



Republic of San Marino

**San Marino Bioethics Committee**

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***CORPSES AND HUMAN REMAINS IN EXHIBITIONS AND  
VIOLATION OF DIGNITY***

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## PRESENTATION

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Since its very beginning, the San Marino Bioethics Committee has dedicated numerous documents and opinions to the delicate issue of respect for the dignity of the corpse<sup>1</sup>, which is one of the pillars of social anthropology, so much so that the earliest forms of civilisation are conventionally associated with the most ancient forms of necropolis.

In some documents, the CSB has explicitly addressed the issue of donating the body or parts thereof but has nevertheless decided to re-examine the issue with a new paper in light of recent forms of exhibition of human bodies and body parts obtained using plastination techniques. These exhibitions, which have been held in numerous countries, have provoked mixed reactions among civil society and the academic community.

In the international bioethical field, with the sole exception of France, there have been no statements by National Ethics/Bioethics Committees. Therefore, the CSB has decided to draw attention to these forms of exhibition using the results of research carried out over the years and published in a recent paper<sup>2</sup>.

In drafting this document, the CSB has chosen to make a clear distinction between the use of the body for therapeutic purposes, including organ donation, and for other purposes, including corpse manipulation for educational, scientific (not strictly therapeutic) or so-called “artistic” purposes.

The first practice is presented as the exaltation of an ethical value by way of derogation from the principles of the inviolability and intangibility of the body. This derogation is justified in this case by the benefit to the recipient and the conscious and altruistic act of the donor, as enshrined in the principle of informed consent. In the second case, however, it is less justified, and even sometimes questionable, especially in the absence of consent. Indeed, the document warns against the risk of depersonalisation and “commodification” of the body that occurs in some cases.

Furthermore, the CSB decided to highlight the issue of “unclaimed bodies”. Although it may have positive scientific implications (utilitarian perspective), from a purely non-utilitarian bioethical point of view, the dissection of an unclaimed body raises issues of respect for personal autonomy and the possible last wishes of the deceased.

The central focus is on the issue of collections of human remains and exhibitions. The ethical management of such practices (think of “Body Worlds”) is an evolving issue. This is why the CSB emphasises the need for clear guidelines based on respect for fundamental ethical principles and transparency regarding the origin and use of remains.

The issue of returning human remains to family members is presented as an ethical duty and as the affirmation of a fundamental anthropological need. In reaffirming the recognition of the common

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<sup>1</sup> In order: *The assessment of human death* (2013), *Answer to the requested opinion on relevant ethical issues using anatomic parts derived from corpses* (2014), *Body and body part donation for therapeutic or scientific purposes* (2016), *Bioethics of Disasters* (2017), *Guide on the decision-making process regarding medical treatment in the end-of-life* (2019), *Answer to the requested opinion on ethical issues regarding animal management in relation to covid-19 pandemic* (2020), *Humanisation of care and end-of-life support in the event of pandemics* (2021), *Opinion on the ethical aspects of the project to train dogs to search for human remains and blood traces* (2021). Documents and opinions available at the following link: <https://bioetica.sm/>

<sup>2</sup> L. BORGIA, RM. Gaudio, [\*The dignity of the corpse and human remains in exhibitions. Between law and bioethics\*](#). Archivio Giuridico Online (issn 2282 2828), vol. III, no. 2 2024.

human dignity of the deceased and his/her relatives, the CSB emphasises the need not to avoid the requirement to identify, often with difficulty and in a manner that is not always immediate and unambiguous, valid solutions to the logistical obstacles to the fulfilment of this duty.

Particular attention is paid to informed consent, clearly understood as the essential bioethical cornerstone capable of distinguishing between ethically acceptable and problematic uses of the human body or parts thereof. This guarantee, whether direct (expressing the wish during life) or mediated (presumed or expressed by family members), is capable of ethically legitimising *post-mortem* organ donation for transplantation purposes. On the contrary, for other purposes, the lack of consent raises serious ethical issues. Indeed, the use of the body for educational, scientific or so-called “artistic” purposes without the consent of the living person is comparable to “commodification” and violates self-determination and personal freedom.

Taking note of the ongoing debate in the bioethics and legal field relating to the limits of informed consent, the CSB emphasises the need to establish how detailed the knowledge and/or instructions provided by the donors regarding the use of their body *post mortem* should be and focuses, above all, on the doubt that consent to donation automatically implies authorisation for uses other than transplantation, including those relating to public dissection or projects that claim to be “artistic”. The debate on this issue remains open.

The hope is that this document will stimulate reflection within the international bioethics community and among National Bioethics Committees, which are called upon to raise awareness and inform society about the until now neglected bioethical and bio-legal aspects of rapidly expanding phenomena.

This document was approved at the meeting of 18 June 2025, by unanimous vote of those present: Borgia, Cantelli Forti, Gaudio, Garofalo, Hrelia, Raschi, Santori, Selva, Strollo. Carinci, Griffo, Iwanejko, Stefanelli were absent from the meeting and sent their approval.

CSB President  
**Luisa M. Borgia**

## INTRODUCTION

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The tendency towards depersonalisation, understood as the progressive erosion of the recognition of the uniqueness and unrepeatability of each person, represents an increasingly pressing challenge in today's world. This dynamic risks reducing human complexity to uniform and impersonal categories and manifests itself in various forms, some more evident and brutal, others more subtle but no less insidious, which risk violating human dignity and are therefore particularly delicate and charged with ethical implications.

Among the latter, practices involving the treatment of human remains outside scientific contexts, with particular reference to their exhibition, raise fundamental ethical questions about the respect owed to the uniqueness and unrepeatability of every human life. The objectification of the inanimate body, deprived of its experiences and individuality, risks triggering a process of depersonalisation that denies the intrinsic sacredness of every human being.

It is interesting to note that the potential loss of individuality just mentioned finds an unsettling echo, for example, in the contemporary digital world, dominated by algorithms, which, despite their apparent neutrality, tend to standardise and categorise us, profoundly influencing our perception of reality and putting at risk the recognition of each person's uniqueness.

This document will focus on examining the fundamental aspects of corpse manipulation in relation to respect for the dignity of human beings who are no longer living and, in particular, will explore how this practice can stray far from the beneficial use of body parts for therapeutic purposes typical of “organ donation”, and can give rise to a broader context of potential depersonalisation. This is in line with what is well illustrated in the 2016 CSB document entitled *Body and body part donation for therapeutic or scientific purposes*. The manipulation of a corpse for the benefit of a recipient and to the detriment of a donor, far from representing an instrumental and degrading use of human body parts, actually represents the exaltation of an ethical value, as clearly explained in the aforementioned 2016 document: «(...) the CSB recognises the donation of the body or parts thereof for therapeutic or research and training purposes as an act of the highest moral value, identifying the bioethical principles of reference for the protection of the persons involved, both donor and recipient (...)».

What makes the willingness to donate one's body or parts thereof after death for transplantation purposes so antithetical to the use of the same lifeless body for “other” purposes that are not strictly therapeutic?

As will be explained in more detail below, a first distinction lies in the fact that *post-mortem* donation is a conscious and altruistic act of will and its ethical nature is supported by the legal requirement of consent, whether direct or mediated. The use of the body or parts thereof for other purposes could, however, take place even without consent and, for this reason – besides other possible critical elements – is bound to raise more complex ethical issues. Indeed, it may be carried out by way of derogation from the principles of inviolability and intangibility if done for therapeutic or scientific purposes, but not in cases where less noble and altruistic purposes strongly call into question the dictates of moral conscience.

However, what stated above does not convey the entirety of our analysis. Indeed, in this document, in addition to the critical issues raised by the exhibitions, including those involving plastinated bodies, the CSB addresses other aspects of the issue that are not at all secondary, including the use of unclaimed bodies, collections of human remains in museums, and the return and burial of such remains.

To this end, after a brief overview of the international and San Marino regulatory contexts, the document will delve into the controversial issue of corpses, "*res sacra extra commercium*", and then analyse the form and multiple meanings of corpses. Finally, it will examine what is ethically acceptable to do with, in, and on corpses, from collection to exhibition for non-therapeutic scientific purposes.

Finally, the conclusion of the document will necessarily take into consideration the bioethical reflections that have emerged from the analysis, in view of the indications, warnings and recommendations that may arise from them.

## THE CORPSE AS *RES SACRA EXTRA COMMERCIIUM*

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Throughout human history, the "corpse" has always had a sacred meaning, linked to the need to make sense of the world. Galileo's revolution separated science and faith, thereby influencing the way the body is considered, especially after death. While in the past the corpse had a religious and social significance, today it serves as a reminder to both secular and religious persons of the importance of fulfilling the wishes of the deceased.

Respect for the corpse has characterised every era, since the earliest forms of social life on record, as shown by the emergence of funeral rites and burial practices that have defined the course of human civilisation, initially to counteract the consequences of the desecration of corpses and, later, with the emergence of a sense of transcendence, to allow the soul of the deceased to find peace and the path to the afterlife.

Therefore, the cult of the dead and respect for the body through burial or cremation rites are expressions of a profound feeling of the human nature and of ethical, social and civil values present in every culture, by virtue of the special status attributed to human beings compared to other biological organisms. Spirituality, cognitive ability, kinship and other characteristics are the basis for attributing dignity to human beings even after death, with special treatments and rituals for corpses<sup>3</sup>.

However, it is only in Roman law that we find the first legal definition of a corpse, referred to as *res sacra and extra commercium*, which is owed respect by virtue of the dignity recognised to the living person.

Similarly, in modern law, the person is an end and not a means. Therefore, if it is not an object but a "subject", the body takes on a dignity infinitely superior to that of a "thing".

Human dignity is a value that requires the protection of the rights, autonomy and physical and psychological integrity of living beings. On the contrary, in the case of a corpse, i.e. the body of someone who was once alive, it refers to a more complex issue. Indeed, death interrupts many of the original characteristics of the person, including autonomy and rationality. However, if dignity arises from the relationship between the person and society, which is not completely eliminated by death, even after death there remains a "moral value" linked to the body as a "memory" of a life lived, through which the dignity of the person becomes clear, a value that in itself deserves respect. This consideration gives rise to the prohibition of the "commodification" of the human body, whether living or non-living, which, since it has intrinsic value, cannot be priced.

Today, we have reached a remarkable level of evolution, to the extent that technology and artificial intelligence even allow us to create non-existent 3D scenarios, or surgeons could be able to operate on a patient in California by remotely using instruments without leaving their London clinic. In such a context, rights such as self-determination and personal freedom, from which valid consent derives, the protection of privacy and personal data, and respect for the arrangements regarding one's body after death, now appear inalienable. Therefore, it appears unfair to *de facto* consider corpses or

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<sup>3</sup> Ibid.

parts thereof as “commodities” of which, without the consent of the living subjects, any kind of use is authorised for educational, scientific or so-called “artistic” purposes.



## THE LEGAL FRAMEWORK

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### a. International

As is well known and widely documented, the history of corpse dissection has been complex, and conditions have changed over time<sup>4</sup>. Restrictions on modern forms of dissection are frequently attributed to religious objections, particularly those relating to the Middle Ages<sup>5</sup>, but it is also important to bear in mind a particular form of “secular” objection in cases where dissection involves bodies to which the dissectors are linked by family ties or personal and social proximity. For example, in 15th-century Bologna, a formal prerequisite was that the deceased had to come from a city at least 30 miles away<sup>6</sup>; over the centuries, the choice was made more frequently for “unclaimed” bodies, up to “donated” bodies.

Although donation programmes can now be considered a common practice, very few countries have specific national regulations in place and, where they do exist, they are often local regulations<sup>7</sup>. In Germany and the USA<sup>8</sup>, for example, anatomical dissection is regulated by regional burial laws that differ slightly from one another, and in some areas, in the absence of any explicit law, body donation is simply practised “by analogy” with transplant law<sup>9</sup>.

The reason for this regulatory gap lies in the fact that regulated body donation programmes involve certain ethical and legal uncertainties, including those concerning the role to be assigned to the relatives of the deceased and the actual legitimate use of the donation<sup>10</sup>. This is not a trivial matter, considering the many ways in which bodies are used, including so-called “artistic” uses such as exhibitions of plastinated corpses or public dissections. The question arises as to whether donors

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<sup>4</sup> R. PORTER, *The greatest benefit to mankind. A medical history of humanity from antiquity to the present*. London: Harper Collins. 1997; Richardson R., *Death, Dissection and the Destitute*, 2nd ed. London: Phoenix Press. 2001.

<sup>5</sup> R.E. ELIZONDO-OMANA et al., *Dissection as a teaching tool: Past, present, and future*. *Anat Rec* 285:11–15. 2005.

<sup>6</sup> K. PARK, *The criminal and the saintly body: Autopsy and dissection in Renaissance Italy*. *Renaissance Quarterly* 47:1–33. 1994.

<sup>7</sup> S. MCHANWELL et al., *The legal and ethical framework governing body donation in Europe – A review of current practice and recommendations for good practice*. *European Journal of Anatomy*. 2008. 12:1–24. For references to international regulations on *post-mortem* body donation for scientific study and research purposes in certain European countries and the USA, please refer to the following link: [Chamber of Deputies Dossier NIS16031](#). At European level and in a broader perspective, in 1991 the Parliamentary Assembly of the Council of Europe adopted Recommendation 1159 (1991) on the harmonisation of autopsy rules, on the basis of which the Committee of Ministers of the Council of Europe adopted Recommendation no. R (99) 3 to Member States on the harmonisation of medico-legal autopsy rules (adopted on 2 February 1999). The Recommendation is not binding for Member States, but it provides a strategic framework and proposals that governments can apply at national level. The Committee has no information on the state of implementation or transposition at national level of Recommendation (99) 3 in the Member States, or on the need to update it, as suggested by the signatory (see: A. Farneti, R. Zoja, *La Raccomandazione del Consiglio d'Europa diretta ad uniformare le procedure autoptiche medico legali*, *Archivio di Medicina Legale* January 1009, 4-13; G. Pierucci, M. Colonna, M. Bacci, R. Zoja, R.M. GAUDIO, *Proposta di procedure standard per l'autopsia medico-legale*, *Riv. It. Med. Leg.* XXVII, 2005, 127-183). The European Commission then issued the [Recommendation of 11 March 2005 on the European Charter for Researchers and on a Code of Conduct for the Recruitment of Researchers](#).

<sup>8</sup> T.H. CHAMPNEY, *A proposal for a policy on the ethical care... cit.*

<sup>9</sup> R. KLEINKE, *Ein Blick auf die Körperspende des Jahres 1845 Einblick in die Körperspende heute. Dissertation*. Centrum für Anatomie. Berlin: Charité - Universitätsmedizin Berlin. 2007.

<sup>10</sup> A. WINKELMANN, *Consent and Consensus*, cit.

should have detailed knowledge of how their bodies will be used or leave detailed instructions on what they consider appropriate in this regard.

From a Kantian perspective, according to which the human body should have dignity but not a price, existing laws on anatomical dissection aim to exclude any commercialisation of human corpses and parts thereof.

Recent scandals involving the retention of decomposing corpses or organs in European hospitals and universities<sup>11</sup> risk undermining confidence in national healthcare services. Similarly, reports of illegal organ theft, “voluntary” sale of body parts in times of need, and the trafficking of corpses in the absence of regulations in developing countries reveal the market's relentless focus on human bodies and remains. The situation becomes even more obscure when self-proclaimed “artists” use body parts and anatomical samples without consent<sup>12</sup>.

All this has led institutions to embark on a process of reflection with a view to establishing a legal regulatory framework for the use of human bodies and remains in accordance with ethical principles.

In 2015, the Council of Europe promulgated a specific Convention against trafficking in human organs<sup>13</sup>.

However, body donation programmes cannot exclude forms of financial transaction in which financial compensation to the donor, or the “sale” of body parts is prohibited. This means that expenses related to transport, storage and processing must be clearly identifiable, even in complex operations where it is not always easy to distinguish between these expenses and the purchase prices of body parts<sup>14</sup>. Furthermore, the motivation of anatomopathologists and anyone else who uses the body and parts thereof should not justify funding, since medical research and training is usually based on scientific progress and the qualification of medical personnel. This would also imply a broader community consent for research involving vulnerable persons, especially where body donation is aimed at advancing scientific knowledge with particular benefits for the local community, in line with the 2013 Declaration of Helsinki: the group involved in the research should also «be able to benefit from the [...] knowledge, practices or interventions resulting from the research». Body donors will obviously not be able to benefit from future medical advances, but they expect that the potential benefits of their act will fall on members of their community.

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<sup>11</sup> The Telegraph. *Spanish University storing donated corpses in ‘Chamber of Horrors’*. 2014. May 19: <http://www.telegraph.co.uk/news/worldnews/europe/spain/10841862/Spanish-university-storing-donated-corpses-in-chamber-of-horrors.html>; The Guardian. *Body parts found in University of Cologne’s cellars*. 2012. Mar 13: <http://www.theguardian.com/world/2012/mar/13/body-parts-university-cologne-cellar>;

<sup>12</sup> N. CLARK, *Dead serious? Photo of Damien Hirst with severed head riles Richard III academics*. The Independent. 2013 Jul 12: <http://www.independent.co.uk/arts-entertainment/art/news/dead-serious-photo-of-damien-hirst-with-severed-head-riles-richard-iii-academics-8706571.html>.

<sup>13</sup> Council of Europe, *Convention against Trafficking in Human Organs*, 2015, ratified by Italy in 2016.

<sup>14</sup> D. DICKENSON, *Body Shopping—Converting Body Parts to Profit*. Oxford: Oneworld. 2008; K. HOEYER, *Tradable body parts? How bone and recycled prosthetic devices acquire a price without forming a ‘market’*. BioSocieties. 2009. 4:239–256.

## b. Italy

With regard to organ donation, the principle of explicit consent or refusal applies (Article 23 of Law no. 91 of 1 April 1999; Decree of the Ministry of Health of 8 April 2000), otherwise it is delegated to family members, in accordance with the wishes expressed by the relative during his/her lifetime, or as expressed at the time of issuing his/her identity card (Art. 3, paragraph 8 *bis* of Decree Law no. 194 of 30 December 2009, converted by Law no. 25 of 26 February 2010).

With regard to the availability of one's body and *post-mortem* tissues for study, training and scientific research purposes, the reference legislation is Law no. 10 of 2020, pursuant to Articles 3 and 4 (in accordance with the provisions of Law no. 22 of 22 December 2017, no. 219) and to Article 8 (in accordance with the provisions of Presidential Decree no. 47/2023), which regulates the methods, storage times, request, transport, use and return of the deceased's body, as well as the exclusion of bodies already affected by communicable infectious diseases; bodies subjected to recent treatment with therapeutic radionuclides, to diagnostic confirmation or judicial autopsy; bodies with severe mutilations and extensive post-traumatic open wounds; bodies of persons who have committed suicide or who have died abroad. This law confirms the provisions of the Mortuary Police Regulation (Presidential Decree no. 285/1990), which dedicates Chapter VI to the Release of corpses for study purposes (Articles 40-43).

It is envisaged that the declaration of availability of one's body will be delivered to the relevant health institution, which is responsible for storing it and electronically transmitting the related information to the database of the Ministry of Health (as referred to in paragraph 418 of Article 1 of Law no. 205 of 27 December 2017). In this regard, a further legislative update (Ministerial Decree of 24 April 2024) sets out the distinctive characteristics of facilities eligible to become reference centres for the preservation and use of deceased's bodies for the purposes of study, training and scientific research, subject to the adoption of appropriate measures to ensure the traceability of all stages of use of the body and anatomical parts, including for the purposes of subsequent return. In particular, the law establishes that the use of the human body, parts thereof, or *post-mortem* tissues cannot be for profit (Art. 7) and that the centres must return the body to the family in decent conditions within twelve months of the date of delivery.

## c. San Marino

In San Marino, the use of blood, cells, tissues and organs of human beings is regulated by Law no. 7 of 21 January 2010, which delegates control functions to the Authority and promotes the adoption of specific delegated decrees to transpose European Directives, the Directives included in the matters covered by Article 152 of the Treaty of Amsterdam, and the WHO Recommendations on these matters.

There are no specific San Marino regulations governing the destination of one's body, with the exception of the provisions on cremation set out in Articles 5<sup>15</sup> and 6 of the Law amending the Mortuary Police Regulation of 15 March 2010 (Law no. 35 of 4 February 2010)<sup>16</sup>.

In any case, a corpse (even after an autopsy) is not expected to be subject to any further activity other than burial.

Just as the Italian Criminal Code provides for the crimes of tampering with a corpse (desecration, Article 410, and unlawful use of a corpse, Article 413), the Criminal Code of the Republic of San Marino also covers crimes against religious faith and feelings towards dead persons in Chapter II of Title III (crimes against society). The interest protected is the feeling of pity towards the deceased regardless of religious faith, as a form of instinctive respect for the deceased.

Article 263 concerns the "Desecration of a corpse": «Anyone who desecrates a corpse, removes or disperses its remains, shall be punished with second-degree imprisonment». Desecration includes demonstrations of contempt/vilification but also tones of mockery and/or insult towards the corpse. Article 264 punishes the destruction, suppression or removal of a corpse with third-degree imprisonment. These are both ordinary crimes, which are punishable only when committed intentionally.

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<sup>15</sup> Article 5 of Law no. 35 of 4 February 2010: «Cremation of the body shall be permitted only when there is clear evidence of the desire to resort to this practice, expressed by the deceased or his/her family members, as verified through records of the Vital Statistics Office or an act in lieu of a notarised document. This intention shall be expressed in one of the following ways: a) provision in the will of the deceased; b) declaration made during his/her lifetime, as referred to in Article 7 below; c) membership, certified by the legal representative, of recognised associations... d) the wishes of the spouse or, if absent, the closest relative... e) the wishes expressed by the legal representatives in case of minors and disqualified persons...».

<sup>16</sup> Article 28 of the Mortuary Police Regulation of 1910 established that the bodies of people who died in hospital or at home – if they had been dependent on “government charity” during their lifetime – could be handed over 24 hours after death for study or investigation to doctors and surgeons who expressly requested them. This article should be considered obsolete, since the law relating to government charity is no longer in force.

## USE OF UNCLAIMED BODIES

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The use of unclaimed bodies in the dissection room was common practice throughout most of the 19th and 20th centuries and is still legally practised in some parts of the world, particularly where donation encounters cultural and religious objections. In such contexts, “unclaimed bodies”, i.e. the bodies of those who die without known relatives or anyone else to “claim” the body for burial, or even of those who cannot afford the costs of burial, are assigned to anatomy departments, which assume the right to dissect the corpses and then bear the costs of burial.

The dissection of an unclaimed body does not necessarily constitute a violation of dignity, but it is not permissible to assume that the deceased person would have approved of the dissection of his/her body. Therefore, at an individual level, this practice can be considered a violation of personal autonomy and of the last wishes of the deceased. Furthermore, it should be noted that the use of unclaimed bodies often represents discrimination against poor people who cannot afford a burial and/or do not have the means to care for their dead. Therefore, the mere awareness that those who die without relatives or without the financial means for burial may be entrusted to the anatomopathologist can be disturbing and undermine the community's trust in specialists who, *de facto*, find in such a context their greatest challenge.

From a utilitarian bioethical perspective, the dissection of an unclaimed body brings potential benefits to a large number of people by advancing medical knowledge, while causing harm to only a few. According to this argument, the perceived benefit is so great that it justifies, in some cases, an ethically dubious practice. This would be acceptable according to John Stuart Mill's ethical approach and based on Jeremy Bentham's early formulation of utilitarianism, which view the “greatest happiness” of the greatest number of people as the general goal of moral decisions. However, Bentham himself, in his later formulation of utilitarianism, went beyond the concept of maximising the number of people, considering it unacceptable that the majority should enjoy great benefits at the expense of enormous suffering for the minority, and therefore defined utilitarianism as the maximisation of aggregate welfare.

Therefore, it is difficult to accept that some people should be harmed for the benefit of others, resulting in obvious injustice. From a non-utilitarian bioethical perspective, the use of unclaimed bodies should be avoided and a special register should be created in relation to their place of origin. One way to address this issue could be to seek consensus on the limits of acceptance of body donation in a society whose culture is opposed to such a practice.

At present, precisely because of the bioethical ambiguities surrounding anatomical dissection and body donation, one of the few certainties is the need to establish clear and transparent rules. Among the most authoritative internationally recognised guidelines are those issued in 2012 by the

International Federation of Associations of Anatomists (IFAA) for the use of human bodies and tissues for autopsy examinations<sup>17</sup> and in 2023 for anatomical education and research<sup>18</sup>.

The first Recommendation of 2012 outlines the need to request informed consent from donors through a free and informed decision, which consequently excludes minors and other “incompetent” individuals, as well as, explicitly, prisoners condemned to death. Relatives and the community are not included in the consent process, but it is expected that donors will discuss their wishes with their families so that even their closest relatives can sign the form, with a view to greater transparency among institutions, potential donors and their relatives throughout the entire process. Therefore, donations made by family members without the donor's consent are excluded. Such a process of consensus-seeking represents an interaction between peers, as opposed to the use of unclaimed bodies or body parts from other continents. The latter method, used to supply communities lacking donated bodies, is the least convincing because it can overlap with illegal trade.

In this light, body donation should be promoted as a service to the local community and not just as an abstract universal advancement of medical knowledge and skills.

The recent 2023 IFAA Recommendations, which integrate the previous ones, reflect the development of digital technologies and the related need to acquire, use and store images derived from human tissues (photographs, videos and images of actual human tissues, as well as those generated by ultrasound, computed tomography and magnetic resonance imaging). Although these images are not physical samples but representations of them, they are derived from real persons and therefore deserve special consideration, since their use and distribution in ways that are not considered ethical can undermine the relations with local communities. Therefore, their use should be authorised by the donor's informed consent regarding the methods of use (even if the images are shared with other institutions for educational and/or research purposes), with a specific and limited purpose and duration of storage. Similarly, the anatomical dissection of deceased persons should be limited to a protected, non-public space.

In cases where images are more likely to be used for commercial purposes, specific consent must be obtained. The documentation should also include a statement declaring that any image that allows the person to be identified has been specifically authorised by donors, relatives or legal representatives. In general, signs or other potentially distinguishing features should be censored from images, which should never be published on social media or websites that are not password-protected. Their use is only acceptable on restricted-access anatomy-related websites, such as institutional platforms, to prevent donated bodies from being misused and from being used for non-

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<sup>17</sup> IFAA. International Federation of Associations of Anatomists. Federative International Committee for Ethics and Medical Humanities (FICEM). *Recommendations of good practice for the donation and study of human bodies and tissues for anatomical examination*. 2012.

<sup>18</sup> IFAA. International Federation of Associations of Anatomists. Federative International Committee for Ethics and Medical Humanities (FICEM). *Recommendations for Good Practice Around Human Tissue Image Acquisition and Use in Anatomy Education and Research*. 2023. The following international guidelines are also worth mentioning: American Association for Anatomy. *Human body donation program best practices*. 2023 ([https://www.anatomy.org/common/Uploaded%20files/Education%20Resources/AAA%20HBD%20Best%20Practices%20Document\\_Final%20v2\\_with%20cover%20page.pdf](https://www.anatomy.org/common/Uploaded%20files/Education%20Resources/AAA%20HBD%20Best%20Practices%20Document_Final%20v2_with%20cover%20page.pdf)) and American Association of Clinical Anatomists (AACA). *Best practices guide for donation programs*. 2nd ed. 2017.

academic purposes (including morbid curiosity) and, in order to protect people's dignity, any form of commodification or commercialisation of such images is prohibited.

Images of human tissues must only be acquired from sources where the status of donor consent can be verified, excluding images acquired randomly from the internet and commercial educational systems that do not disclose their sources. Where possible, images from historical collections of unknown or non-consenting persons should be replaced with those of consenting persons, except in educational contexts that specifically address the history and ethics of their acquisition.

The Recommendations also indicate how to store digital images. Even in these recent Recommendations, IFAA acknowledges that access to donated bodies is not universal at the global level and, in cases where unclaimed and unauthorised bodies are used on the Internet without specific regulations, institutions should still strive to meet the requirements of the Guidelines as much as possible.

## COLLECTIONS OF HUMAN REMAINS IN MUSEUMS

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There is growing attention to ethical issues associated with collections of human remains, both public and private, focusing primarily on the acquisition, preservation, use and availability of organs and bodies that were often collected without consent and without due regard for the wishes or respect of the culture of the person.

To address these issues, the American Association for Anatomy (AAA) set up a Task Force on Legacy Anatomical Collections, composed of bioethics experts and professionals who work with skeletal remains in education, research, and museum collections to draw up specific Recommendations. Although these Recommendations are to be considered a document that may change over time in relation to developments in the sector, they are the result of a long process of analysis on this issue and currently represent the best practice for researchers, teachers and museum managers who are responsible for preserving legacy anatomical collections.

Historical and archaeological documents are full of examples of people collecting human remains or tissues for study, education or simply out of curiosity. These were usually acquired without consent or consideration for the persons or communities of origin, since, as we have highlighted, before the middle of the last century, the donation of bodies and tissues based on informed consent was rare.

The resulting collections can be found everywhere throughout the world and are often referred to as “legacy anatomical collections” by academics in the field of anatomical sciences. The length of time required for a collection to be considered a “legacy”<sup>19</sup> collection depends on several factors, including the historical, cultural, and ethnic significance of the content.

Such collections are often found in museums of anatomy, pathology and natural history, and in the anatomy or anthropology departments of academic institutions. There are also collections of human remains which are part of private historical collections. The actual origin of many of the collected tissues may be unknown and these may have been purchased in accordance with the legal standards of the time. On the other hand, there are large collections of human tissues in universities and museums that have been acquired in accordance with contemporary guidelines. The anatomy community needs a regulatory framework, also in relation to the growing awareness of the exploitation of marginalised populations for the procurement and use of human remains. For these reasons, the AAA Recommendations offer detailed guidance to the global scientific community in the absence of a regulatory framework and encourage the critical review of current practices, with particular reference to inventory, use, conservation and availability.

The document recognises the existence of two levels: the legal level, which imposes a duty of care on custodians to comply with local regulations, and the ethical level, which goes beyond mere compliance with the law. The first ethical consideration concerns the recognition of the unique, special status of human beings compared to other biological organisms and, as already stated at the beginning of this paper, the recognition of dignity extends to both the living and the dead. Moreover,

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<sup>19</sup> In the context of museum collections, the term “legacy” generally refers to everything that is handed down or bequeathed and comes from historical collections or donations. It refers to the cultural and historical heritage that a museum preserves and which represents its past and identity.



even more importantly, the custodian is not the owner but the guardian and protector of human remains and has a duty to assess the damage to communities, families and descendants of the deceased that could potentially result from their misuse. Cultural awareness and knowledge of the historical foundations related to anatomical or legacy collections become key elements because, over time, persons belonging to marginalised or underrepresented groups have been the subject of anatomical and tissue collections. When known, descendant communities should be involved in breaking the cycle of past abuses by implementing procedures of maximum transparency available to the public for all aspects of the collection, while ensuring the anonymity, respect and dignity of those who have been entrusted to a museum.

In order to support the ethical management of collections, an institutional control mechanism is required in the form of an anatomical supervision committee, or monitoring committee, capable of providing support to custodians by multiple perspectives in order to avoid conflicts of interest and mitigate bias. Respect for the dignity of the remains is also guaranteed by determining the origin of the human remains through genetic or genomic analysis and the consequent possibility of providing a sufficiently precise context of origin, determining whether the tissues were obtained legally, and treating the remains in line with the beliefs and values of the person and his/her community of origin.

Determining the origin can be problematic and time-consuming, also because of the presence of unreliable or incomplete documentation or, in cases of dubious acquisition methods, documentation that has been deliberately concealed.

In accordance with the bioethical principle of non-maleficence, the best way to involve families, descendants or, in some cases, local and cultural communities should be identified. In particular, every effort should be made to determine the identity of persons who lived in specific contexts of historical injustice and atrocities, such as the Holocaust, genocide, and slavery. Indeed, these remains may be the only traces that allow for their commemoration. It is also necessary to develop records that include all available information relating to the remains, including gender, any pathologies, geographical region, age at death, acquisition processes, source (entity that transferred the tissues to the institution) and persons involved in the acquisition and transfer, documents relating to informed consent, with details of what was specifically permitted. Moreover, the cataloguing through a system that allows for data security and control is also necessary. If the origin of the remains is unknown or only partially known, the support of the monitoring committee is essential in determining the most appropriate arrangements.

In the event of transfer to other institutions, each of these should keep traceability data in a permanent register. Even in the event of transfer, the option of trading human remains is excluded.

Where storage, transfer or repatriation is not possible, human remains should be disposed of legally through burial, cremation and other legally acceptable means. Where the origin of the remains is known, the opinion of the community should be taken into account. Indeed, some cultures consider specific forms of disposal, such as cremation, to be unacceptable. Cremation involves irreversible destruction and, if it is not possible to contact descendants or communities, requires the explicit authorisation of the guarantee committee. Indeed, it should be borne in mind that irreversible

destruction has in the past been used as a method of deliberately eliminating collections of “problematic” tissues, such as those in Nazi Germany, so much so that this option must be carefully assessed as opposed to other methods of disposal considered ethically acceptable.

In addition to the above Recommendations, there are other important documents issued by the International Council of Museums (ICOM) that constitute cornerstones for museums and their staff: the Code of Ethics for Museums and the Guidance for restitution and return of items from university museums and collections.

The Code of Ethics, translated into numerous languages, sets minimum standards of professional practice and performance; by joining the organisation, ICOM members undertake to comply with this Code.

Overall, all the main documents mentioned represent forms of guidelines that are “in progress” and constantly evolving, based on ongoing in-depth analysis of the relevant ethical considerations. They should be disseminated and discussed within the various professional communities involved with anatomical collections in order to implement appropriate ethical practices and raise the standards of care and management. This could give rise to new methods such as the development of national committees that accredit collection holders to help ensure compliance with ethical standards, a publisher-led system requiring all journals to issue ethical statements on the use of legacy collections, and the drafting of annual reports on the holding and use of collections to ensure transparency.

The development of Guidelines represents an effort to advance contemporary views on the appropriate ethical management of anatomical collections and to address the numerous and complex ethical challenges in an evolving social and cultural context. Reaffirming the importance of fundamental ethical principles in anatomy, in line with well-established ethical frameworks, ensures the continuity of values and principles that can foster a climate of trust towards collection custodians within the community.

Finally, worth noting is the emerging promotion of public debates by museums. In Italy, the Egyptian Museum in Turin is the first example of visitor involvement, since it invited visitors to reflect before viewing the human remains contained in one of the rooms<sup>20</sup>.

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<sup>20</sup> In one of the large rooms of the Egyptian Museum in Turin, there is a panel that invites visitors to reflect on the age-old dilemma: is it right to display a human body, or are we being disrespectful? The issue is analysed from many points of view (cultural, religious, ethical, historical) and the need emerges to start a debate and observe those who came before us with due respect. In the multimedia space, the debate continues with an explanatory video that summarises the complexity of the body and its meanings. On the museum's website, visitors can also take part in a survey which allows to find out what the public thinks about exhibiting human remains in a museum: <https://museoegizio.it/esplora/notizie/lesposizione-dei-resti-umani-nei-musei/>. An initial analysis of the data collected confirmed the visitors' positive interest in the human remains on display, and the way in which these remains were presented was also judged positively. The full report of this survey is available at: <https://drive.google.com/file/d/1Jq9joWcfegFDZSntxeL1vzvaA52pFPyH/edit>. Finally, worth mentioning is the cultural magazine AEON, which, at [https://aeon.co/essays/do-the-dead-have-a-right-to-keep-their-bodies-out-of-museums?utm\\_source=Gmi+Mailchimp+INTEGRATION+Prod+List&utm\\_campaign=d069640b94-EMAIL+CAMPAIGN+2018+07+08+04+14+COPY+17&utm\\_medium=email&utm\\_term=0\\_ff3735a749-d069640b94-56993045](https://aeon.co/essays/do-the-dead-have-a-right-to-keep-their-bodies-out-of-museums?utm_source=Gmi+Mailchimp+INTEGRATION+Prod+List&utm_campaign=d069640b94-EMAIL+CAMPAIGN+2018+07+08+04+14+COPY+17&utm_medium=email&utm_term=0_ff3735a749-d069640b94-56993045) addresses this issue by describing two highly controversial episodes that have paved the way for endless reactions to this day: the first concerns the so-called Irish giant, Charles Byrne, a man who reached the height of 231

## RETURN OF HUMAN BODIES AND REMAINS IN INTERNATIONAL CONTEXTS

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Many legacy anatomical collections include the remains of persons who were part of marginalised populations and are seen by some as a form of continued exploitation.

In the United States, educational collections in major medical schools often relied on a substantial trade in human skeletons coming from Southeast Asia or local poor communities through the exploitation of mass graves, paupers' graves, and potter's fields used as burial sites for unknown or unclaimed persons.

Since 1990, the Native American Graves Protection and Repatriation Act has required federally funded institutions in the United States to maintain an inventory of Native American human remains and funerary objects to facilitate their return to their respective tribes. Consultations are being held with tribes to revise the law, which still presents some shortcomings.

In the United Kingdom, the two versions of the Human Tissue Act established the principle of consent and criminalised the theft of DNA, so that in 2011 the Museum of London returned the remains of over 130 Torres Strait Islanders to their communities of origin.

In Germany, human remains originating from contexts of injustice may relate to the period of Soviet occupation, as well as the Nazi era or colonial contexts. Therefore, based on specific recommendations, human remains that show signs of violent death or are of dubious origin must be separated from the rest of the collection and not used in research, teaching activities or exhibitions.

Recently, the attention of political activists and public opinion has turned to colonial contexts of injustice, and in addition to cultural objects, focus has also been placed on human remains in European collections.

In Germany, for over a decade, the repatriation of non-European human remains to their communities of origin has often been a response to requests made many years earlier.

At present, the concept of colonial injustice is defined in very broad terms and is applied to any context characterised by colonial power imbalances from around 1500 onwards. In Belgium, starting in the mid-19th century, collections of human remains began to be created. However, during the colonial period, these human remains were often obtained under problematic circumstances. Based on a specific request for an opinion, the Belgian National Bioethics Committee issued a document stating that the exhibition of such remains in Belgian museums is no longer justifiable and focusing on the meaning of the term “return”, understood as “returning a property to its rightful owners”. This position implies that the appropriation and enjoyment of the property is based on a morally reprehensible act that renders the claimed property illegitimate and unlawful. The return, therefore, aims to restore the legitimate owner's right to enjoy and exercise all the prerogatives associated with ownership (*usus, fructus, abusus*), with implicit recognition of the illegitimacy of the possession of

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centimetres during his lifetime; the second starts with the discovery of a skull called “The Ancient One” along the Columbia River in North America. Both bodies were the subject of bitter debates.

the property to date, regardless of its duration, and of the need for an act of restorative justice and rebalancing. Above all, this establishes new cultural relationships based on relational ethics.

The concept of “repatriation” accompanies that of “return” when it is requested by the authorities of the country of origin, also in compliance with the United Nations Resolution on the rights of indigenous persons which, in response to the requests of the latter, has undertaken to develop, in collaboration with the populations concerned, fair, transparent and effective mechanisms for access to and repatriation of human remains, ceremonial and funerary objects associated with them, and the containers in which they were found at national and international level. This Resolution was updated in 2019, emphasising the importance of partnerships with UNESCO and WIPO (World Intellectual Property Organisation), and in 2020 Recommendations for experts were issued in relation to the mechanism for the repatriation of ceremonial objects. At European level, in 2018 the European Parliament adopted a resolution calling on the European Union and its Member States to address the issue of indigenous peoples' rights and expressing explicit support for the requests for international repatriation made by these populations and for the establishment of an international mechanism to fight the sale of indigenous artefacts taken from them illegally.

As stated by the Comité Consultatif National d'Éthique, «history shows that all peoples have always wanted to honour their dead. The request of the peoples [for the return of human remains] expresses an anthropological need present in all civilisations: the ritualisation of death and the granting of burial to the deceased. It is not just a matter of recognising a people's right, but also of allowing them to fulfil their duties towards their dead».

In Italy, the CNR (National Research Council) was among the first body to focus on the ethics of cultural heritage research when, in 2015, a working group was set up to develop a Code of Ethics and Conduct for researchers working in the field of cultural heritage and activities. Today, the latter represents a powerful tool for guidance and self-regulation for researchers, consultants, or experts in the various stages of their studies and in a wide range of environmental and social contexts.

If the origin of a legacy anatomical collection appears to include persons from marginalised populations, the decision-making process should involve care communities representing the interests of descendant communities, which in some cases may play an essential role in decisions about how best to honour human remains acquired in an unethical manner. Those who hold such collections should follow a collaborative model that promotes fair and transparent dialogue with representatives of the descendant communities or cultures to facilitate the recognition and understanding of cultural values and beliefs that are useful in identifying the most appropriate ethical management practices. Knowledge of geographical regions provides key information for determining the potential descendant community of human remains, especially when the latter have been separated from any cultural connection. Although the tissues are not accompanied by archival records indicating a geographical area of origin or acquisition, there are clear clues on the tissues themselves, such as the manufacturer of the container or tags or legacy labels. It is important to be aware that, since tissue collections often move, the location of the institution currently housing the collection may not be the community of origin.

The significant characteristics concern marks and inscriptions on the tissues that can provide relevant information for reconstructing their movements, especially in cases where there is little associated documentation. Human tissues are often marked with legacy collection or autopsy numbers, anatomical supply company labels, donor names, or even individual historical details that can serve as a starting point for a precise investigation into the origin of the sample.

Other components that can reveal the previous use of tissues and establish a sort of narrative include anatomical marks, medical devices, implants and prostheses. It is recommended that all possible graphical and topographical details be accurately recorded for further investigation in the future.

In the event of repatriation of human remains, the relevant procedures depend on the community involved and its legal system. South Africa's draft national policy on the repatriation and return of human remains and legacy objects emphasises that “communities and families are the rightful custodians of their ancestral remains”, even if these are held in a collection. One possible solution in such cases may be shared custody, especially since repatriation processes can be complex and usually require negotiations with the descendant community at various levels of government involvement. In Australia and New Zealand, for example, national agencies provide specific guidelines to ensure ethically and culturally appropriate repatriation for indigenous communities.

In order to ensure that the returned human remains are treated with the necessary dignity and that the communities and descendants of the deceased are duly involved, appropriate forms of commemoration are desirable. These may range from exhibition in local museums to the inclusion of texts in institutional documents, to financial support for investigating the origin of existing collections in commemoration of remains that no longer exist.

It should also be borne in mind that not all communities will be equally ready to engage in repatriation procedures, especially when European collections become proactive; it is therefore even more appropriate to develop joint research projects and involve community representatives, harnessing their expertise on an equal footing from the outset, also in order to shift the focus, at least in part, from the colonial conquerors to the victims, with their biographies and individual destinies.

The international bioethics community addressed this issue systematically for the first time in a special session of the 33rd European Forum of National Ethics Committees (NEC FORUM), held in Brussels in May 2024. At this meeting, the status and care of human remains in museums and scientific and private collections, and their return to their communities of origin, were discussed from the perspective of justice. Indeed, promoting the bioethical principle of justice means considering and acknowledging certain structurally unfair practices of the past, particularly those related to European colonialism, and addressing their problematic legacy in a way that, if not healing the pain and damage caused, at least restores balance in the present.

The principle of restorative justice is therefore introduced in a global context in which issues of human rights protection and participation in inclusive and representative democratic and decision-making processes for all communities involved are highlighted<sup>21</sup>.

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<sup>21</sup> In the Republic of San Marino, there is an ongoing debate regarding the return of remains found on San Marino territory and preserved at the Giovanni Capellini Museum of Geology and Palaeontology at the University of Bologna. These are not human remains, but the case is indicative of how the issue of returning remains is becoming increasingly important and is being addressed in many countries. The remains found in San Marino are of an extinct cetacean that lived around 13 million years ago, in the Middle Miocene. It is an ancestor of the modern whale, measuring around six metres in length. The *Titanocetus sammarinensis* owes its name to the place where it was found, namely Mount Titano (on which the Republic of San Marino lies). In 1897, Italian paleontologist Giovanni Capellini bought the remains (the skull and some ribs) for a small amount (six hundred liras at the time) from the landowner, Luigi Reffi, and took them to the University of Bologna, where he was a professor. The San Marino Naturalistic Centre holds a cast of it, donated by the Institute, and some fragments of the original ribs. This is one of the most important finds for San Marino paleontology, which boasts a rich collection of marine fossils and microfossils. This is why two *Istanze d'Arengo* (popular petitions to the Captains Regent on issues of public interest so that they can be discussed at the legislative level) have already been submitted to request its return, despite a previous rejection by the Museum on the grounds that the purchase was legitimate.

## RETURN OF HUMAN BODIES AND REMAINS TO FAMILY MEMBERS AND THE PUBLIC AFTER AN AUTOPSY AND OTHER SCIENTIFIC PROCEDURES

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The return of the body (to family members or to the social context and community, for the purposes of its final destination, such as burial, interment, embalming, cremation) is also provided for in the event of previous necropsy (*post-mortem* examination aimed at determining the cause, time and manner of death through external and internal observation) for judicial (so-called judicial autopsy) or health (so-called diagnostic confirmation) purposes. Although the activities have different purposes (the first is ordered by the Judicial Authority when death occurs in suspicious circumstances or from unnatural causes, and is therefore aimed at investigating a possible crime; the second is carried out in a clinic or hospital to confirm the diagnosis and clarify the causes of death, therefore for clinical purposes), the body must be recomposed and sutured, i.e. returned to its most natural appearance, to allow family members or local authorities to proceed with the funeral. This provision is clear and understandable, and «appears to be aimed at protecting a particular aspect of the collective sentiment of pity for the deceased, in this case harmed by abuses that may be perpetrated for scientific or educational purposes»<sup>22</sup>, or «the sentiment that we all feel, or should feel, towards those who are no longer with us»<sup>23</sup>.

### EXHIBITIONS

Many legacy collections have a history of educating the public and direct links to historical periods, while some may also evoke memories or references to travelling exhibitions of medical curiosities from the 19th century.

An anatomical exhibition has mainly educational purposes, but its impact on the general public is not easy to predict. It should therefore also take into account all possible negative effects generated by the exhibition, and it should be used for educational purposes only with the explicit and specific permission of a monitoring committee in order to avoid the risk of human tissue becoming an object of morbid curiosity or being used for entertainment purposes.

The management of sensitive collections requires a special sense of responsibility, especially when it comes to human bodies and parts thereof; visitors must be encouraged to respect the deceased as human beings with their own specific biographies and with the right to human dignity after death.

In medical exhibitions, pathology is presented differently than in the clinical field, which typically pursues the ultimate goal of promoting medical education and developing treatment plans. Indeed, trust, confidentiality and respect for informed consent – another key element in the therapeutic relationship – are fundamental ethical principles in the doctor-patient relationship during life and should also extend to the *post-mortem* stage, as taught in many medical schools that strongly protect the identity of donors even when exhibiting human remains for educational purposes.

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<sup>22</sup> FIANDACA G., MUSCO E., *Diritto penale*. Special part, vol. 1, IV Edition., Zanichelli, Bologna 2007.

<sup>23</sup> NORDIO C., *Responsabilità penale del medico. Vecchi e nuovi problemi alla luce della recente giurisprudenza*, in CAZZATO G., *Aspetti medico legali in otorinolaringoiatria*, Quaderni Monografici di Aggiornamento AOOf, 2005.

In the exhibition of human remains, anything that is compromising, eye-catching or purely decorative is not readily compatible with the expected respect for the dignity of the deceased and does not contribute in any way to providing factual information to the public.

As stated by the Belgian National Bioethics Committee, «the public exhibition of human remains should only take place in a scientific context. For example, mummies should not be stripped of their wrappings, and bodies in good condition should not be exhibited naked, even if they were discovered in that state», since the principle of respect for dignity also applies to the bodies of the deceased, including those belonging to institutional or private collections.

These considerations are in line with those of the Comité Consultatif National d'Éthique pour les Sciences de la Vie et de la Santé, according to which it is also appropriate to refer to «one of the pillars of ethical reasoning [which] consists in not wanting for others what we would not want for ourselves. This “golden rule” forces everyone to ask themselves whether they would accept the presence of other people's corpses in an exhibition if they did not want it for themselves or their loved ones».

## EXHIBITIONS OF PLASTINATED BODIES

Recent exhibitions of plastinated human bodies and samples, inspired by Gunter von Hagens' “Body Worlds” (*Körperwelten*), have been hugely successful with the public and, at the same time, have sparked heated debates about their ethics, provoking controversial reactions about the use of human corpses for entertainment and education.

In order to make a proper bioethical and legal assessment of these forms of exhibition, it is necessary to reflect on the technique of plastination.

### The plastination technique

Plastination was invented and patented by German anatomopathologist Gunther von Hagens and is a process whereby bodily fluids and fat are replaced with silicone polymers.

The process consists of five stages: embalming and anatomical dissection, defatting and removal of body fat, forced vacuum impregnation, positioning and curing:

**1. Embalming.** The first step in the process is to stop the degenerative processes by pumping formaldehyde into the body through the circulatory system, using an artery. Formaldehyde allows you to stop/slow down the degenerative processes of the corpse. For the technique to be successful, the corpses must be treated at a stage when degenerative processes and mechanisms (transformative phenomena) have not yet begun, or their onset has been significantly slowed down. Experience shows that, depending on the cause of death, the clinical/conservation status *ante mortem* and the place of death (degree of radiation, degree of humidity, environmental exposure), the corpse may undergo stages of transformation (consecutive abiotic phenomena and transformative phenomena) in completely unique timeframes. Therefore, embalming must take place in a specially designed environment, quickly and on a corpse that has not yet undergone any transformative phenomena, i.e. one that is in an initial abiotic phase or has been preserved in a refrigerated environment immediately after death, so that the onset and development of the transformative phases have been slowed down as much as possible. The embalming process in a



corpse in a transformative phase is much more complex, due to the collapse of the circulatory system, as well as in a corpse that has been preserved for a long time in a refrigerated environment: this detail is significant when considering the time that corpses must remain in storage in order to be declared “unclaimed”, i.e. at least thirty days (even in China) after technical confirmation of death.

**2. Anatomical dissection.** Dissection instruments are used to prepare the anatomical structures by removing the integumentary, connective and adipose tissues. The removal of these anatomical structures renders the corpse “de-fleshed”, that is, stripped of the features that characterised the person when alive. This sort of “depersonalisation” makes it impossible to recognise the corpse later on and confirm that it is the same person over time... This refutes and denies the claims made by von Hagens and the exhibition curators regarding the immortality of plastinated bodies, since each corpse can easily be replaced by another with a similar muscular and organic structure, provided that its structural integrity is preserved.

**3. Removal of fat and water from the body.** The water and soluble fats in the body are dissolved by immersing the corpse in a bath of acetone. This process therefore requires a structural modification that decodes the persons by age and gender, thus rendering them amorphous and isomorphic. This additional step makes the corpse unrecognisable compared to the person before death.

**4. Forced impregnation.** This second exchange process is the central step in plastination. During forced impregnation, silicone (or another similar polymer) replaces acetone. These operations are carried out in sealed containers in which the silicone is injected under pressure so that it penetrates every cell. For the process to be successful, pressure must be applied to the individual cells in a standardised manner. However, numerous variables, including the mass to be impregnated and the correct procedure for the previous stages, guarantee the effectiveness of the entire process, and the prevalence of some of these variables over others can compromise the result. It is therefore legitimate to wonder how many bodies are actually used to obtain a plastinated body... Indeed, it is not possible to know whether the “donated” body is the same one to which immortality is attributed and which visitors will observe throughout the duration of the exhibition and subsequent ones. On the contrary, and paradoxically, previous pathologies and/or iatrogenic anatomical or structural characteristics could be used as “identifying marks” of the corpse and therefore of a particular body before death. It is reasonable to wonder whether the plastination process is the same for all bodies, regardless of whether they have suffered from a wide range of diseases or undergone any type of surgery, or whether, more likely, the plastination process must be modified or is rendered ineffective due to structural changes (in vessels, organs or tissues) that necessarily occur as a result of a specific pathological evolution or surgical manipulation.

**5. Positioning.** The body is positioned in the desired pose and each anatomical structure is secured with twine, needles and clips. This mechanism requires that the body be healthy, i.e. free from organic pathologies or pathological manifestations that may have affected the anatomical position of the organs in the cavities. However, the long securing with twine, needles and clips also suggests the possibility of a “collage” of different organs inside a container body. In other words, it is reasonable to wonder whether organs, structures, etc. belonged to a single corpse, or whether the body we observe may represent a “collection” of different anatomical sections from different corpses.

**6. Curing.** This is the final step in the entire plastination process. The times and methods depend on the polymer used: some polymers cure when exposed to gas, others to UV radiation, and others to heat sources.

In general, the plastination process takes around 1,500 hours of work and is only completed after around a year.

In light of the above, it is clear that this technique goes beyond the mere preservation of the body, as is the case with embalming, which similarly involves replacing bodily fluids with a formaldehyde-based preservative solution but preserves the entire appearance and features of the corpse.

Finally, it is important to highlight how exposing bodies to different agents for curing poses further problems that have been ignored or overlooked until now, both by exhibition organisers and in the literature. In particular, worth considering are the methods used to preserve the cured bodies and how they are transferred from the plastination centre to and between the various exhibition venues (remember that these are travelling exhibitions). Indeed, it is not possible to know whether, in order to guarantee the state of plastination, the persons responsible for it must store or transfer the bodies to environments with a constant temperature (as required for freeze-dried facilities) or refrigerated environments, or environments with constant radiation.

It is clear that the costs of such processes can only be sustained by a few facilities and that high profits are therefore necessary to ensure the continuity of the related activities.

Finally, it is not possible to know how the bodies will be disposed of once they can no longer be used; there is no information on the possibility of burial or cremation, because of the presence of chemicals.

Indeed, this raises a new question regarding the classification of such bodies: can they still be identified as “corpses” or should they be classified as “unrecognisable anatomical parts”?

This is not a minor issue, since it has a series of repercussions in various areas, including *post-mortem* certification, public health, municipal authorisations and cemetery facilities. If plastinated bodies were considered “unrecognisable anatomical parts”, special requests and disposal methods would be required, with health and municipal authorisations and final disposal by burial/interment (upon request and at the expense of the family) or cremation (upon request and at the expense of the family, or alternatively at the expense of the municipality). Furthermore, plastinated bodies, since they contain chemical agents, should be disposed of as “hazardous” medical waste and therefore should follow the procedure for the disposal of medical waste classified as “biological hazard” or “chemical hazard” (such as waste from analysis or pathological anatomy laboratories or from radiological activities). In this case, the disposal of plastinated bodies should take place in a protected environment, in authorised containers and in accordance with standard safety procedures, and the bodies should be sent to supervised and authorised disposal sites. Finally, the presence of chemicals would pose a further problem in terms of environmental compatibility, since burial or incineration could lead to the spread of pollutants in the soil and the environment in general.

From what has been reported so far, it appears that uncertainty about the final fate of the bodies is not only the most critical ethical and bioethical issue, but also disregards and negates the profound cultural, civil and religious significance that a dignified burial has represented in the development of human civilisation.

## The case of the “Body Worlds” exhibition

Since its debut in the 1990s, the “Body Worlds” exhibition has provoked, and continues to provoke, mixed reactions for numerous reasons, which we will analyse, also considering the fact that it set a precedent in a regulatory and ethical vacuum that is now being filled.

Anatomical research aimed at understanding the innerparts of our bodies has long been at odds with aesthetic ideals and human and religious sensibilities regarding the meaning of the human body.

The constant calls to reconcile science and human sciences seem to be undermined by von Hagens' work, in which some authors have recognised the presence of two Goethean figures, the *Prosektor* and the *Proplastiker*: the former, driven by scientific curiosity, is willing to destroy and desecrate the human form in order to gain knowledge; the second opposes such mutilation of the physical body, which is marvellous even in death, and sees his art as an imitation of divine creativity, a first step towards “bringing the dead bones back to life”. According to this perspective, the exhibition of plastinated bodies aims to fulfil the anonymous motto of anatomy (“the dead teach us how to live”) not only for a privileged few but for the general public, through a presentation that is neither repulsive nor aesthetic. Not only that, but von Hagens is not unlike the anatomopathologists of the anatomical theatres of 16th-century Bologna, who, in addition to teaching medical students, sold tickets to the public, who watched the procedure as a form of entertainment. Speaking about himself, von Hagens states that, with his dissections and plastinated bodies, he is not only pursuing an educational goal but a true “anatomical art” defined as “edutainment” (a fusion of the terms educational and entertainment), blurring the line between anatomical and artistic objectives and creating an anatomical presentation with which he performs a radical “reversal of art that represents the body in a body that represents art”. Furthermore, during a heated argument with Dr Jeremy Metters, a British inspector of anatomy who threatened to arrest von Hagens for violating the Anatomy Act because he did not have a *post-mortem* licence, von Hagens compared the inspector to the clergy who, in the past, reserved the right to read the Bible. The German anatomopathologist compares the body to a sacred text, with its own metaphysical attributes that can be read in various ways based on different religious and philosophical interpretations. Furthermore, each body on display tells its own unique story, revealing the experiences and anomalies of the real person: for this reason, the exhibition is presented as “dedicated to the individual inner face”.

Finally, the aim of this activity would be to guarantee the bodies a sort of eternity, since, according to von Hagens, «When I replace this water with a permanent polymer such as silicone rubber, there is no more decay. Certainly, those bodies will last longer than the mummies of the pharaohs».

The desire for eternity would be the underlying motivation for those who donate their bodies for such exhibitions, as has been the case since ancient times with mummification or embalming. Furthermore, in von Hagens' hands, people could also expect to have their body transformed into a statue or work of art, thereby further enhancing their self-esteem while they are still alive. From this perspective, Von Hagens becomes the post-modern Prometheus who is already working to create, through a new type of plastination, the idealised superhuman of the future, so much so that on his website<sup>24</sup> he calls on terminally ill patients to agree to have their own deaths filmed and donate their

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<sup>24</sup> [Institute for Plastination.](#)

bodies for plastination and the reconstruction of a superhuman, free from all the defects caused by evolution. On the same website, under the body donation programme, one can read that «All anatomical samples come from people who donated their bodies with legal consent during their lifetime for the education of future generations. For over 30 years, the body donation programme has been the ethical foundation of our plastination work». Given that the donation of bodies is completely free of charge, it states that «To ensure that the decision to donate one's body to the IfP (Institute of Plastination)<sup>25</sup> is made of one's own free will, no financial compensation is provided» and it is guaranteed that «we strictly limit the sale of human plastinates to “qualified users”».

This interpretation of von Hagens' work stems from a dualistic view of the human body: on the one hand, the body is seen as sacred, a work of God that does not belong to man, a temple of the spirit, and therefore untouchable and destined to be resurrected at the end of time; on the other hand, man is seen as the sole owner of his own body and the architect of his own destiny.

However, limiting the discussion on the availability of human bodies to an opposed secular-religious view not only appears overly simplistic, but also ignores all levels of ethical, legal, cultural, and anthropological reflection that have characterised human history and which we have attempted to illustrate in the previous chapters.

Therefore, it is necessary to proceed with an analysis of the elements that emerge from the creation of these exhibitions and von Hagens' work.

Unlike ancient embalming procedures for religious veneration and the mummification of bodies destined for eternal life, the plastination process, as explained in the previous section, does not guarantee the immortality promised by von Hagens and desired by donors, and is preparatory to the exhibition of bodies as supposed “works of art” for a paying public. Therefore, the ultimate goal of von Hagens' work seems to be to gain profit as well as fame, as he himself states on his website. While there does not appear to be any financial compensation for the acquisition of the bodies, there is a clear profit from the sale of the plastinated bodies and remains to so-called “qualified users”, just as there is an entry fee to access the exhibition, managed by a for-profit company, in clear demonstration of the aim of financial gain. This constitutes a violation of the rules prohibiting the trade in corpses in countries where such regulations are in force and, in any case, represents an unacceptable bioethical violation, resulting in unfair profit.

However, the most significant consideration concerns the use of the body in a voyeuristic context, such as an exhibition for entertainment purposes, in violation of the status of the corpse, whose dignity is recognised across a wide range of cultures throughout time and space, regardless of the presence or absence of a particular religion.

These considerations are made regardless of the donor's informed consent, which, according to the IfP website, does not constitute a contract but a declaration of intent that can be revoked at any time.

With regard to informed consent, there is an ongoing debate within the bioethical and legal community about what use of the body can be legitimised by a confirmed body donation. Should the donors have detailed knowledge and/or leave detailed instructions on what they consider

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<sup>25</sup> Ibidem.

appropriate? Would this include, for example, the use for an artistic project? Would public dissection be included?

Some authors argue that such use of a corpse would not be appropriate even if the donor had expressly agreed to it; the same applies to the exhibition of corpses in sexual poses, as occurred in some editions, to the extent that a German court banned this section of the 2009 exhibition in Augsburg.

The bioethical concerns regarding the legitimacy of such exhibitions stem not only from their commercial purpose presented as a scientific one, but also from the goals declared by von Hagens regarding the pursuit of immortality or personal exhibition by donors after death, which is difficult to reconcile with the declared aim of helping others “through education and research”. According to some authors, such selfish aims would disrupt the usual “link between donation and altruism”, although it is difficult to make an ethical judgement on individual motivations for body donation, since these cannot be known with certainty.

It is probably more realistic to assume that there is a negotiation between different personal interests with the additional aim of benefiting from cooperation between the parties (contractualist ethical perspective). If the perspectives of donors and plastinators converge in a “materialistic” desire to achieve a kind of “*post-mortem* eternal existence” through plastination, the choice may be accepted by some from a purely legal perspective through legally valid consent, but it may be legitimately questioned by a wider community that opposes such a view and, in invoking respect for the dignity of the body, seeks to reach a consensus for the prohibition of such exhibitions. Furthermore, it would be highly desirable to involve the relatives of the deceased in cases where the body is used for public events.

These ethical concerns were assessed by the International Federation of Associations of Anatomists (IFAA), which issued a detailed opinion in 2018<sup>26</sup>. IFAA considered various aspects in addition to informed consent, which was deemed a necessary but not a sufficient condition for the ethical approval of such exhibitions.

The main considerations of IFAA concern the following aspects:

- **acquisition of bodies:** informed consent must be individual, expressed during the deceased's lifetime by free decision and documented in writing. This can be difficult to assess when items are imported from other countries, often from far away, because the methods of procurement may remain unclear if they take place outside the local legislation of the place of exhibition. Regardless of the geographical origin of the bodies, transparency regarding procurement procedures is still mandatory.
- **use of dead human bodies for personal gain:** the human body cannot be traded;
- **alleged educational purpose of advancing knowledge and improving visitors' lifestyles:** according to a survey conducted in Greece in 2012<sup>27</sup> only a small proportion of visitors

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<sup>26</sup> Federative International Committee for Ethics and Medical Humanities (FICEM) of the International Federation of Associations of Anatomists (IFAA), *Ethical and Medical Humanities Perspectives on the Public Display of Plastinated Human Bodies*. 2018.

<sup>27</sup> RAIKOS et al., *Human body exhibitions: Public opinion of young individuals and contemporary bioethics*. *Surgical and Radiologic Anatomy*. 2012. 34(5):433-40. DOI: 10.1007/s00276-011-0925-4. The study, based on a survey of 500

interviewed were willing to change their lifestyle, while there was broad consensus that health and anatomy education could be achieved through alternative, morally uncontroversial methods, such as imaging techniques, multimedia resources and anatomical models;

- **morbid curiosity:** the “voyeurism” that may be implicit in viewing a real body can become a violation of every kind of respect and a form of pornography when bodies are exposed in positions that reproduce sexual intercourse;
- **the alleged historical continuity** invoked to justify von Hagens' activities is actually used in a selective manner, favouring only certain historical lines;
- **unclear “lifespan” of a plastinated sample:** von Hagens claims that plastinated bodies have an “eternal” lifespan; however, in some exhibitions, signs of liquids leaking from the bodies have been observed, forcing organisers to replace them and prompting local officials to call for a ban on such exhibitions;
- **burial:** there is no information on the fate of plastinated bodies and their “waste” parts that accumulate during the process after being used in exhibitions, since plastination makes simple burial difficult and cremation impossible. Therefore, unlike other donation programmes in which bodies are buried or cremated in accordance with the relevant culture and religion, plastinated bodies are potentially destined for disposal as plastic waste, with an obvious depersonalisation and erasure of their special *status*, unless the scientific and ethical community identifies another definitive solution. In this case, consent to plastination and exhibition must also include information on the fate of the body;
- **donor privacy:** the exhibition of bodies bearing identifying marks must be avoided, also in respect of the privacy of relatives;
- **positioning of dead human bodies:** a particular feature of the exhibitions in question is the presentation of bodies in “life-like” positions (e.g. playing chess or cards, running or engaging in other sporting activities) with no other purpose than to be spectacular. Certain *post-mortem* “animations”, such as the plastinated body of a pregnant woman or plastinated bodies in erotic poses, even simulating eternal sexual intercourse, have been considered by some observers to be highly offensive because they are more voyeuristic than educational. Finally, the artistic aspect of positioning plastinated bodies is highly controversial. This type of “art” is actually far from contemporary art (which has adopted very different approaches with regard to the human body in recent decades). Rather than art, this would be considered design based on organic “material”, or the reproduction or citation of classical works of art (as in the case of the drawing man), which exploits a very unique “material”. Both approaches reduce the corpse to an object, thereby questioning the dignity of the deceased;
- **ambiguity of plastinated bodies:** despite the ambiguity regarding their authenticity, from an ethical point of view it is important to emphasise that plastinated bodies originate from and continue to be part of the donor, i.e. a person. In this sense, the ambiguity between body and person leads to the obliteration of the dignity of those whose body was plastinated.

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persons aged between 18 and 35, aimed to find out their opinion on such exhibitions and on donating their bodies for scientific purposes. It emerged that over half of those interviewed had moral concerns and many emphasised the violation of human dignity, which is considered an intrinsic value of human beings, even without having any information on the matter. Furthermore, some of the people interviewed expressed concern about the effects of the exhibition on visitors' mental health.

- **dehumanising/depersonalising perspective:** human remains, far from being understood according to their special *status*, become “plastinated”, in the most extreme form of dehumanisation. It is clear that donated bodies become malleable raw material for any so-called “artistic” purpose, and human nature and the work carried out in life are replaced by “plastic” and aesthetic creativity. This is the origin of an exhibition in which labels with “artistic” signatures take the place of obituaries and inscriptions on gravestones, while the date of creation of the “plastinated body” replaces the date of death. The individuality that arises from a person's history, name and family background is dematerialised in a generic pose that may not characterise the donor's lifestyle or may even be contrary to his/her moral values.

### **The (unresolved) issue of the origin of the bodies**

The plastinated body exhibitions project (“Body Worlds”, “Bodies Revealed”, “Our Body: The Universe Within”) consists of world tours which, since their inception, have been the subject of ethical and legal controversy, so much so that they have been banned in some countries.

The most striking issue, which remains unresolved, concerns the origin of the bodies being exhibited. An editorial published in the prestigious journal “The Lancet”<sup>28</sup> in 2010, immediately after the Real Bodies exhibition in Birmingham, United Kingdom, raised the alarm within the international scientific community. The article refers to the lawsuit filed in 2008 by the New York State Attorney General's Office (USA) to obtain documents on the origin of the bodies. The organising company, Premier Exhibitions, had displayed a disclaimer stating that the remains were those of Chinese citizens or residents, originally received from the Chinese Police Department, which in turn may have received them from national prisons, and that the company had been unable to independently verify that the remains did not belong to Chinese prisoners. This information was not present in any way in the Birmingham exhibition. The importation into the United Kingdom was made possible thanks to a loophole in the 2004 Human Tissue Act, which regulates the storage and use of human bodies, organs and tissues in England, Wales and Northern Ireland, but does not require proof of informed consent for imported tissues. The UK Human Tissue Authority accepted the origin of the tissues in the exhibition on the basis of an affidavit and granted permission for them to be exhibited to the public. A statement on the exhibition's website indicated that, although Premier Exhibitions' suppliers certified that all individuals had died of natural causes and their remains had been donated with the permission of the deceased or their next of kin for educational purposes, the company could not independently verify the origins of what was exhibited. Following this episode, a group of British doctors organised an online petition calling for consent regulations to be extended to imported and exported tissues, in order to close the loophole in the Human Tissue Act and ensure that all remains exhibited to the public were donated with the consent of the deceased.

Ethical concerns about the origin of the bodies, which are as crucial as they are still largely unknown to most people, are the basis for ongoing investigations by institutions and for complaints by human rights activists, which appear to provide evidence supporting the idea that the bodies and organs on display also come from prisoners killed in China.

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<sup>28</sup> Editorial, [\*Bodies revealed, but whose?\*](#) The Lancet, Vol. 375, Issue 9715, 20–26 February 2010, Page 612.

Roy Glover, chief medical director of Premier Exhibition, stated that what "exhibited" was obtained from the plastination laboratories of Dalian Medical University in Dalian (China)<sup>29</sup>, specifying the "unclaimed" nature of those bodies, as of many others used for educational purposes in the United States. It goes without saying that, while the use of unclaimed bodies remains an ethical issue for scientific and educational purposes, it becomes unacceptable if it is for commercial and exhibitionist reasons, like in the exhibitions mentioned above.

In this regard, it should be noted that unclaimed bodies could have been purchased by von Hagens, plastinated and displayed for profit in exhibitions or even sold to those whom he defines on his website as "qualified users".

In addition to China, Russia was also among the countries supplying corpses for plastination until the procurement channel was interrupted following scandals involving the trafficking in corpses in Russia and the Kyrgyz Republic.

China would therefore remain the preferred country in this regard, also due to the flexibility offered by the regulations on the use of unclaimed bodies. According to Chinese criminal procedure law, if the family of the perpetrator of the crime does not claim the body after a specific date, the People's Court may notify the relevant organisations to collect the body or remains.

This practice facilitates the availability of the bodies of those who have been persecuted for their beliefs, including Tibetan monks and religious figures of all faiths, whose families are unlikely to claim them, both because it is rare to know where they are being held and because their families fear being arrested themselves.

Among the most likely victims in this regard are prisoners executed for practising Falun Gong, a spiritual movement that is banned and persecuted in China.

Despite assurances from the exhibition organisers and Dalian Medical University anatomy professor Hong Jin Sui regarding the legal origin of the bodies<sup>30</sup>, in 2016, the report "Bloody Harvest/the Slaughter"<sup>31</sup> was published. This report contained further evidence supporting the findings published in 2007 in the first Kilgour-Matas Report on the removal of organs from prisoners of

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<sup>29</sup> JACOBS A., [\*Cadaver exhibition raises questions beyond taste\*](#) [editor's note appears in *New York Times*, January 7, 2006]. *New York Times*. November 18, 2005:B3. Glover justified his decision to collaborate with the Chinese medical school on the grounds that China has "the best dissectors in the world". These statements have sparked criticism from many anatomopathologists, who have questioned the inaccurate descriptions of bodily systems and expressed concern that the commercial nature of such exhibitions could be counterproductive to body donation and scientific progress in the academic field (*Exhibits promote human remains as . . . art*. Talk of the Nation. National Public Radio. March 24, 2006).

<sup>30</sup> Prof. Hong Jin Sui stated in a declaration that «the samples were originally received from the city morgue and then transferred to medical universities in China, and finally legally donated to the Dalian Hoffen Bio-technique Laboratory for storage, dissection and exhibition. Dalian Hoffen Bio-technique only accepts samples that have been legally donated, are free of infectious diseases and are certified as having died of natural causes» (see: M. PALIN, [\*"Real Bodies: The Exhibition", controversy about "disturbing" origins of corpses\*](#). News.com.au, April 9, 2018). The same source quotes a statement by Tom Zaller, president and CEO of Imagine Exhibitions, who said that the claims according to which the exhibition used human corpses from Chinese political prisoners who died during detention were "unfounded" and "offensive". But he was unable to provide any evidence of their origin. He stated that the bodies "definitely came from China", but at the same time admitted that there was no documentation proving their identity or showing that the people concerned had agreed during their lifetime to donate their bodies after death.

<sup>31</sup> D. KILGOUR, E. GUTMANN, D. MATAS, [\*Bloody Harvest/The Slaughter: An Update\*](#), June 22, 2016. Revised April 30, 2017.



conscience in China<sup>32</sup>. The report was presented in 2019 during the hearings of the Independent China Tribunal, to which the International Coalition to End Transplant Abuse in China (ETAC) had entrusted the task of examining the evidence and acting collectively to determine what the legal consequences would be if China were found guilty of international crimes involving the forced removal of human organs<sup>33</sup>.

The evidence gathered by the authors of the report was so convincing and supported by such clear testimonies indicating that thousands of prisoners of conscience had undergone organ removal that the jury of the Independent China Tribunal issued a provisional judgement against China and, with an unusual initiative, the London Court issued preliminary conclusions on forced removal of organs in the People's Republic of China. Indeed, it has been established «unanimously and beyond reasonable doubt that the forced removal of organs from prisoners of conscience has been practised in China for a considerable period of time, involving a very large number of victims»<sup>34</sup>.

Therefore, based on the research carried out to draw up the aforementioned reports, Kilgour discredited the statements made by the exhibition organisers, also highlighting significant discrepancies found in the report on the Dalian Plastination Body Plant<sup>35</sup> in relation to the number of corpses supplied to science and body donations in China.

The ambiguity that characterises these exhibitions also extends to the forms of communication, which combine elements typical of medical teaching exhibitions, such as careful anatomical reconstruction, with those typical of a *freak show*<sup>36</sup>, with a clear focus on sensationalism. Indeed, modern performances draw inspiration from Victorian-era *freak show* posters for the use of adjectives in their subtitles to attract as many visitors as possible<sup>37</sup>. Finally, the uproar and controversy surrounding the staging of the performances create the climate of sensationalism that is the essence of every show.

In light of what has been said and documented so far, it is impossible not to wonder why such exhibitions continue to be authorised to be hosted in cities, in serious and open violation of the legal rules of respect for the dead and dignified burial, of the ethical principles that have guided human

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<sup>32</sup> D. MATAS, D. KILGOUR, *BLOODY HARVEST. Revised Report into Allegations of Organ Harvesting of Falun Gong Practitioners in China. An Independent Investigation into Allegations of Organ Harvesting of Falun Gong Practitioners in China*. 31 January 2007.

<sup>33</sup> For further information on the Independent China Tribunal, Independent Tribunal into Forced Organ Harvesting from Prisoners of Conscience in China, see the website: <https://chinatribunal.com/>

<sup>34</sup> With regard to the history of organ transplant abuse in China, please refer to the observations by David Matas (international human rights lawyer and co-founder of the International Coalition to End Transplant Abuse in China) for the conference of the International Academic Forum on arts, media and culture held in Kyoto, Japan, on 20 October 2022, available at: <https://endtransplantabuse.org/it/innovation-and-value-organ-transplant-abuse-in-china-remarks-by-david-matas/>. This report states that the mass killing of prisoners of conscience for the purpose of removing their organs can be traced back to the collaboration between state and military hospitals and detention centres, in the complete absence of legal or professional ethical standards or regulations. These observations suggest that such mass killings have been documented since the early 2000s and are evident to any researcher who has examined the data.

<sup>35</sup> For information on von Hagens' plastination centre in Dalian, see: <http://chinascope.org/archives/6423>

<sup>36</sup> *Freak shows* were performances featuring biological and human rarities that took place mainly in England and the United States between the 19th and 20th centuries: N. DURBACH, *Spectacle of Deformity: Freak Shows and Modern British Culture*, University of California Press, 2009.

<sup>37</sup> In the subtitle "The Original Exhibition of Real Human Bodies", the adjectives "Original" and "Real" echo the same adjectives ("Original" and "Alive") used on freak show posters.

civilisation, and of the principles enshrined in numerous international guidelines on the exhibition of bodies in museums.

Numerous attempts have been made by prominent figures and institutions to highlight their inadmissibility, but very few have succeeded in preventing them from being staged.

Among the most illustrious opponents of the exhibition of plastinated bodies was Jon Jackson, of the Grand Forks University of North Dakota School of Medicine, who, feeling deeply frustrated by the "profit" accumulated by the promoters of exhibitions created to make anatomical sciences popular and sensationalistic, complained of a serious difficulty in finding a convincing argument in favour of body donation in such a context. In a statement he made in January 2007, he masterfully explained that body donation programmes «need to beg people to donate their bodies. [They need to] remind people what a great gift it is and what altruistic purposes this gift is given for». Furthermore, Elaine Catz, from the Penn Carnegie Science Centre in Pittsburgh, where "Bodies...The Exhibition" was inaugurated in October 2007, resigned in protest after eleven years, with a sensational *j'accuse*<sup>38</sup>.

In France, the exhibition "Our Body, A Corps Ouvert" sparked strong criticism from intellectuals and human rights organisations and an immediate response from the French Bioethics Committee, which compared the exhibition to pure voyeurism that encouraged people to look at human bodies that had once belonged to real persons from a purely technical perspective. On the basis of numerous arguments, the exhibition was declared illegal by the French government, which invoked Article 16 of the National Civil Code<sup>39</sup> in a judgement delivered by Judge Raingeard<sup>40</sup>. The Court ruled that such use of human bodies can only be authorised for medical purposes and not for entertainment purposes, and ordered the confiscation and burial of the bodies in order to show due respect for the deceased.

In Italy, too, when it was announced that the Body Worlds exhibition would be held in Milan in 2013, a group of representatives from civil society, politics, academia and religion made a heartfelt appeal to the mayor not to authorise it, expressing doubts about respect for human rights due to the lack of transparency regarding the origin of the bodies and calling for further consideration by the Municipal Attorney General of Articles 410 (desecration of a corpse) and 413 (illegal use of a corpse) of the Italian Criminal Code<sup>41</sup>. This appeal was ignored, and the exhibition was held in 2013 and in subsequent editions in Milan and other Italian cities.

In Bologna, on the eve of the 2013 exhibition, the curia took a tough stance, publishing several articles in the Sunday supplement of the Catholic newspaper "Avvenire". These comments attributed pornographic characteristics to the exhibition, not so much and not only from a religious perspective, but rather in the context of *pietas*, which demands respect for the body of the

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<sup>38</sup> Catz stated: «There are many so-called "guarantees" about this exhibition, but I'm not sure the Carnegie Institute has investigated it thoroughly enough... Asking questions is the only way scientists can learn anything, but it is necessary to verify the sources... The scientific centre is willing to accept the answer it wants to hear, without verification, because it wants this exhibition to attract large crowds». See: Kalson S., [China "Bodies" exhibit raises hackles here: Science Center employee quits to protest display of corpses](#). Pittsburgh Post-Gazette. June 21, 2007.

<sup>39</sup> French Civil Code, art. 16: "Respect for the human body shall not end with death, and the remains of the deceased shall be treated with respect, dignity and decency."

<sup>40</sup> See: (AFP) *French court orders ban on Chinese body parts show* del 21.04.2009 Doc. on line 34.

<sup>41</sup> The appeal was signed by Nando Dalla Chiesa, Fiorello Cortiana, Silvia Giacomoni and Elisabetta Pellarin.

deceased, which can never be objectified, let alone become a source of entertainment. From this perspective, the exhibition methods were characterised as violence against modesty, a form of voyeurism, in other words, a form of pornography<sup>42</sup>.

Despite numerous doubts, these exhibitions continue to attract hundreds of thousands of visitors across the country, and some museums are even considering adding plastinated exhibits to their permanent collections.

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<sup>42</sup> A. DALL'ASTA, [\*La pornografia di quelle persone scarnificate\*](#). Bologna sette, 25 August 2013, no. 34; L. GORIUP, [\*"Body worlds", mostra di corpi senza persona\*](#). Bologna sette, 10 November 2013, no. 45.

## CONCLUSIONS

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The CSB bases its argument on the centrality of “informed consent” as a basic ethical criterion in the use of the human body or parts thereof.

It reiterates that donation for therapeutic purposes, motivated by altruistic intent and supported by an expressed (or legitimately presumed) willingness, represents an exaltation of ethical values, even if it derogates from the principles of inviolability and intangibility. On the contrary, the use of the body for different purposes, especially in the absence of explicit and informed consent, raises serious bioethical issues and risks reducing the body to a mere object as well as undermining the dignity of the person, even after death.

The CSB notes that this complex and sensitive issue requires ongoing reflection, alongside the definition of evolving guidelines for the ethical management of anatomical collections and exhibitions, with particular attention to transparency, respect for dignity and, where possible, the return of human remains. The ongoing debate on the limits of consent to body donation highlights the importance of clear and detailed communication between potential donors and institutions, in order to avoid ambiguous interpretations and ensure that individual wishes are respected.

Overall, the document emphasises that any practice involving the human body, whether living or dead, must be driven by a deep respect for dignity. The case of the “Body Worlds” exhibition in Milan in 2013, with the strong appeals made to the mayor by representatives of civil society, politics, academia and religion, is a symbolic example of the bioethical tensions raised by the use of human bodies for exhibition purposes. The opposition mainly focused on two crucial aspects, closely linked to the general considerations outlined in the document. The first referred to the lack of transparency regarding the origin of the bodies. The main issue was whether donors had given their informed consent in an ethically acceptable way and with a full understanding of what would happen to their bodies, including public exhibition. In that situation, the lack of clarity directly called into question the fundamental principle of informed consent, highlighting that the absence or dubious validity of the latter can undermine the ethical legitimacy of the practices in question. The second aspect referred to the possible violation of the Italian Criminal Code. The opponents invoked Articles 410 (desecration of a corpse) and 413 (illegal use of a corpse) to support the fact that bioethical concerns can also have potential legal implications. Indeed, the public exhibition of plastinated bodies could be interpreted by some as a form of disrespect towards the deceased or as a use that does not comply with the wishes expressed (or presumed) during their lifetime, and this consideration highlights how bioethical principles must also be reflected in the legal framework in order to protect human dignity. The fact that the exhibition was held in various Italian cities despite protests from certain groups suggests a divergence of views within society and, at the same time, a growing awareness among civil society, politicians and academics of the bioethical implications of manipulating and exhibiting human remains.

After reflecting on a topic that has touched the deepest chords of human existence since the dawn of civilisation, the CSB believes that one final observation should come from the healthcare sector, on the basis of the invaluable support provided by narrative medicine.

Indeed, the mediation of a suffering “body” can always be traced back to the sick person who owns it and the persons who take care of him or her. This is well known to healthcare professionals who dedicate their professional activities to the final stages of the sick person’s illness and life.

In this sense, worth mentioning is the experience of a terminally ill patient who was lovingly cared for until the end by a palliative care doctor in a hospice: during those few weeks, a strong relationship based on clarity about clinical issues and shared feelings allowed her to express her fears, uncertainties and many questions about the future fate of her dying body. In one of the patient's last moments of lucidity, the doctor told her: «I promise you that after your death, I will take care of your body». She responded with a smile that was difficult to forget.

The silent dignity of those who leave this world is echoed in the nobility of those who remain by their side to care for them. It is our own flesh, fragile and precious, that reminds us of the right path to follow so as not to fall into the shadow of dehumanisation; it is for this reason that our corporeality demands the utmost respect, against all forms of debasement.

## FINAL RECOMMENDATIONS

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The CSB believes that today it is more necessary than ever for the scientific, bioethical and legal communities to clearly define whether it is legitimate to use the body for the purposes and methods of organising the aforementioned exhibitions, also in light of the massive involvement of young people and school groups who are accompanied on visits by their teachers, who are honestly convinced that they are offering them an unparalleled educational opportunity in the anatomy field. Indeed, the organisers contact the schools in the cities hosting the event, offering affordable packages for classes and presenting the exhibition as the most advanced scientific exhibition currently available. It goes without saying that without all the correct information, visitors and, in particular, educators are unaware of whether or not participation is appropriate. Our experience as educators teaches us that by sharing all available information and ethical and legal assessments, students are able to fully understand the various implications of the phenomenon and exercise their autonomy in making choices<sup>43</sup>. Furthermore, based on psychological reactions and discomfort reported by visitors at several exhibitions and declared by the organisers<sup>44</sup>, it is essential to obtain the consent of parents and guardians for the participation of minors, and it is equally important to inform people who are particularly sensitive or fragile that these are real bodies<sup>45</sup>. Finally, the enrichment of exhibitions of plastinated bodies with provocative attitudes and positions raises a further highly problematic ethical issue. While recognising freedom of expression or the intention to make anatomy more “engaging”, it is essential to balance these objectives with respect for human dignity, clarity of consent and the actual educational purpose of the exhibition. Spectacularisation and provocation for its own sake risk overriding fundamental ethical principles. A more respectful approach focused on anatomical learning, avoiding poses that could be interpreted as irreverent or debasing, would be ethically more desirable.

The complexity and significance of the issue discussed thus far cannot be ignored or underestimated by decision-makers responsible for evaluating whether to accept or reject such exhibitions based on numerous factors that transcend commercial considerations.

Furthermore, by highlighting the risk that these exhibitions may strongly discourage donors for fear that their bodies or organs will be publicly exhibited in plastinated form, the CSB intends to also call on local governments to fulfil their moral duty to strongly support and promote programmes for the donation of bodies to anatomy laboratories for teaching and research purposes.

Similarly, the CSB stresses the individual, institutional, and disciplinary responsibility of managers and consumers of educational and entertainment products in assessing and negotiating the ethical uncertainties related to the exhibitions of corpses. The question that has yet to be adequately

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<sup>43</sup> In this regard, reference shall be made to the findings of the survey reported in the study by A. Raikos et al., *Human body exhibitions... cit.*

<sup>44</sup> D. VON LEHN, *The body as interactive display: examining bodies in a public exhibition*. 2006. *Sociol Health Illn* 28:223–251.

<sup>45</sup> These people, who are particularly emotionally vulnerable, can be permanently affected due to repulsion or analogy with their own personal condition, suffering a negative physical effect: P. LEIBERICH et al., *Body worlds exhibition: visitor attitudes and emotions*. *Ann Anat*. 2006. 188:567–573. It should be emphasised that education in normal and pathological anatomy requires special management by specialists who also have a duty to ensure the physical and mental health of those who watch the exhibition.

answered is always the same: if anatomy exhibitions are educational, what are exhibitions of plastinated bodies teaching us, and at what cost?