

Study, conservation and exhibition of human remains: the need of a bioethical perspective

Marta Licata¹, Alessandro Bonsignore², Rosa Boano³, Francesca Monza⁴, Ezio Fulcheri^{5,6} and Rosagemma Ciliberti⁷

¹Centre of Research in Osteoarchaeology and Paleopathology Department of Biotechnology and Life Sciences, University of Insubria, Varese, Italy

²Section of Legal and Forensic Medicine, Department of Science of Health, University of Genoa, Genova, Italy

³Department of Life Sciences and Systems Biology, University of Turin, Torino, Italy

⁴Department of Medicine and Aging Sciences, University of Chieti, Chieti, Italy

⁵UOSD of Fetal and Perinatal Pathology, Istituto Giannina Gaslini

⁶Department of Surgical Sciences, School of Medicine, University of Genova

⁷Section History of Medicine and Bioethics, Department of Science of Health, University of Genoa, Genova, Italy

Summary. Today, the recovery, study and exposition of archaeological human remains are subjected to new discussions. Human remains preserve a clear record of past life to later generations. These remains, even if dated hundreds or thousands of years ago, maintain their human dignity and force the community to reflect on the ethical issues related to their analysis, curation and display. Such a topic stimulate a continuous dialogue between the different actors of the bioarchaeological/osteobiological/anthropological (physical and forensic) field: archaeologists, anthropologists, bioethicists, museum curators and other figures in order to give voice to a broad range of approaches and identify shared paths on the management of human remains that respect human dignity and different cultural values of community. As a “culturally sensitive material”, human remains collections must be acquired and handled with respect regardless of their age and legitimacy of provenance. The opening up to disciplines quite far from the expertise of museum curators is an essential prerequisite to increase awareness towards ethical issues and to develop guidelines that take into account the dignity of the person and the cultural values of community to whom human remains belonged. Accordingly, the authors stimulate the increase of the discussion and try to identify solutions sensitive to the issue. (www.actabiomedica.it)

Keywords: human remains, exhibition in museum, ethical issues, ICOM, NAGPRA

Introduction: The Value of Human Remains

The advances in genomics and paleogenomics and their respective applications in the medical, and bio-naturalistic fields (reconstruction of the archaic genomes), aroused new issues on the human remains and their role in medical, biological and naturalistic research.

The “genomic revolution” provided access to the distinctive aspects of the biology of present and past man, revealing a history of migrations and mixtures

between populations (1) and confirming the role of the human body as a “biological archive”, unique and unrepeatable, of humanity and history.

The enthusiasm for these new research perspectives was also shared with the humanities that traditionally study man from a socio-cultural approach, also urging the attention of ethics and law on the propriety of human remains and on their management (2-4).

The inviolability or the violability of the human body by science and medical research, its potential

commercialization, the relationship between the body and the person, the status of the human embryo and fetus, the issues surrounding birth and end of life, the definition of clinical, biological and cell death, the relationships gene-body- person and the bio-potentiation, are just some of the themes of bioethics that animate public discussion (5).

In the background, new and pressing needs emerge for the protection of the centrality of the person and his dignity, towards which the sole criterion of informed consent can be insufficient or inadequate to deal with the continuous evolution of science and the possible violations of human rights.

At the same time, in a context in which genomic, nanotechnical, information technology and robotic practices act radically on the body, the definition of human identity itself is today increasingly problematic and uncertain (6).

The ethical issues that derive from it are the subject of a wide reflection that for several decades has now invested the entire international community.

Unlike the “living”, the ethical evaluation on human remains developed only in some countries, predominantly in the United States and Anglo-Saxon Europe, with particular reference to the theme of returning museum collections to the communities of origin (7). In other countries, such as Italy and Spain, this reflection is very recent and, outside of scientific institutions, almost unknown (8). This lack attention towards on human remains is in contrast with the long tradition of preserving and displaying these finds not only in places of worship, but also in different types of museums (9).

Studying and showing death means not only knowing and making one of the most intimate aspects of humanity known, but also measuring oneself with social preconceptions and psychological obstacles, educating them to reflect on them. The remains tell us how those who preceded us have lived, worked and suffered over the years and how illness (and healing) have marked their body (10).

Studying the evolution of diseases over the centuries, can guide scientists to face recurring threats. The human body, the skeleton and the ancient anatomical remains, as biological archive, can constitute a valuable source of scientific information, providing a temporal

and cultural window on the funerary practices, beliefs and customs of different cultures (11,12).

From the anthropological point of view, archaeobiological human remains, allow reconstructing the demographics and the style lives of the past populations (13). From the paleopathological point of view, they represent a direct source to investigate diseases of the past (14,15). Since the beginning, in the second half of nineteen century, paleopathological investigations enriched the archaeological interests in the historical reconstruction (16).

Moreover, the idea of scientific, historical and anthropological value of human remains has supported the creation of museum collections that, starting from the XVI century in the Wunderkammern context, have developed all over the world (17).

Personal, cultural, symbolic and religious values of individuals or groups revolve around the human body and the various funerary artefacts from different civilizations (18).

From a purely ethical point of view, the value of human remains is closely related to the dignity of the individual to whom the body belongs, to respect its identity and, again, to respect any parental ties. The ethical value of human remains is also a very recent and still, at least in part, unexplored question.

The requests for repatriation / restitution of funerary artifacts and human remains advanced by heirs or local communities, in the name of a unique bond or a specific identity, have progressively highlighted the breadth and complexity of the moral questions that revolve around human remains: ownership, burial, conservation and treatment, public exposure, respect for cultures, communication with the community, identification of parameters and ethical and legal references; the protection and accessibility of cultural heritage.

The biological and/or cultural continuity between living individuals or populations and the human remains preserved in museums is an issue that requires a plural and interdisciplinary involvement.

Researchers, archaeologists, anthropologists, anatomists, clinical and forensic pathologists, jurists, bioethicists, curators, ethnographers are called to ask themselves on questions that are in part unpublished and require constant dialogue with the community.

Museums Between Judicial Disputes and Conciliatory Policies

The scientific interest in the genetic and biological study of the findings of these collections that provide a wealth of useful information for the study of evolution, human diversity and living conditions (diet, health status, economy and migratory movements) of certain human groups, is confronted with the interest in the protection of equally ethically relevant assets, such as the protection of the dignity of the person and the identity of cultures, of the symbolic, religious or ritual values of individuals or communities (18).

In recent decades, museums around the world have been subjected to legal disputes concerning not only the legitimacy of the detention of human remains, repatriation and their exposure, but also the same scientific and pedagogical value of the museum institution.

The question of the restitution of human remains has mostly interested those countries like for example United States, Canada, Australia and New Zealand that, during the years of the exploration of the world, have lived a violent phenomenon of internal colonization and have suffered innumerable spoliations of finds funerary or human remains (19).

Since the seventies of the last century, a long and complex attempt at reconciliation that has also involved international organizations (such as the UNESCO and ICOM) has led to the acceptance of requests to return these finds, with the recognition of the cultural specificities of indigenous communities and their rights in territories, objects of worship and human remains (20-23).

In 1979 the US Government recognized the right of Native Americans to decide on the conservation and protection of their cultural heritages in the "Archaeological Resources Protection Act", and in 1990 approved the Native American Grave Protection and Repatriation Act (NAGPRA) against the abuses of desecration of cemeteries and the looting of Indian objects to be sold on the market of collectors and museums. The legislation establishes that any institution that uses public funds must restitute to Native Americans human remains and objects of worship to the native communities belonging to the said peoples. The

law also provides for a series of loans to enable the aforementioned to be returned (24).

The Aboriginal and Torres Strait Islander Heritage Protection Act of 1984 in Australia and the Treaty of Waitangi Act of 1975 confirm the will to prepare instruments of "reconciliation" with the native groups present in the various nations (25).

In 2004, England approved the Human Tissue Act 2004 (Section 47) which provides that nine national museums have the discretion to decide the separation of certain human remains from their respective collections, if it turns out that they have an antiquity of less than a thousand years on the date of entry into force of the rule itself (26, 27).

This "collaborative museology" has also been enhanced by the United Nations with the Declaration of the Rights of Indigenous Peoples approved on 13th September 2007, which provides for these peoples "the right to preserve and access their religious and cultural sites [...], to use and maintain control of their ceremonial objects [...] and the right to repatriation of their bodies". The rule also establishes the commitment of the States to work "to make possible the access and / or repatriation of ceremonial objects and corpses in their possession through fair, transparent and effective mechanisms developed together with the indigenous peoples concerned (art. 13) (28).

The process of recognizing the rights in the colonial states has, however, followed different paths: the legislation in the United States; the moral persuasion in Australia and Canada; the bilateral treaties as in New Zealand and, for some disputes, in Canada, the obligations of ethical order along with the Reason of State, as in the United Kingdom.

In the absence of international legislation, reconciliation policies have alternatively allowed that these findings to be returned to the requesting indigenous communities (if the origin has been ascertained), share the responsibility for conservation and exposure, or even attribute ownership to the same communities that allowed the preservation of these finds in museums, while also maintaining the possibility of their use in religious and traditional ceremonies.

The dialogue between the museum staff and the representatives of the native communities therefore al-

lowed to identify different paths of reconciliation, in relation to the different operating circumstances.

Each case deserves a wide, careful and detailed evaluation of the different identity claims of the victim populations and, together, of the pedagogical and scientific demands of the countries that preserve human objects and remains (29, 30).

In the "Document on the question of the request, presented by the Australian Government, for the restitution of human skeletal remains from Australian territory preserved in the Section of Anthropology and Ethnology of the Natural History Museum of the University of Florence, Italy" highlighted important points: the scientific value of the collections in question (also in light of the progress of the investigation techniques); the importance of maintaining the integrity of historical collections; the fact that the remains, after examination, are part of the Italian museum heritage and as such are inalienable assets of the State (as established also by the Code of Cultural Heritage of 2004); the fact that these remains did not arrive in Italy illegally, following looting or genocide, but for purchase, barter, donation or exchange and that, therefore, Italy has no responsibility of any kind or, in any case, such as to entail a duty to reconciliation with the communities residing in the countries of origin of these remains; the impossibility of excluding, finally, that requests for restitution of human remains may be followed by requests for restitution of ethnographic objects of worship or simply representative of the different cultures, whose restitution would constitute a huge impoverishment of the historical-cultural heritage present in Italian museums and would prevent museums from disseminating knowledge about the diversity of world cultures as their main function. Based on these considerations, the commission asked the Italian Government: that any decision about the return of human remains or ethnographic material be preceded by a careful analysis of the historical, scientific and documentary value of the material in question, taking into account how much is expressed in this document as well as through the consultation of the anthropological-ethnological museums that hold this material and of the scientific associations that signed this document (which represent the Italian scientific museums).

The legality of the acquisition, together with the superiority of the interest in the knowledge of influential historical scientific theories such as the Lombrosian atavism, although now completely overcome, are the basis of the declared legitimacy of the detention by the Cesare Lombroso Museum of the skull on which the famous anthropologist identified the famous third occipital dimple (31, 32).

The controversies still open on the Kennewick Man case (a 9,000-year-old male human skeleton discovered in Washington state, USA in 1996) remind us, however, not only of the deep divisions still underway on requests for restitution of human remains and on the interpretation of regulations of reference, but also the political and moral meanings / implications of disputes (33-35).

Almost thirty years after the issue of NAGPRA, the world of professionals continues to be split (36).

The Exhibition of the Human Body and its Remains: An Instrument of Power or a Cultural Instrument?

The human body of the deceased and its remains have been exposed to the public for centuries. However, only in recent times has the moral attention been paid to the use of human remains and their display in museums (37, 38).

The ethical issues on the exhibition use of the human body and its remains has been placed more carefully, at least for the public, in relation to the exhibitions of Gunther von Hagens which represents an extreme form and which has given rise to a series of legal disputes, but also to numerous followers. However, well before von Hagens institutions other than museums have permanently or temporarily exposed human remains (segments, whole bodies, mummies or skeletons). Skeletons of famous acromegalic giants were inserted and exposed in the medical collections of museums even though these patients had never donated or even refused to donate their bodies, nor did their relatives give permission (39-41). Clearly, as with plastinated bodies, not all the "specimens" exposed were able to give their consent: fetuses, newborns and

animals did not give their consent to post-mortem exposure (42,43).

However, it is only recently that the use of human remains, and their exposure calls for moral reflections. Many are the ethical and juridical questions we face: to whom did the body belong to? who is the voice of the dead? Who represents them? And, even more crucial, should we speak of dignity?

An approach to the inherent problems in the conservation and use of human remains also requires a reflection on the relationship that western society has with death (44).

Although there are exceptions to separate the world of the dead from the living contexts (such as the “home” burials in the Neolithic Jericho or the so-called “mummy tribes” in the case of the Dani of Papua New Guinea), the fear of spreading contagious diseases or poisoning water sources and food with the putrefaction of bodies was an important motivation for such separation.

In this regard, we must remember the Edict of Saint Cloud, issued in France in 1804, that sanctioned the prohibition of burying the dead near churches and in urban centers and ordered the construction of cemeteries outside the city walls (45).

Subsequently also the decree of 19 July 1809 the *Consulat Extraordinaire pour les Etats Romains*

ordered that the burial of the dead be “cemeteries located outside the city walls of Rome” (46).

In addition to fundamental hygienic-sanitary motivations, cultural and religious legacies have contributed to shaping our relationship with death, albeit with ambiguity and contradictions.

From the holy bodies, objects of worship and veneration, to the civil remains devoted to the respect of memory, to the mummies and anatomical remains preserved and exhibited in scientific and museum collections, human remains have in any case assumed a multiplicity of meanings and uses.

In the Convent of the Capuchin Friars Minor in Rome, the bones of the monks have been showed in the crypt for centuries. The exposition of human remains wanted to show a static demonstration of death as a fundamental element of spirituality (47).

Animal and human mummies have been used for centuries as fuel (48). Between the seventeenth

and eighteenth centuries the powder obtained from the crumbling of the bones of the skull of the mummies was used as a precious medicinal material. Starting from, at least, the sixteenth century, and until the beginning of the last century, European painters used a particular so-called brown mummy pigment, composed of pitch, myrrh and ground remains of human or cat mummies as a coloring agent for oil paint (49).

The display of the body and human remains as social entertainment was exalted by the public practice of the drop in which, in Gothic Victorian England, the body of the mummy was transformed into a curious object to be admired in its complete nakedness.

Hundreds of years later, the debate on the use of human remains is confronted with new issues that call into question, even before the law, the ethical reflection on the issues at stake and the values to be protected (50). We cannot forget that the long tradition of consultation and exposure operated by scientific museums was fundamental for the dissemination of scientific knowledge and culture. Moreover, the museum pedagogical purpose is not exempt from the identification of parameters and expository criteria aimed at guaranteeing the protection of the dignity of the person, respect for its history and for the community it belongs to, as well as the plurality of cultural, philosophical and ideological orientations that the bodies represent (51).

The purpose of exposing human remains, but more particularly the respect of the will of the person to whom the rest belonged, the value of the positioning of bodies / the realism of positioning and the protection of dignity with respect to reification and arbitrary or commercial use of human bodies are central elements in ethical reflection (52).

In any case, it seems ethically obligatory that the exhibition must take place with methods that also respect the modesty of the subject. Dignity must be the rule, even for mummified bodies and for the skeletons that must be treated as fully preserved bodies (no fragmentation, no alteration due to disinterest, etc.). Even in the voluntary donation of the body to science, exposure must also involve every effort to honor the dignity of donors (53).

Between Ethics and Law: Operational References

The ICOM Code of Ethics for Museums (revised 2004 and currently being updated) included human remains preserved in museums in a special category called “culturally sensitive materials” (54).

Their collection is justified only if these materials can be placed in a safe place and treated with respect. Research on human remains or valuable materials must be performed in accordance with professional standards and with the beliefs and interests, if known, of community members, ethnic or religious groups from which the objects originate. Even the display of sensitive material (human remains and sacred material) must comply with professional standards and, if the origin is known, the interests and beliefs of the community and the ethnic or religious groups from which the objects come. The latter must be exposed with the utmost respect and in compliance with moral principles of community. The Code also provides for specific provisions on the withdrawal of public display as well as on the display of materials of non-certified origin, also in relation to the possibility that the use of such materials may be interpreted as consent and encouragement given by the museum to illicit trade in heritage cultural (see 4.5, ICOM Code of Ethics for Museums) (55).

Moreover, the ICOM Code of Ethics represents - as explicitly stated by the same in the “premise” - a minimum standard for museums that can therefore develop additional regulations, in compliance with the principles established by the same. The binding nature of this Code of Ethics is, moreover, addressed only to members who are members of ICOM.

The situation of human remains present in the academic scientific collections is, however, more uncertain. The anatomical museums of many medical universities preserve in their rooms human remains collected over the centuries (human skeletons, single organs or tissues and sometimes entire bodies of men and women or even fetuses at different stages of gestation).

The collections of anatomical and pathologic preparations present in many institutions of anatomy

and pathological anatomy are of considerable historical and scientific value and constitute a valuable testimony to the history of Pathological Anatomy. For thousands of students, these collections have also provided the occasion, sometimes even a unique opportunity, to observe and study accurately in every detail the normal and pathological morphology of an organ or an apparatus.

Far from representing a collection of objects that are now devoid of any current interest, these findings still constitute a valuable scientific-cultural resource capable of increasing museum collections. These findings, in fact, are able to provide important data on epidemiological aspects and medical knowledge of the time, through their historical contextualization.

This material, although not included in a museum context, cannot be considered merely biological material or a study sample, since its detention, preservation and exposure has ethical implications similar to those found for the material present in the museum collections.

Purchase of Human Remains

For a long time, India has represented a thriving bone industry that provided medical samples to much of the western world (56). India banned the export of human remains only in 1985 when a trader was found to have sold more than 1,500 skeletons of children of unknown origin (57). For some time, China assumed India's role as a global bones trader, but also banned exports in 2008. Over time, the closure or downsizing of medical schools brought human remains to market (58). Today it is possible to find human remains for sale on private websites like Wylie's, as well as on some large online platforms such as eBay, Facebook, Etsy, Instagram that allow users to post skeletal material for sale, largely anonymously and without much fear of legal repercussions (59).

Research has developed around the online and offline trade of human remains of various categories (60). Individuals conduct transactions in numerous western and non-western countries and actively seek “specimens” or “curiosities” ranging from specimens of

previous anatomical teachings to mummies, "tribal" or ancestral skulls of various cultures, Tibetan Buddhist artifacts, and even human biological samples, dry or in liquid (e.g. macro sections of brain, other organs, fetuses or examples of gross pathology) (61). To date, a few nations or US states have been introduced to the ownership, sale or transit of human remains (62), whether from archaeological excavations or old Colonial-era collections (63).

In the United States, many states allow for the personal possession and purchase of human remains (64). However, only very rarely have e-commerce platforms taken action in response to exposure and public outcry (65) probably the shocking nature of the specimen offered and the means of attempted sale (66).

According to the *Guidelines for Research Ethics in Social Sciences, Humanities, Law and Theology* of the National Committee for Research Ethics in the Social Sciences and the Humanities (NESH), the notion of "human remains" includes not only intact skeletons, parts of skeletons, remains after cremations, and other human biological material that is retained by museums and collections, but also "which emerges as a result of archaeological and other investigations" (67). However, the scope of application refers to human remains that are more than about 60 years old. The word "research" is to be given a broad interpretation in these guidelines, so that research also includes teaching, communication and exhibits relating to research.

The normative references are however limited to date and sometimes uncertain.

The Anatomical Preparations of the Academic Collections

According to Italian legislation, the human finds present in the academic institutions are to be considered cultural heritage according to the Code of Cultural Heritage (Legislative Decree No. 42/2004 - Urbani Code) and, as such, are always considered inalienable.

The insertion of the anatomical findings in the Code of Cultural Heritage is made explicit in Annex "A" of the Code which provides for the obligation to

report commercial activity and record keeping for the "Collections and specimens from zoology and botanical collections, mineralogy, anatomy".

Often, however, despite the attempts of their valorization, through systematic activities of cataloging, restoration and conservation, the problems connected to the availability of spaces, to the human and financial resources, but above all cultural and emotional barriers towards everything that is confronted with event of death, could condemn them to oblivion.

The promotion of a cultural sensitivity towards these collections and, together, the creation of a network system between the various departments and university structures, could favor the recovery of this heritage. A recovery that could express not only an enhancement of these findings, but also the possibility of honoring their memory of the place. These archaeological findings could be useful for the formation of knowledge in constant evolution with human paths.

The same exposure of these finds to the public, according to methods strictly respectful of the dignity towards the person to whom the exhibit belonged, but also of the ethical values of the community to which they belong, can constitute a precious didactic resource towards the knowledge of the human body and also of health awareness. The knowledge of the body and of pathological realities, through the comparative exposure of healthy organs and tissues with others altered by pathological processes - as a consequence of unhealthy behaviors and lifestyles or catastrophic natural events - can, in fact, stimulate a critical reflection and constitute a teaching in favor of the culture of life. At the same time, promoting interest in the artifact, recognizing its scientific and educational values and reconstructing the stories, even if incomplete and fragmentary in the life of our predecessors, can also be an education tool for the culture of death and the values of solidarity.

In this context, these places, recovered from distance with the community of living beings, could become places of encounter and dialogue with science, also capable of promoting acts of the highest moral value, through awareness-raising campaigns, on the donation of the post-mortem body for purposes of study and research.

Conclusions

The detention and conservation of human remains are topics which are still open. However, the research of parameters together with ethical and legal references is carrying out important results in the management policies of human remains, from the time of archaeological recovery to the museum exhibition. We must continue to have a multidisciplinary approach because only through a continuous dialogue between the various actors directly involved in the research, in the study and in the musealization of this particular category of finds, is it possible to identify a broad range of approaches and shared paths that respect different cultures and moral values. In fact, archaeologists, anthropologists, museum curators and many other figures which operate in this field are moving in this direction as demonstrated by the scientific literature of recent years.

- **HIGHLIGHT**
- Human remains collections must be acquired and handled with respect
- Ethical value of human remains is also a very recent and still, at least in part, unexplored question
- Musealization of human remains need guidelines to adopt the better solutions to preserve human remains
- Archaeologists, anthropologists, anatomists, clinical and forensic pathologists, jurists, bioethicists, curators, ethnographers must be included in the issue relating the exposition on human remains.

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Correspondence:

Marta Licata

Centre of Research in Osteoarchaeology and Paleopathology
Department of Biotechnology and Life Sciences, University of
Insubria, Varese, Italy