

HOMININ REPRESENTATIONS IN MUSEUM DISPLAYS

Their role in forming public understanding through the non-verbal communication of science



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DECLARATION

This thesis submitted to the University of Adelaide in fulfilment of the requirements for the degree of Doctor of Philosophy (Medicine).

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PUBLICATIONS

The following items resulting from the work described in this thesis have been published or otherwise publically presented, and sections of these are included in the present thesis.

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ABSTRACT

Key points

- 71 institutions visited
- 860 hominin representations assessed
- Earlier hominins are treated differently from *H. sapiens* and often convey inaccurate scientific information

Hominin representations in museums and other displays have been used for well over a century to illustrate the people of the past. The popularity of archaeological and forensic facial reconstructions in the media ensures that they will be popular for some time to come. The aim of this work is to ascertain how hominin representations displayed in museums convey to the public interpretations of human evolution, variation and behaviour. These representations are a unique form of museum material culture as they are used as both part of the display and as an artefact that displays scientific knowledge from its era of manufacture. Various institutions (71) in 10 European countries and Australia were visited. Out of those, 55 hold altogether 860 life-sized and three-dimensional hominin representations.

Ten representation types were identified: facial reconstructions (n=100), facial reconstructions on a body (n=92), casts (n=158), educational sculptures (n=104), museum mannequins (n=99), standard mannequins (n=87), portrait figures (n=147), medical models (n=27), costume dummies (n=31) and miscellaneous representations (n=15). These representations were found to be displayed in four different contexts: complete contexts (e.g., dioramas and tableaux), partial contexts (e.g., life-groups), in a series or as a solo figure. The terminology used to classify representations and their context was found to be inconsistent in both the museums and in the literature. The various taxa found included *Kenyanthropus*, *Australopithecus* and *Homo* species. The facial realism of these representations ranged from blank faces to highly detailed faces, which were also extremely realistic. The earlier hominin representations were more highly

detailed than the *H. sapiens* representations, even though many of these details are unknown. Particular facial features (such as eyes, oral cavity and individual eyelashes and brows) were also found to increase the perceived realism of the representation. The body proportions of the earlier hominin taxa were found to be inconsistent within the various taxa and with scientific knowledge. Faces of the earlier hominins were found to be genus specific (i.e., *Australopithecus* and *Homo*) rather than species specific: essentially the representations looked either human or pre-human. There was also a range of biases in the sample, for example 66% of the representations were male and 70% were adults (approximately 20–40 years).

These findings may enable museums to use hominin representations in the most effective way possible in terms of the intended purpose of the exhibition in which they feature, their expected audience and the museum's economic constraints.

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WARNING

There are terms used in this thesis that may offend the reader. The author has used the terms and information from labels displayed at the museums and institutions visited for this study. Some of these institutions have old exhibitions on display and may use out-dated or insensitive terminology. As these terms were still in use at the time of the museum visit they have been used in this thesis.

Some of the terminology employed in these labels is specific to a particular era and was originally used to identify a group of people. Some such terms have since been applied in a derogatory manner; this is not their intended use in this thesis.

Because of the topic of this thesis, please also be aware that some of the figures and photographs may contain images of human remains or casts of Indigenous people who have since died.

A NOTE ON NOMENCLATURE

Neandertal is spelt in two ways in this thesis. Firstly this serves to differentiate between the Neanderthal Museum in Mettmann, Germany, which uses the original spelling, and the Neandertal representations that are a part of this study. Secondly, the new spelling of 'Neandertal' has been used for the representations to reinforce the idea that there is debate about their position in our ancestral lineage¹. This differentiates between *Homo neanderthalensis*, which indicates a separate taxon, and 'Neandertals' with the implication of the uncertainty about their taxonomic placement.

Pithecanthropus' is not used in this thesis as a taxonomic designation as the skeletal remains in this taxon have been reclassified as *Homo erectus*. Other taxonomic names follow the convention used by the particular museum being considered at any given point in the text.

¹ See for example Saniotis A, and Henneberg M. 2010. Rehabilitating Neandertals*: anthropological constructions of Neandertals in the process of 'othering'. *Before Farming* 4:article 3, 1-11.

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To get through the hardest journey we need take only one step at a time, but we must keep on stepping.

Chinese Proverb

A journey is best measured in friends rather than miles.

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PREFACE

Due to the nature of this thesis the format does not follow the usual conventions. This is due to the thesis drawing from various disciplines ranging from anatomy and palaeoanthropology to the humanities, the fine arts and social sciences. Out of necessity this thesis touches upon many topics but not all of them could be addressed fully. It concentrates on the evaluation of displays of human bodies in museums as a means of transmitting scientific information to the public, and address various topic with this goal in mind. A systematic approach was taken to address the limited terminology currently in use and to create classifications and methodologies in order to concentrate on the aims of the thesis. There are areas of this work that may be researched further in–depth which may be topics of separate studies.

This thesis begins with introductory remarks that are then followed by a background chapter covering a variety of topics to ensure that the reader has the required information upon which subsequent chapters are based. The third chapter details the data collection required for the research and defines the types of representations found and their context. This third chapter is essential reading for the following chapters as it lays the foundation for the sample upon which the following chapters are based. Chapter four details the type of finishing techniques used on the *Homo sapiens* representations in the sample. This is further expanded on in Chapter five, which looks at both the finishing techniques and the body size and shape of the representations of earlier hominins. An experiment on the recognition of hominin species is the basis of Chapter six, while Chapter seven discusses the types of information found in the representations and their contexts that may bias or influence the viewer. As each chapter has a specific focus and many of the references are chapter specific the references for each chapter will be given at its end, rather than in a complete reference list at the end of this thesis.

A large number (71) of institutions were visited in Austria, Belgium, England, France, Germany, Hungary, Portugal, Scotland, the Netherlands, and Wales, as well as Australia. The topic of this thesis has been embraced by the majority of the curators and museum staff that hosted the research visits and has resulted in a number of them requesting a copy of the finished thesis.