

Studying and exposing human remains: two cases from the Padua University Museum of Anthropology

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ABSTRACT

The theme of the study and on the exposure of human remains in museums is very topical and debated. It is a fruit of a greater attention to these particular museum specimens which present unique ethical problems.

Within this debate, we want to bring the contribution of two cases occurred at the Padua University Museum of Anthropology. The first concerns the osteological human collections preserved, both those coming from archaeological excavations and the modern ones. A multi-disciplinary study for these collections has started with the aim of increasing the knowledge of these finds, providing a suitable key of presentation for future exposure.

The second case linked to the Egyptian mummy wants to reflect on the importance of language in exhibiting thus particular finds: the choice of a complete and clear communication about the scientific investigations carried out on the specimen appears the best thing to do.

Key words:

human remains, studies, researches, exhibition, communication.

RIASSUNTO

Studiare ed esporre i resti umani: due casi dal Museo di Antropologia dell'Università di Padova.

Il tema dello studio e dell'esposizione di resti umani nei musei è molto attuale e dibattuto. Esso è frutto di una maggiore attenzione per questi particolari beni museali che presentano delle problematiche etiche uniche.

All'interno di questo dibattito, si vuole portare il contributo di due casi occorsi al Museo di Antropologia dell'Università di Padova. Il primo riguarda le collezioni osteologiche umane conservate, sia quelle provenienti da scavi archeologici che quelle moderne. Per queste collezioni si sta procedendo con uno studio multi-disciplinare che negli auspici aumenterà le conoscenze di questi reperti, fornendo una chiave di presentazione adeguata per la futura esposizione.

Il secondo caso legato alla mummia egizia vuole riflettere sull'importanza del linguaggio espositivo di reperti così particolari: la scelta di una comunicazione completa e chiara delle indagini scientifiche svolte sul reperto appare la via migliore da percorrere.

Parole chiave:

resti umani, studio, ricerca, musealizzazione, comunicazione.

INTRODUCTION

Often the display of human remains, such as mummies, anatomical preparations and skeletal remains within temporary and/or permanent exhibition routes by science museums, rekindles the ideological debate that arises in similar circumstances: is it right to expose human remains in museums? Is it the presentation of results in archaeological-scientific researches or the profanation of deceased?

Sometimes the exhibition of human remains can offend the sensibility of visitors because it can be

considered, in some cases, disrespectful of customs and local traditions or, in other cases, of the single individual. Especially in Italy, the controversy is fuelled by the cultural and religious background which modeled the relationship with death based on the sacredness of the human body as gift of the divinity. Anyway, in the Catholic world itself there are some exceptions like the Catacombe dei Cappuccini in Palermo (South Italy), San Bernardino alle Ossa in Milan (North Italy) - with walls adorned by skulls - or the Convento dei Frati Minori Cappuccini in Rome (Central Italy) that shows monks' bones utilized as architectonic decorations;

in those contexts, the body was considered a simple casing of the soul which lost all importance after death.

Undoubtedly there are various types of reflection on death: passing from strictly philosophical concept of those who claims tolerable only the disappearance of the person, to that one strictly biological of those who only sees the cessation of the vital functions for the maintenance of life, until you get to that pertinent the pathological anatomy, intended to study the changes that occur in the body by the time of death (Bernat et al., 1981). These lines of thought can therefore cause different sensations in the viewer's eyes. Knowing how to tackle the themes around death with scientific method is the challenge for researchers and curators of museums that it has allowed and it is allowing the increase of the studies and the advancement of investigative techniques in these areas of interest especially from twenty years to today. Froment (2011) well underlines the great number of fields that involve the studies on human bones and, as reflection of this trend, it is observed an increase of university courses in osteology and human anatomy and increased request for access to collections of human remains by researchers (Fletcher et al., 2014).

Therefore, study and display death it means not only know and to make known one of the most intimate aspects of humanity, but also measuring itself with social preconceptions and psychological obstacles, educating to reflection on them. This form of education, in which scientific museums are the protagonists, has as prevalent objectives the removal of the taboos of death and the promotion of forms of interaction with it in order to face death with the minimum reaction of anxiety, trying to explain the social structure of dying - the so-called "death system" (Kastenbaum, 2016) -, as well as recognizing the differences and peculiarities existing among the various cultures on the subject. All these things must rightly pass through an appropriate choice of languages. Indeed "[...] the exposure of human remains may create confusion because not always the speaker and the listener using the same language" (Monza, 2014), because it is common sense that the collections of human remains preserved in the museums are not simply "unusual objects" to be admired. The scientific community is certainly unanimous in not consider them objects, but rather individuals full of culture, memories, individual and collective stories, by extracting and presenting any data that can reveal, through the study of death, especially their lives (Mays, 2014). Particularly in the United Kingdom and the United States of America, these issues caused the entry into force of regulations for the safeguard and treatment of the human remains in the museum institutions, in addition to some requests for the restitution of these

made by indigenous communities, such as Native Americans, Aboriginal Australians and Maori (AA.VV., 2004; AA.VV., 2011). Such laws highlight another delicate aspect of the question, because they are not made, in fact, to protect the skeletal remains - archaeological and modern - but rather the living people that honour their memory (Barbiera, 2012).

THE OSTEOLOGICAL COLLECTIONS OF THE MUSEUM OF ANTHROPOLOGY

The Padua University Museum of Anthropology possesses a wealth of osteological collections of considerable importance (fig. 1), including anatomical specimens and skeletal series referable to a period ranging from prehistoric to modern times. These collections are a fertile ground for researches for many Italian and foreign academics who investigate on the evolution of the human species and on the biological variations among individuals and populations.

Even if the "raw material" of the archaeological and modern collections is the same (i.e. human bones), the approach to their study and exhibition must be different and respectful of their respective peculiarities.

The osteological collections of archaeological interest

The importance of osteological collections of archaeological interest is linked not so much to the remarkable consistency (a research project currently underway has the aim to catalogue them entirely), but rather to the concomitant presence of palethnological materials, coming in part from the same sites.

The palethnological collection consists of over 7000 lithic and metal tools, pottery, as well as horn and bone artefacts, with a wide chronological arc: from the Palaeolithic, passing through Copper Age, Bronze Age and Iron Age, until Late-ancient and Middle Ages. The origin of the artifacts ranges from different Italian regions such as Veneto, Trentino Alto Adige, Friuli Venezia Giulia, Lombardia, Emilia Romagna and other Central-Southern and insular regions, and from the neighboring foreign nations such as France, Switzerland, Austria, ex-Yugoslavia, Greece up to the most distant regions such as Tunisia, Egypt, Somalia, Arabia and North America (Alciati et al., 1996).

This peculiar situation naturally leads to a research work aimed at a multidisciplinary approach, through the union of palethnology and physical anthropology, in order to be able to draw from the finds all the information that describe, with greater immediacy and simplicity, culture, habits, customs, activities and the economy of the pre- and proto-



Fig. 1. Lateral view of a human exploded skull.

historic human societies. The study of these skeletons permits direct observation of the way of life of past populations (bioarchaeology) because each individual can reveal a lot of information: signs of diseases, marks of violence or cannibalism, growth and maturation markers, body proportions and adult stature, sexual dimorphism, bone markers of muscular activities or postural markers, markers of social stratification, aesthetics markers, dental wear, tooth decay and micro-traces, stable isotopes of carbon and nitrogen related to the eco-environment and diet, trace elements, paleo-parasitology, paleo-epidemiology and paleo-demography (Froment, 2011). Thanks to the presence of the palethnological materials, all this information can be integrated under a bio-cultural perspective.

In the intentions of the museum curators, the future exhibition of the human remains of archaeological interest at the Padua University Museum of Natural History - which will take place respecting the professional standards promoted by ICOM (ICOM, 2004; Alberti et al., 2009) - in association with the palethnological collection, becomes one of the focal points for understanding the human evolution and history. In fact, the museographic reconstruction of some ancient funerary contexts, exhibiting both the mortal remains and the associated grave goods,

underlines a key evolutionary step in our species: the transition from nature to culture. The human remains, exposed in such context, are not only a biological proof of "how" we were, but even more they explain "who" we were, how it was the daily life of our ancestors and what were their thoughts about death.

Undoubtedly, the challenge behind this exhibition is played almost exclusively on the employed languages and they have to be found exactly in the ongoing researches: the multidisciplinary work hopefully will find a synthesis between different sensibilities and will give the right value to these collections.

The modern osteological collections

For what concerns the skeletal remains of the modern era, they are well documented on the "Registro craniologico" [craniological register] compiled by prof. Enrico Tedeschi in the early '900s. Such historic register is more properly a general osteological catalogue, because it contains, for many persons, information regarding age, gender, causes of death, origin and also name and surname. In addition to the above detailed records, for thirty individuals the scientist took note even of weight and stature during the life.

In 2015, the cataloguing of the "Tedeschi" osteological collection has been completed and, since some time, the search requests on this collection are many, both from Italy and from abroad. The high value of the collection lies in the fact that not many collections in the world that possess such data: they constitute an irreplaceable source of news and investigative material, for proper biological reconstruction of the past populations, as well as in forensics. This is therefore a real archive from which derive valuable information to "calibrate" on them the anatomical modifications that physiologically happen through time and which can be so identified in archaeological finds, devoid of personal data.

For these reasons the Museum policy has always been to allow such searches if supported by a clear and detailed scientific plan. This choice reflects the vocation of study in which they have been collected by the university professors since the origins, as writes Enrico Tedeschi in 1897-98, talking about the formation of museum collections, started by Giovanni Canestrini. It was the professor Canestrini himself who, «sacrificing his own patrimony, has made possible, in such misery of State, the birth of the Anthropology cabinet at the Padua University. Cabinet that starts with more than five hundred finds and that is sufficient, modestly, at the scientific production and in manner exuberant at necessity of teaching» [translated from the Italian]. (Tedeschi, 1898). Together with the grant to the study, however, the Museum has always chosen to provide researchers only essential personal data, ensuring the anonymity of the studied subjects. Such self-regulation, which does not affect the outcome of the investigation, was made to respect the individual himself and his descendants still living.

The modern osteological collections highlight another delicate aspect related to the conservation of human remains. Indeed, the preservation of collections guarantees the future application of technologies that haven't yet been invented (Froment, 2011). By the times of the birth of the collections, some new techniques have been developed and applied to these human remains (i.e. Giacon & Carrara, 2014).

In order to respect the anonymity of individuals of known age and sex, it is not provided the exposure of these finds in the future exhibition plan at the Natural History Museum and the role of this collection will be dedicated exclusively to study and research.

THE CASE OF THE EGYPTIAN MUMMY

The mummy currently preserved at the Museum of Anthropology is the one that «in 1835, Giuseppe Acerbi, former Consul General of Austria in Egypt,

assuming a new government position in Venice» [translated from the Italian] decided to donate to the Padua University together with other finds (Catullo, 1836). A recent work has highlighted that the mummy belonged to the first Toth's priest named Nas, from the city of Heliopolis in Egypt (Ciampini, 2013).

In June 2012, the mummy and other mummified Egyptian finds underwent a computed tomography exam (CT) at the Radiology section of the Department of Medicine, Padua University. The aim of the survey was to evaluate new information relating the individual's age, constitution, state of health, potential anomalies and diseases, ethnicity and the mummification techniques utilized (Stramare et al., 2013).

The age determination made through the classic anthropological methods allowed to attribute 35 years. As regards the mummification techniques, CT scan showed that the brain was absent, and that the removal was carried out through a trans-nasal craniotomy. The eyes were preserved, remained intact inside the orbits and, in part, the optic nerve was recognizable. The cranial cavity and the maxillary sinuses contained resin residue. In the chest cavity, the heart was intact inside the pericardial sac while the lungs, apparently well-preserved, appeared collapsed. In the abdomen, the diaphragm was complete. The right groin presents a wound of about 3 cm from which can be introduced a tool for the partial evisceration abdominal.

The most interesting result of the CT regarded the evidence of two perimortal traumas that were probably the cause of the individual's death. The first was a multi-fragmented compound fracture of the clavicle medial third, with thickening of periclavicular tissues compared to the contralateral region (fig. 2). It is observed a wound in the right parasternal, with an angle of about 20° from the bottom upwards, which reached the chest cavity and a declivous deposit below the right lung, compatible with a hemothorax. Moreover, a spiroid fracture occurred to the left humerus. The injury mechanism at the clavicle level is typical of a sharp weapon (daggers, spears, arrows), while the spiroid lesion at the left humerus is due to a torsion fracture, that it is generated typically when a person immobilizes and twists the arm of another individual behind his back. The two perimortal traumas are compatible with a single episode of aggression from behind, blocking and twisting the victim's left arm and stabbing him in the chest with an arm motion to rise.

Telling the death and the violent death

The Egyptian mummy and his own sarcophagus have been exposed in recent times in two different temporary exhibitions organized by the Padua University.

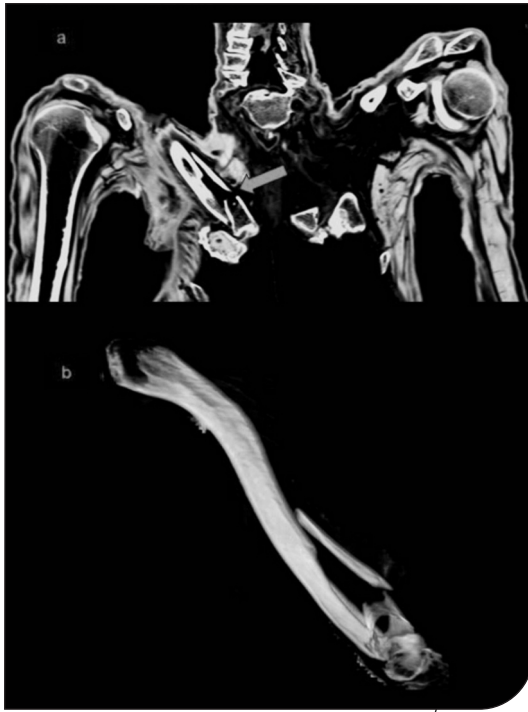


Fig. 2. Detail of the CT scan that highlights the fatal wound to the Egyptian mummy.

The exhibition "Egypt in Veneto", deployed in four locations at Padua, was inaugurated on 19 April 2013 and ended on 30 June of the same year (Zanovello & Ciampini, 2013).

The various exhibition routes gave an account of what the Veneto in general and the city of Padua in particular were full of Egyptian and Egyptian-style artefacts. They ideally concluded a project that had recorded and made public a point-like but considerable heritage of Egyptian archaeological artefacts.

The leitmotif of the exhibition was, therefore, archaeological and wanted to make known, through the exhibits, some aspects of life in the ancient Egypt. As it often happens in archaeology, the exhibition reflected that just by funerary aspects emerge the most significant knowledge related to life and death played an important role in the narrative path. The section dedicated to the funerary practices had, as ideal conclusion, the visit to a reconstructed burial chamber that housed the mummy and his sarcophagus. In the intentions of the organizers, the choice of black as background colour and the low light wanted to recreate in visitors the experience of the archaeologists in discovering such graves. The most interesting aspect for the theme of this paper regards the mummy's expositive choice, which reflected the debate at that period, when the authoritative Egyptian Museum of Turin decided not to expose more mummies as to

not offend the sensibilities of visitors. The debate during the design of the route had arrived even to suggest not to exhibit the mummy, leaving a sort of empty tomb: it was coming to the paradoxical situation to talk about the conception of death for the Egyptian culture, without mentioning the dead themselves. The final expositive choice was the result of an internal mediation among the Scientific Committee, undoubtedly influenced by debate of the Turin's case. The mummy was exhibited but his vision, however, was "filtered" by loopholes that prevented the complete view of the find. Furthermore, the organizers chose not to make mention of the studies carried out on the mummy, avoiding any reference to what the CT scan revealed on the mummification methods used and the individual's violent death.

The exhibition "Faces. The many visages of human history", held in the halls of the University Centre for Museums, inaugurated on 14 February 2015 and concluded on 13 December 2015, has exposed the Egyptian mummy once again. The exhibition, starting from forensic facial reconstruction techniques, deepened some meanings of human faces: they very often say who we are, where we come from and how we are, but also they can become symbolic territories (Bezzi et al., 2016). In the third exhibition section, dedicated to the facial reconstructions of important past personalities - Saint Anthony, Blessed Luca Belludi, Francesco Petrarca and Gianbattista Morgagni -, it was also displayed the Egyptian priest's face of which the museum conserves the mummy.

The exhibition "Faces. The many visages of human history" was also designed as a starting point to address issues dear to anthropology, highlighting how the study borders of this discipline have changed very much over time, often coming to overturn today what was asserted in the past. Undoubtedly one of the most interesting research frontiers for Anthropology is precisely the one related to facial reconstructions that, starting from recent forensic cases in which the positive contribution of these techniques is well documented (Morales et al., 2014), it is now extended both to historical and museological researches (Thompson, 2014). Within this framework, the mummy has taken on a different perspective than the shows that previously had housed and consequently the exhibition choices and communication have been different.

The mummy in the exposition of 2015 played a pivotal role since many of the issues addressed in the path were attributable to this finding: the priest's "living" forensic facial reconstruction, the information discovered thanks to CT scan of the individual's violent death and the medico-legal implications, the interest of anthropology in the



Fig. 3. The mummy and sarcophagus at the exhibition "Faces. The many visages of human history".

study of mummies, both in the past and in the present.

For these reasons, the finding was clearly exposed, without barriers of any type (if not the display case that protected it), with a set of information provided by explanatory panels, one video that showed what the CT scan had discovered, explained the mummification techniques and the murder reconstruction, and a multimedia station showing the various stages of the facial reconstruction (fig. 3).

CONCLUSIONS

The theme of the preservation, study and exhibition of human remains in museum contexts is undoubtedly delicate and often a source of different choices between the various institutions. Although there are references and international codes of conduct, convenience often involved situations that can lead to choices sometimes discordant.

This is because the reference framework of these themes is ethical: as there is no universal ethics is, therefore, inevitable that the choices may be different. However, we have to hope that the dialogue among the different institutions involved will continue through the comparison of individual experiences and, at the same time, that a common dialogue language will be found.

In the experience of the Padua University Museum of Anthropology, the multi-disciplinary scientific approach, by its nature, guarantees the right

distance among the various instances involved and, at the same time, it offers a plain and understandable language to most people.

REFERENCES

AA.VV., 2004. *Human Tissue Act 2004*, http://www.legislation.gov.uk/ukpga/2004/30/pdfs/ukpga_20040030_en.pdf (accessed 15/VII/2016).

AA.VV., 2011. Documento sulla questione della richiesta, presentata dal Governo Australiano, di restituzione di resti scheletrici umani provenienti dal territorio Australiano conservati presso la Sezione di Antropologia ed Etnologia del Museo di Storia Naturale dell'Università di Firenze. *Museologia Scientifica n.s.*, 5(1-2): 11-21.

ALCIATI G., CAPITANIO M., TOMMASEO PONZETTA M., 1996. *Il Museo di Antropologia ed Etnografia*. In: Gregolin C. (ed.), Università di Padova - i musei, le collezioni scientifiche e le sezioni antiche delle biblioteche. Padova, pp. 89-99.

ALBERTI S., DREW R., BIENKOWSKI P., CHAPMAN M.J., 2009. "Should we display the dead?" *Museum and society*, 7(3): 133-149.

BARBIERA I., 2012. *Memorie sepolte. Tombe e identità nell'alto medioevo (secoli V-VIII)*. Carrocci Editore, pp. 16-18.

BERNAT J., CULVER C.H., GERT, B., 1981. On the definition and criterion of death. *Annals of Internal Medicine*, XCIV: 389-394.

- BEZZI A., BEZZI L., MORAES C., CARRARA N., PIEVANI T., TIZIANI M., 2016. "FACCE. I molti volti della storia umana": progettare una mostra Open Source basata sulla Computer Vision. In: Bon M., Trabucco R., Vianello C. (eds), atti del XXIII Congresso ANSM, Allestire per comunicare nei Musei scientifici. Venezia 13-15 novembre 2013. *Museologia Scientifica Memorie*, 15: 136-139.
- CATULLO T.A., 1836. Relazione dei doni fatti dal consigliere Cav. Acerbi, già console generali di S.M.I.R.A. in Egitto, al Gabinetto di Storia Naturale dell'I.R. Università di Padova. *Biblioteca Italiana ossia giornale di letteratura, scienze ed arti compilato da una società di letterati*, 83: 44-64.
- CIAMPINI E.M., 2013. Testi dal sarcofago del Museo di Antropologia dell'Università degli Studi di Padova. Il coperchio. In: Zanovello P., Ciampini E.M. (eds), *Egitto in Veneto*. Padova, Cluep, pp. 71-72.
- FROMENT A., 2011. Argumentaire sur la conservation et l'étude des collections de restes humains. *Museologia Scientifica n.s.*, 5(1-2): 22-27.
- GIACON M., CARRARA N., 2014. Paleopatologia nella collezione osteologica del Museo di Antropologia dell'Università di Padova: tecniche di indagine nei casi di tubercolosi. In: Del Favero L., Fornasiero M.G., Molin G. (eds), atti del XXI Congresso ANMS, La ricerca nei musei scientifici. Padova 9-11 novembre 2011. *Museologia Scientifica Memorie*, 11: 136-139.
- ICOM, 2004. Codice etico dell'ICOM per i musei, <http://archives.icom.museum/codes/italy.pdf> (accessed 15/VII/2016).
- KASTENBAUM R.J., 2016. *Death, Society, and Human Experience*, 11th edition. Arizona State University, p. 69.
- MAYS S., 2014. *Holding and Displaying Human Remains*. In: Fletcher A., Antoine D., Hill J.D. (eds.), *Regarding the Dead: Human Remains in the British Museum*, British Museum, London, pp. 1-2.
- MONZA F., 2014. Esporre i resti umani: un problema tra ricerca, etica e comunicazione. Il caso britannico. In: Del Favero L., Fornasiero M.G., Molin G. (eds), atti del XXI Congresso ANMS, La ricerca nei musei scientifici. Padova 9-11 novembre 2011. *Museologia Scientifica Memorie*, 11: 241-244.
- MORAES C., MIAMOTO P., MELANI R., 2014. Demonstration of protocol for computer aided forensic facial reconstruction with Free Software and photogrammetry. *Journal of Research in Dentistry*, 2(1): 77-90.
- STRAMARE R., SCATTOLIN G., MEROLA F., CARRARA N., 2013. Risultati preliminari della tomografia computerizzata sulla mummia. In: Zanovello P., Ciampini E.M. (eds), *Egitto in Veneto*. Cluep, Padova, pp. 72-74.
- TEDESCHI E., 1898. Antropologia e Scienze antropologiche (Prolusione al corso 1897-98). *Archeografo triestino*, 22(1).
- THOMPSON H., 2014. *Paleoartist Brings Human Evolution to Life*. Smithsonian.com, <http://www.smithsonianmag.com/science-nature/bringing-human-evolution-life-180951155/?no-ist> (accessed 15/VII/2016).
- ZANOVELLO P., CIAMPINI E. M., 2013. *L'Egitto in Veneto tra Padova e Rovigo*. In: Zanovello P. e Ciampini E.M. (eds.), *Egitto in Veneto*. Cluep, Padova, pp. 13-16.

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