallery on the second floor. Small cases lining the balcony of the bird gallery also contain invertebrate material. Each gallery contains cases exploring the diversity of life with the mammals arranged taxonomically, the birds geographically. The majority of the specimens on display are taxidermy mounts and osteological material.

The range of mammals, birds and other animals on display in the Manchester Museum's natural history galleries are clearly intended to inform and inspire those who visit them. For most visitors to this city-centre museum, the animals on display are the closest they will ever come to many species, whether dead or alive. It could be said, therefore, that as with other museums of natural history, there is a curatorial obligation or responsibility to explain the collections on display and to encourage visitors to reflect on the extent to which displays properly represent difference and diversity with respect to life on earth.

Many of the specimens in the zoology collections date from the museum's foundation and most are more than fifty years old. New specimens are now largely acquired opportunistically, for example when seized by HM Customs, or if found dead and donated to the museum. Given the constraints of the building and the realities of acquisition the potential for changing and developing displays is limited to what is currently shown on the galleries, and what is already in store. However, this does not mean that the mode of display, textual information and other matters of curatorial interpretation are immutable.

### **Methodology**

The initial stage of my study involved surveying the specimens on display in the natural history galleries at the Manchester Museum. I focused on the mammal and bird specimens, as these

make up the majority of the natural history displays. The museum database gives the gender of some specimens on display. In addition to this information, I surveyed the galleries looking at every bird and mammal specimen, making additional gender identifications where possible. Armed with this information, I recorded the following:

- The number of female and male specimens on display;
- The number of species represented by: male specimens alone; female specimens alone; juvenile specimens alone; both male and female specimens; male, female and juvenile specimens; female and juvenile specimens; and male and juvenile specimens;
- Where both the male and female of a species were present, how these were positioned relative to each other, and the postures in which they were mounted;
- The information provided in interpretative text relating to gender, and the language used when referring to female and male individuals.

In addition to compiling statistics from these observations, I also surveyed visitors' comments left on the feedback board in the mammal gallery, focusing particularly on any favourite specimens mentioned by the authors.

A limitation of this survey was that the sex of many of the specimens on display was indeterminate. Where species are sexually monomorphic (the males and females differing only in their genitalia rather than other external features), the lack of original collection data for some specimens can mean that gender is difficult to determine. I discounted from this study any adult specimens where sex could not be determined by observation. As a result 18% of the specimens in the mammal gallery, and 43% of specimens in the bird gallery were included in the quantitative analysis below.

When I discussed the findings of the survey, which suggest that difference and diversity had been occluded by display, with my museum colleagues, the responses were polarized. Some colleagues simply would not believe the results that I had obtained, insisting that the bias I had found was imaginary rather than real. It is interesting to compare this response with Donna Haraway's report of readers' reactions to Adrienne Zihlmann's *Human Evolution Coloring Book* (Zihlmann 1982). Haraway's description is of a book that is at odds with the way readers see difference and diversity:

Zihlman's book scrupulously illustrates human, i.e., general points with specific, i.e. marked bodies belonging to particular sexes, species, cultures and races. Her attention to representing something of the diversity of primates, human and nonhuman, creates an odd book that looks cluttered with the particular. People looking through it for the first time have sometimes complained that it is a feminist polemic filled only with females. Exactly one half the representations of the animal and human bodies where sex/gender can be distinguished are female. (Haraway 1989: 84).

This dismissive reaction from some colleagues towards my own findings was particularly frustrating since the galleries are open to everyone and my survey had primarily involved what was openly on display and thus easily verifiable. Other colleagues felt that the results, as well as the negative responses that lent them a certain poignancy, warranted more attention and acknowledgement. Working with the Museum's Head of Exhibitions and Presentation (Jeff Horsley) and Head of Natural Sciences (Henry McGhie), I decided that an appropriate response to this would be a temporary 'intervention' on the natural history galleries.

Interventions and temporary exhibitions such as the one that we devised have been used to examine gender representations in art galleries and museums in the past. For example, the Whitworth Art Gallery, also part of the University of Manchester, was the venue and subject of a temporary exhibition, *Women and Men* (December 1991 – August 1992). Hyde's report (Hyde 1997) suggests revealing parallels between the representation of gender in the natural

history display and the art gallery.

At the Manchester Museum it was agreed with my colleagues that the our intervention should take place in International Women's Week, running from March 4<sup>th</sup> to March 11<sup>th</sup> 2006. Representative cases were chosen to highlight the different forms that androcentric bias took in the galleries, with text panels provided throughout to explain the ideas behind the intervention more fully.

## Results

The appendix shows the raw data for this survey. The following results pertain to the adult specimens on display in which sex could be determined, and to the juvenile specimens on display.

### *The number of male and female specimens on display*

In most species, the ratio of male to female individuals is around 1:1. Therefore, if a museum were to seek to display a representative sample of biodiversity, one might expect it to display male and female specimens in similar proportions. The Manchester Museum's displays tell a different story. Of the specimens displayed on the mammal gallery, 71% were male and 29% female (appendix a). In the bird gallery, the distribution was slightly more balanced, with 66% male specimens and 34% female.

There are a number of factors that may have contributed to the gender bias that is undoubtedly present in the museum's natural history displays. It is certainly true that many of the early collectors favoured male specimens to female. Male mammal specimens were sometimes seen as more of a challenge than females, and therefore more indicative of the masculinity of the hunter. Haraway's critique of Carl Akeley's African Hall in the American Museum of Natural History (Haraway 1984) describes in depth how the collection and display of animals reflected the perceived masculinity of the (white) men involved. Haraway (1984: 37) also touches upon the perception of the male specimen as the true exemplar of a species. There appear to be parallels here with the gendered politics of science itself for Keller's discussion of gender and recruitment to scientific posts (Keller 1992: 43) highlights the tendency for females to be described as different *from* males, implying that the male state represents the standard from which females deviate. In the museum setting, this view is manifested as female birds and mammals being the browner, smaller, duller, uninteresting and unimportant variants of the males that are preferred for display. In birds, the males are often the brighter and more flamboyant of the sexes, and so may have been similarly prized by collectors.

One of the show cases in the Manchester Museum's mammal gallery is devoted to some of the animals hunted by Lord Egerton (1874-1958), the Fourth Baron Egerton of Tatton. Lord Egerton was a keen hunter and spent much time collecting in Africa, donating specimens to the Manchester Museum in the first half of the twentieth century. A sample page of Lord Egerton's notes is exhibited alongside the antelope case containing animals he collected. The notes indicate that of the twenty-two mammals hunted and recorded on this page, only four were female.

This androcentric bias was represented in the museum's International Women's Week intervention by placing a female specimen (normally kept in store) in a temporary case in the central aisle of the mammal gallery (**Fig. 1**). The specimen was a female Nyala, of which there is usually only a male on display, despite the striking sexual dimorphism of this species. In the past, the male and female specimens have been displayed together, but now visitors without specialist knowledge of antelopes would have no way of realising the intraspecies diversity of Nyalas and other antelopes from the permanent displays. The female Nyala became an introduction to the intervention, illustrating, to museum visitors, the untapped potential of female specimens usually hidden in the museum's stores.

### *Representation of species*

The raw data concerning the number of male and female specimens displayed on the galleries do not in themselves tell us how well the natural history of each species on display is represented. For example, if a case displayed a group of several female specimens of the same species, then this would only inform visitors of the appearance and biology of the females of one



*Figure 1. Female Nyala in temporary display case (Photo B. Bond, 2006)*

and deer). Of the artiodactyls on display in the mammal gallery, those represented by both male and female specimens are by far the smallest. They also happen to be the species with perhaps the least sexual dimorphism of those sharing a display case, and so the species where displaying both male and female specimens is the least visually striking. For example, in the antelope case, the only female specimen is a Kirk's Dik Dik (one of the smallest antelope species (Kingdon 2004: 232)), and she is accompanied by a male specimen. There is little sexual dimorphism in this species, in contrast with some of the larger antelope species displayed, such as the Nyala (Kingdon 2004: 214) of which only a male of this species is on display (the female Nyala is kept in store but was revealed as part of the temporary intervention). It seems that in some cases, females are displayed where they somewhat conveniently take up little space rather than where they would be most informative. Not only are females under-

species. In contrast, if the same number of female specimens belonged to different species, then they would provide more diverse information about the females of other species. For this reason, I also surveyed the way in which species on display in the galleries were represented by male and female specimens (appendix b).

On the bird gallery, 44% of species were represented solely by males, compared to 3% represented by females alone. Just under half of bird species displayed (48%) had male and female representatives. On the mammal gallery, 61% of species displayed were represented by male specimens alone, while 11% of species were represented by female specimens alone. Only 14% of species had male and female representatives. These results suggest that museum displays perpetuate the idea that males are perceived as more worthy representatives of species than females (Haraway 1984:3).

On the mammal gallery, only six species are represented by both male and female specimens. Of these, three are rather diminutive artiodactyls (even-toed ungulates, for example antelopes



*Figure 2. The antelope case, with male specimens concealed (Photo B. Bond, 2006)*

represented in the gallery displays in terms of numbers, but they are apparently regarded as less fit to represent their species than are the males.

The gallery intervention responded to the dominance of male representatives of species in the antelope case. We covered all the male specimens in the case with white sheets, thus concealing them from view for the duration of the intervention, leaving only the tiny female Kirk's Dik Dik on show (**Fig. 2**). A piece of text accompanying this portion of the gallery intervention explained the reasoning behind changes in the display case, and commented on the female specimens permanently concealed from museum visitors in the stores, and the inadequate representation of females with respect to information and number of specimens. In the USA and elsewhere a similar interventionary technique has been in deployed as part of 'A Day Without Art', to encourage AIDS awareness<sup>1</sup>. The Day was first observed in 1989 as part of World AIDS Day and is now an international event. In 1998 statues in the Franklin D. Murphy Sculpture Garden at the UCLA campus were covered in black fabric, to raise awareness of the effects of HIV and AIDS, and to commemorate AIDS-related deaths in the artistic community. The value of this kind of method is that it jolts the expectations of viewers, inviting them to think and talk about the subject in ways that might be overlooked in the course of normal, day to day communication.

### ***Posture and position of male and female bird specimens***

In contrast to the mammal gallery, the relatively large number of species represented by both male and female specimens on the bird gallery allows a closer examination of how these are displayed. Where male and female specimens of the same species were displayed together in the bird gallery, the relative postures and positions were noted.

Of the pairs of specimens displayed at different heights, in 74% of these cases the male is the higher specimen (appendix c). Where it could be determined that one of the pair was mounted in a more erect or dominant posture, in 82% of cases this was the male specimen (appendix d). **Figure 3** shows an example of a pair of specimens in which the male is both higher and in a more erect posture than the female. In most examples the positioning of the male above the female does not inform the visitor about the behaviour of each species. In fact, in two of the more informative mounts, the male is placed lower than the female, in its display posture. In some cases the position and posture of females have been dictated by the taxidermist whose role in these matters is, of course, crucial. Taxidermists' representations of natural history may be affected by personal views of politics and society (Grasseni 1998: 287). In older mounts, it may well be that taxidermists (consciously or subconsciously) reflected patriarchal norms in their mounts and compositions.<sup>2</sup> It is not an easy matter to remedy the social biases of past technicians and experts in modern displays. However, the fact that individual specimens may still be positioned according to the same pattern more recently suggests that bias is not entirely a residue of past views of gender.



*Figure 3. Male (left) and female pheasants, Phasianus colchicus (Photo R. Machin, 2005)*

The gallery intervention highlighted biases in the posture and position of male and female bird specimens by placing white vinyl circles on the glass of bird display cases in front of suitable examples (**Fig.4**). This served to draw attention to display patterns that were entrenched in the displays and which might otherwise remain unnoticed and unchallenged by museum visitors.

### ***Interpretative text and graphics***

Whilst the ratios of male and female specimens, and the choices made in their display,



*Figure 4. Examples of male specimens dominating females on the bird gallery (Photo B. Bond, 2006)*

may well be influenced by historical constraints, recent updates to the galleries such as textual interpretation are not, we might suppose, subject to the stereotypes and prejudices of the past. However, I found that rather than correcting the biases of inherited displays of specimens, the interpretation used on the galleries has reinforced (albeit, perhaps, subconsciously) androcentrism. The language used throughout the natural history galleries follows the story-telling model of the patriarchal imagery of science critiqued by Keller (1992: 48), presenting stereotypical male and female roles, and lending a disturbing vein of biological determinism to a visitor's day out.

The general information about mammal biology provided at the entrance

to the mammal gallery includes statements such as '*mammals give birth*' and '*mammals have placentas*', whereas as in fact these characters are exclusive to females. Conversely, the statement that '*females breed*' suggests that reproduction does not involve males, which is also untrue. In the label text for separate species, the roles of males as the hunter, fighter and protector, and of females as the bearer of offspring are emphasized throughout the mammal gallery (compare with Porter 1996, 107). Statements such as '*The more powerful males have harems...*' and '*Males with a territory have harems of about 50 females*' imply that males have ownership of females, rather than females having the potential to make decisions in the courtship process (Haraway 1989: 338). The text is written as if it is authoritative fact, rather than the partial story it surely is. Fedigan (cited in Haraway 1989: 320) has noted how the language of science has often been used to categorize females as resources, thus silencing the agency of females in primate societies. Despite such work, and more recent research suggesting the centrality of females in the societies of some species, the patriarchal paradigm still dominates the displays of the Manchester Museum's natural history galleries.

The language used in the bird gallery seems in general to better represent the important roles of both males and females. The word 'parent' is used often in text, perhaps due to the different strategies of offspring care found in birds. However, the information on eggs does not refer to females being the egg-layers. The words 'female' and 'mother' are more or less interchangeable in the mammal gallery text. While the word 'mother' is used frequently throughout the bird and mammal galleries, the word 'father' is never used on either gallery. If it is acceptable to use the word 'mother' in relation to non-human animals, why is the word 'father' omitted? The fathering role of the males of some species is acknowledged by the use of the term 'parent' on the bird gallery, and yet they are never labelled as 'fathers' here. This curious use of language perpetuates, perhaps unintentionally, the idea that the role of females (including women) is to reproduce, while males (including men) are capable of this and everything else (Haraway 1989: 282).

While most specimens in the natural history galleries are presented as mere samples of their own species rather than as once living individuals, the mammal gallery contains a number of specimens that have a particularly strong identity, some of which are very popular with visitors. It is interesting to compare the interpretation of iconic specimens of different sexes. The text for Maharajah (a male Asian elephant) and Old Billy (a male horse) refers to 'him' and 'his', whereas Mr Potter's Cow (a female) is referred to simply as 'the cow' or 'the specimen'. Her gender is not referred to in the text, and she is thus represented as an object rather than a once living, gendered individual. This is particularly inappropriate since the remains of Maharajah and Old Billy are skeletal, whereas Mr Potter's Cow is a taxidermy specimen, and is therefore more lifelike to her audience. The fact that Mr Potter's Cow is named through her (male) owner is similarly rather telling. In her exhibition *Beloved and Forsaken*<sup>3</sup> (15 May 2004

– 12 September 2004), the artist Spring Hurlbut was moved to name Mr Potter's Cow 'Lady', thus reclaiming her individual and gendered identity.

Until very recently, when the human evolution displays were removed to make way for the new Lindow Man exhibition, the mammal gallery sections that made most use of graphics and artistic reconstructions were those dedicated to human biology and evolution. Given that these media are not constrained by historical biases in collecting, one might imagine that women and men could be equally represented here. However, only 13% of pictures of humans on the gallery (excluding anatomical diagrams) are of women or girls<sup>4</sup>. The human evolution display includes large graphical representations of early human species, all of which are of men. The artistic reconstruction of *Homo erectus* consists of three men holding spears by a fire, with a faceless woman sitting by the cave wall in the background. The picture of *Homo sapiens neanderthalensis* comprises two women with children, and five men back from the hunt. This 'man the hunter' view of human evolution is an inherited story (Haraway 1989: 317) which has been widely challenged by female primatologists and anthropologists (e.g. Tanner 1988; Fedigan 1992), and yet it remains authoritatively in place as fact in the museum's gallery. The representation of modern human women is similarly skewed. The various sketches of people dotted throughout the gallery are mostly male (the only exception is a young girl riding a Shetland pony). The anatomical drawings of humans are all male, with exception of those of female reproductive anatomy. Therefore the only way in which adult female *Homo sapiens sapiens* (modern day women) are represented on the gallery is in the disembodied models and diagrams of uteri and mammary glands. The idea of the female body being organized around the uterus, and reproduction as the fundamental role of females, is regarded by Haraway (1989: 352) as part of the symbolism used in science and politics to maintain power over women's bodies. An alternative story displaying the multiple roles that women have played in human evolution, and in modern human society, could easily be told, yet the patriarchal tone of the museum's displays remains unchallenged. The relative abundance of anatomical models of female reproductive parts in the Manchester Museum may reflect the interests of scientists many years ago, and yet the way this is manifested in today's displays means that a museum visitor can gaze on the anatomy of women more readily than that of men. Similarly, the recently redeveloped galleries at the Hunterian Museum, part of the Royal College of Surgeons in London, display several examples of female 'generative organs' yet very few male genitalia (these are presented in the context of disease rather than reproductive organs). This presumably represents the personal interests of John Hunter, but the resulting museum displays allow women to be viewed as objects and specimens more readily than men.



Figure 5. Examples of value-laden words used throughout the galleries (Photo B. Bond, 2006)

These issues were illustrated in the gallery intervention by using white vinyl to place enlarged copies of label text in front of the exhibits, where they could not be ignored (Fig. 5). The phrase 'Males compete for females, and the successful ones are often two cooperating males that are probably related' was placed in front of the male lion, and the phrase 'Both sexes hold territories which they mark by scent and by scratching trees. The males' territories are large

and often include the territories of several tigresses' was placed in front of the male tiger, bringing attention to the value-laden words used throughout the galleries.

## Discussion

The representation of gender in natural history displays may seem unproblematic to some museum practitioners, as they primarily concern non-human animals. However, by presenting the natural history of other species through the apparent realities of science and taxidermy, it is possible that the aspects of biology which humans share with them may be misrepresented. Biological determinism has been used in the past to justify social inequality between men and women (Lambert 1987: 125). As the personal views of scientists from many disciplines can affect their research (Tuana 1989a: 147), so can taxidermy displays reflect the personal views of their makers, rather than representing a balanced view of nature. The displays housed in the Manchester Museum are not exceptional in their androcentric biases. Indeed, the displays are representative of a bias apparent in many natural history galleries. It would be a simple matter for a museum to contextualise the historic reasons behind biases found in such displays in interpretative text, but instead patriarchal messages retain the unchallenged tone of authority. The apparently factual lessons taught by natural history displays such as those of the Manchester Museum are simply stories, inherited from science past, partial interpretations of work produced and challenged decades ago. And yet, as Haraway notes, 'one story is not as good as another' (Haraway 1989: 331).

The historical legacy of gender imbalance in the museum's collection does not entirely explain the bias shown in the display galleries today. The positioning of male specimens above females and the dominance of males in the interpretative text (both in quantity and language used) are both biases that could have been addressed in more recent times in the light of scientific change. It appears, then, that there is a bias towards male animals in contemporary display techniques and decisions. For instance, why has work by female scientists proposing alternatives to the 'man-the-hunter' view of human evolution been excluded from the museum's display on human evolution? In considering past decisions that have shaped the current appearance of the natural history galleries in the Manchester Museum, it is worthy of note that the museum has only had two female zoology curators in its lengthy history (there have been no palaeontology or entomology curators). As more women enter the museum profession, one may hope to see a more balanced depiction of gender in museum displays (compare with Hyde 1997: 15-16). Happily, women make up 54% of the staff at the Manchester Museum (correct as of March 2008). However, there are no female science curators on the current staff (although three out of five curatorial assistants working with science collections are female). Perhaps more significantly, there are no female staff members of the management or leadership teams of the museum.

These matters led me to think of the gallery intervention as way of encouraging visitors to reflect, not only what counts as knowledge, but also on *who* makes it count. Thus, a small text panel was placed with the models of female anatomy in the Mammal Biology display case, quietly explaining the gender balance and staff structure of the museum and contextualizing the impetus for the intervention. Hubbard (1989: 128) maintains that science plays a role in underwriting the existing distribution of power in society and that it expresses the interests of those who are politically dominant. It seems reasonable to suggest that there might be a link between the understanding of the androcentrism found on the natural history galleries of the Manchester Museum and the gendered hierarchy of the museum. It has been suggested that the gender balance of scientists in different fields can be linked to the kind of stories they tell (Fedigan 1992: 111). It seems from other research that museum displays are not immune to such bias (e.g. Star and Griesemer 1989: 389-90).

It is often assumed that museum visitors are attracted to exhibits displaying large, impressive specimens and this could be a part explanation for the choices that curators have made in displaying specimens. The popularity of the Manchester Museum's recently acquired *Tyrannosaurus rex* cast is a case in point. The species itself has been 'engendered' with a male name, reflecting its 'kingly' stature. However, it is thought that the females of this species may have been larger than the males. The cast in the Manchester Museum is nicknamed 'Stan' after

its discoverer Stan Sacrison. It is not certain that this specimen was male, but nevertheless, it now has a male identity. The fact that a (partially) real, small, herbivorous dinosaur (*Tenontosaurus tilletti*) was replaced in the Prehistoric Life gallery by 'Stan', a cast of a carnivore, is also noteworthy when we hold in mind the link that has been made by some feminist writers between meat eating and masculinity (e.g. Birke 1994: 21).

A survey of 2000 visitor comments collected from a feedback board in the mammal gallery revealed the favourite specimens on the mammal gallery (appendix e). While large and fearsome specimens are popular, there is nevertheless a refreshing appreciation for more diminutive and herbivorous species. A problem with using surveying visitor comments such as these to inform display choices is that they may be shaped by the museum installations themselves. Larger specimens are often displayed centrally or on plinths out of necessity, whereas smaller (/browner/female) specimens are more easily tucked into cases and behind pillars. This may mean that when visitors are asked what their favourite specimens are, they are more likely to have noticed the bigger (/colourful/male) specimens, and so these are regarded as the most popular. If museums then base decisions on which specimens to display on these results, there is little chance for the less obvious choices to be included. It would be interesting to replace a large, popular specimen such as the male lion, with a cleverly spotlighted pygmy shrew on a fine plinth, to observe whether visitor responses showed more preference for smaller specimens as a result.

The imbalance in the number of male and female specimens on the natural history galleries misrepresents the diversity of life. A museum will never, of course, be able to display a male, female and juvenile of each species, in some kind of pseudo-Ark. However, it should be made clear that not all Peafowl have iridescent fan-tails (only males do), and not all Red-necked Phalaropes have red necks (only females do), simply to avoid misinformation. Similarly, it could also be made clear that although male lions may look fearsome when mounted with a snarl, it is the females that do most of the hunting, as well as raising cubs. Females could be represented as having the choice of males to mate, rather than being the possessions of males, mere venues for the fertilisation process. Fedigan (2001: 55-58) has discussed the importance of gender symbolism in scientific terminology, giving examples of how language use has affected the routes of scientific enquiry followed. While it may often be the case that males of other species dominate females, it is important that this is not carelessly assumed, and that value-laden descriptions are avoided where the facts are unclear. The texts accompanying exhibits are stories with alternatives, and therefore should not be presented as authoritative truths, framed as proof that a patriarchal society is natural, and therefore inevitable and morally right.

There are a number of possible reasons for the androcentrism found on the natural history galleries at the Manchester Museum, and while it may be impossible to untangle these various factors, in some ways this is unimportant. What is of prime importance is to recognize the bias that exists on the galleries as they are today, and to consider how this may affect visitors' experiences of the museum, both in terms of learning about natural history, and learning about our society. The temporary intervention on the natural history galleries served to disrupt the expectations of museum visitors and staff, and proved controversial within the institution. The intervention stayed on the gallery for five weeks, four weeks longer than originally planned, but its effects have been longer lasting. On an institutional level, the intervention has provided, and has been used as, a model of how relatively low-cost changes can be made to permanent galleries in a way that could be used to instantly update displays to adapt to current affairs and local issues. For example, a temporary intervention using similar practices, a *Revealing Histories* trail highlighting links between objects on permanent display with the transatlantic slave trade was staged throughout the Manchester Museum galleries to mark the 2007 bicentenary of the abolition of the transatlantic slave trade. White vinyl text overlaid displays to draw attention to issues that might otherwise be overlooked by visitors.

Since dismantling the temporary intervention normality has reasserted itself and the gender inequalities found in the permanent displays of the natural history galleries probably remain unnoticed by most visitors (and indeed most museum staff). This makes them all the more concerning. Not only are visitors being presented with a skewed, and therefore unscientific view of the natural world (Potter 1989: 133), they are being presented with stereotypical and

inaccurate messages, both subliminal and obvious, about the roles of females in our own species and those of others. As museum exhibits these messages are spoken with the authoritative voice of Science (Genova 1989: 212) and so visitors to the museum are likely to accept them without challenge (Hubbard 1989: 129).

Different people hold wide-ranging views about the relation of humans to other animals. But all women share at least one characteristic with other female animals, and that is their sex. Other species presented in museums may play a part in shaping our identities (compare with Duncan 1989: 172, Porter 1996: 109) and it is possible for women to relate more closely with female non-human animals than with some male humans (Haraway 1989: 292, 317). Gender is an important part of a human's identity, perhaps the first thing that might be used to describe someone. Yet a woman shares her sex with Mr Potter's Cow, but not with her male colleagues, or her father. Children make up a large proportion of the Manchester Museum's visitors. If they are presented with a depiction of animals, including humans, as either small, child-bearing females or large, tough males, then the effects that this may have on their perception of gender in society is concerning. The museum displays are replete with patriarchal imagery mixed with biological determinism, a heady mix for impressionable young museum visitors. Not only does the museum have a responsibility to explain the extent to which its displays represent actual biodiversity, it should also be aware of the potentially political nature of biology and the way it is communicated (Hubbard 1989: 129).

Given that 'we become what biology tells us is the truth about life' (The Biology and Gender Study Group 1989: 184), I hope that in the Manchester Museum at least, the self-perpetuating cycle of gender stereotyping in science may have been halted for a moment by the International Women's Week gallery intervention.

## Conclusions

Just as outdated anthropology displays have been criticized as representing other cultures from a colonialist perspective, so natural history galleries can be revealed to show androcentric biases through their patriarchal stories masquerading as biological truths. The case study of the Manchester Museum reveals patterns which are followed in museums elsewhere, both in Victorian displays and modern gallery redevelopments. The distance of history may be used as an excuse for perpetuating gender myths, but unless this historical context is made clear within a museum's exhibits, it is likely that museum visitors will interpret displays at face value. Temporary interventions can be an effective way of disrupting museum visitors' expectations of natural history, and can raise awareness of the need to question gender-based assumptions when choosing specimens and interpretative methods in exhibition design.

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## Notes

- <sup>1</sup> <http://www.dailybruin.ucla.edu/news/1998/dec/01/day-of-mourning/> (correct as of September 2007).
- <sup>2</sup> Star (1992: 258, 274) touches upon the importance of changing societal and scientific views in the type of taxidermy produced through history. This forms a parallel with the changing representations of women in art through history (Hyde 1997). Artworks such as Mr and Mrs Andrews by Thomas Gainsborough (1750), for example, reflect a disarming similarity to the postures given to male and female pairs in museum displays.
- <sup>3</sup> <http://www.alchemy.manchester.museum/AlchemyHistory/C2/belovedforsaken.htm> (correct as of September 2007)
- <sup>4</sup> There are parallels here with the finding of Hyde's Women and Men intervention, in which she noted that works in the Whitworth Art Gallery's drawing collection were produced by men and women at a ratio of 32:1 (Hyde 1997: 7).

**Appendix**

**a**

	Female	Male	Juvenile
Mammal	16	39	7
Bird	88	168	45

**b**

	Female only	Male only	Male & female	Male, female & juvenile	Female & juvenile	Male & Juvenile	Juvenile only
Mammal	5	27	6	2	1	1	2
Bird	5	68	75	4	1	1	2

**c**

Male higher	Female higher	Equal height
32	11	19

**d**

Male dominant	Female dominant	Equal posture
18	4	40

**e**

<b>Favourite specimens</b>	
Polar bear	30
Tiger	20
Primates	21
Elephant	18
Lion	11
Rabbits	10
Sperm whale	9
Deer	9
Fox	2
Mice	2
Kangaroo	2
Bats	2
Walrus	2
Armadillos	2
Others	23 x 1

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