Legal and ethical issues of research on the bones of unidentified persons: a comparative perspective

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ABSTRACT: This article looks at the legal and ethical issues arising from scientific advances in the fields of bioarchaeological and forensic research on human bones. While DNA-based technologies allow methods of identification that were unthinkable just decades ago, the question arises as to whether legislation and guidelines governing such research are keeping pace with developments. Similarly, new social concerns continue to emerge, as seen for example in the growth of migration and the associated cultural differences. Comparing the legal situation in two civil-law countries (Italy and Norway) and two common-law countries (the UK and the US), we come to the conclusion that – though maybe desirable – no legislation (hard law) is able to cover all legal and ethical aspects of such research, and that soft law in the form of guidelines, codes of conduct and codes of ethics will continue to fill the legislative gaps. In the same vein, enforcement of these legal and ethical frameworks in the field of research would seem to be more in the hands of ethics committees than of the courts.

KEYWORDS: Law and science; research on human bones; soft law; research ethics committees

SUMMARY: 1. Premise. – 2. Legislation governing research on human bones from a comparative perspective. – 2.1. The civil law approach: the cases of Italy and Norway. – 2.2 The common law approach: the United States and the United Kingdom. – 3. A comparative overview. – 4. How to deal with ethical issues when conducting research on the bones of unidentified persons. – 5. The search for a common approach. – 6. Concluding remarks.

1. Premise

Bioarchaeological and forensic research on human bones yields many benefits for society. Bioarchaeology has brought new knowledge to our history, making clearer, for instance, the development and impact of nutrition and diseases on populations, while forensic anthropology has, in particular, improved the resolution of crimes and missing persons' cases.

The last decades have seen unprecedented growth in this research field.[1]

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[1] For a comparative perspective on the history of physical anthropology, see N. MARQUEZ-GRANT, L. FIBIGER (eds.), *The Routledge Handbook of Archaeological Human Remains and Legislation: An International Guide to Laws and Practice in The Excavation and Treatment of Archaeological Human Remains*, London-New York, 2011. The approach to physical anthropology changed in the majority of Western countries after the Second World War,

When talking about research on human bones, the major advances in DNA extraction and analysis cannot be ignored, especially as bones and teeth are less prone to deterioration than other human tissue. This in turn has led to major advances in identifying corpses, an aspect of importance not only in criminal law but also in private law. For instance, identification can have an impact on the declaration of disappearance made by a court, while certainty that a person is dead has important consequences in inheritance matters.

Obviously, as it is usually the case, law needs to deliver certainty even when factual events are not certain. Legal certainty is indeed important, sometimes to the detriment of factual certainty. This is the reason why presumed death is a legal definition in many legal systems, irrespective of whether in civil law countries or common law countries, and even outside the so-called Western Legal Tradition.[2]

Such legal tools are instrumental in achieving a balance between the interests of the missing person and, for instance, those of his/her heirs. Over time, heirs can be granted certain succession rights, for instance using and benefiting from the property of the missing person, while a missing person can regain access to property on reappearance. Such transient rights are a kind of legal fiction aimed at bringing stability to legal relationships regardless of the factual uncertainty. Obviously, facts remain important: the reappearance of a person will have consequences, perhaps even requiring a new court declaration.[3]

Notwithstanding the legal approach and the legal certainty given to a factual ‘in limbo’ situation to achieve a balance between the interests of the missing person and those of the heirs, an important subjective situation may persist. Being sure that a beloved person is dead can help survivors for various reasons, for instance bringing closure after an agonizing period not knowing the person’s fate.[4]

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with its potential becoming clearer in the 1980’s. Its subsequent development, in particular in the form of forensic anthropology, lead to it still being considered a young discipline, as defined in 2018 by N.V. PASSALACQUA, M. A. PILLOUD, *Ethics and Professionalism in Forensic Anthropology*, London, 2018, 1.

[2] Some legal systems – as in Italy – offer a progressive procedure: from declaring a person to be disappeared, via absent to presumed death: after more than two years of disappearance, a person can be declared as absent, meaning, for instance, that potential heirs can start using that person’s property (temporary possession), albeit without selling it. Succession can be finalised thanks to the presumption of death after 10 years. In the case of reappearance, the rights of bona fide third parties are to be protected. In Italy the articles of the civil code (arts. 48, 49, 58 ss.) are now supported by the Law No. 203 of 2012. In the United Kingdom, the Presumption of Death Act was adopted in 2013, simplifying a situation under which presumption of death was a rebuttable presumption that occurred when there was no evidence that the person was still alive, inquiries were useless and relatives or persons close to the missing person had no contact. In the People’s Republic of China, presumption of death is regulated by Article 46 ss. of the new Chinese civil code of 2021, though remains based on the 1987 General Principles of Civil Law (Art. 23). Besides the general framework, exceptions can occur for instance when a person disappears after a plane crash, a ship sinking or in a war: events that usually makes the declaration of death a shorter process.

[3] In many Western legal systems, reappearance needs to be confirmed by a court, making factual reappearance useless from a legal point of view. This is also the case in the People’s Republic of China (art. 50 Chinese Civil Code).

[4] L.I.M. LENFERINK, M.Y. VAN DENDEREN, J. DE KEIJSER, I. WESSEL, P. A. BOELEN, *Prolonged grief and post-traumatic stress among relatives of missing persons and homicidally bereaved individuals: A comparative study*, in *Journal of Affective Disorders*, 209, 2017, 1-2.

Natural disasters, wars, ship sinkings, – especially ships carrying migrants – impose a reflection on the abovementioned issues. As the International Organization for Migration made clear, for every lifeless body found in the sea and unidentified, there is a family living in anguish, uncertain whether a beloved relative is dead or alive.[5]

In light of the different but relevant impacts that research on the bones of unidentified persons can have, what are the legal and ethical issues to be considered in such research?

2. Legislation governing research on human bones from a comparative perspective

The fact that forensic and bioarchaeological anthropology have developed significantly in the last decades does not mean that the discipline has been subject to the attention of legislators. Indeed, the discipline remains characterized by several grey areas. These can arise for several reasons. The absence of specific legislation regarding research on human remains – and human bones in particular – can be due to the fact that, until recently, recovered bones were hardly considered of scientific importance.[6] While obviously they might have had archaeological relevance, they had little legal relevance, with legislation on archaeological value and cultural heritage protection listing quite generic categories when human remains/bones were involved.[7]

In several countries, legislation regarding the dead was mainly related to the management of tombs and cemeteries, with any related legal suits tending to concern breaches of the right to burial or disturbances of buried bodies.

Few hints could be found in legislation relating to the methods used in scientific research on bones and, in particular, on the bones of unidentified persons. Indeed, in many countries, anachronistic legal rules can be found (or could be found until recently), with little relevance to research methodology, but reflecting ethical concerns.

2.1. The civil law approach: the cases of Italy and Norway

Interestingly enough, in Italy the Royal Decree No. 1592 of 1933, defining a kind of Higher/University Education Code contained Art. 32. Remaining in force until adoption of Italian Law No. 10 of 2020 on the possibility of making one's own body available *post-mortem* for research and educational purposes, this article stated that corpses not claimed by relatives (with the exception of suicide cases)

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[5] S. Robins, *Analysis of Best Practices on the Identification of Missing Migrants: Implications for the Central Mediterranean. Central Mediterranean Route Thematic Report Series*, Geneva, 2019, 6.

[6] "[…] until relatively recently, certainly post-World War II, little could be done with skeletal remains; the science for identifying individuals from bones simply did not exist". And "[…] un-fleshed bones typically were unidentifiable". D. T. Holland, *Since I Must Please Those Below: Human Skeletal Remains Research and the Law*, in *American Journal of Law & Medicine*, 41, 2015, 617, at 620 and 650.

[7] A good example is Italian Law No. 78 passed on March 2001, aimed at protecting the historical heritage dating from World War I. For some scholars, this also covers human remains, see D. Piombino-Mascali, A.R. Zink, *Italy*, in N. Marquez-Grant, L. Fibiger (eds.), *The Routledge Handbook of Archaeological Human Remains*, cit., 255, though the only possible reference is in its Article 1 stating what should be considered as cultural heritage of that time: "ogni altro residuato avente diretta relazione con le operazioni belliche". (art. 1(f)) [all the 'remaining' that have direct relation with the military/war operations].

were kept for education and scientific investigation.[8] This allowed research to be conducted on abandoned corpses. However, these were usually the bodies of the poor, meaning that the dignity attached to such corpses was different from that applying to other dead bodies. On the other hand, there is nothing unethical about using a dead body for research purposes: indeed, unprecedented medical discoveries resulting in improved human well-being have stemmed from such research. What is unethical is the 'selection system'.

Through the adoption of the abovementioned Law No. 10, donating one's body to science is now legally regulated, though obviously still under the informed consent umbrella[9]: i) such consent has to be given in the form prescribed by law;[10] ii) a fiduciary is to be nominated; and iii) the person who has given the consent is to be informed of the fact that such consent can be withdrawn at any time.[11] According to its Article 4, universities and (teaching) hospitals authorized by law may conduct activities in line with the scientific research projects for which the competent ethics committee has given a green light.[12]

In other words, a corpse donated to science will be handled in an ethical manner, with any activities performed on it subject to ethical review. It thus seems that, with this more ethical approach, Italy is now trying to inform people of the possible *post-mortem* scientific value of their bodies, repealing the idea that research may only be conducted on the bodies of the less lucky.

Despite its virtuous aspirations, the new legislation unfortunately neither fills all the legislative gaps nor solves all the concrete problems, especially those related to research conducted on the bones of unidentified persons. Such bones may be found by chance or recovered during planned archaeological excavations.

In the first case, the first person to be informed is the mayor of the place of the discovery. He will then inform the competent judicial authority, the police and the Department of Health. If the judicial authority does not find aspects requiring further investigation (e.g. a suspected crime), the human

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[8] Art. 32 stated that: "cadavers […] whose transport is not performed at the expense of relatives up to the sixth degree or by confraternities or associations who may have made commitments for the funerary transport of associates and those [cadavers] coming from medico-legal investigations (apart from suicides) and not claimed by relatives in the family group, are reserved for teaching and scientific study", this English translation can be found in M.RIEDERER et al., *The legal and ethical framework governing Body Donation in Europe - 1st update on current practice*, in *European Journal of Anatomy*, 16, 2012, 5.

[9] The informed consent principle has its roots in the codes of ethics, *in primis* in the Nuremberg Code. Nevertheless, in Italy the principle was only codified in legislation in 2017 in the form of Law No. 219 of 2017 on Rules on informed consent and anticipatory treatment regulations [Norme in materia di consenso informato e di disposizioni anticipate di trattamento].

[10] As developed also in the codes of ethics, informed consent must be free and revocable at any time, and can be written or recorded, for the formalities required by the Italian law see Art. 1 of Italian Law No. 219 of 2017. For some comments on the informed consent requirements and impact in different laws related to anticipatory treatment regulations and post-mortem treatment (including organs transplants – Law No. 91 of 1999) see G. GIAIMO, *Il lascito del proprio corpo a fini didattici e di ricerca. Il nobile (ma vano) intento della legge 10/2020*, in *BioLaw Journal*, 2, 2021, 171 ss.

[11] See Art. 3 subsection 5 of Italian law No. 10 of 2020.

[12] The competent ethics committees are regulated by the Italian Legislative Decree [Decreto legislativo] No. 211 of 2003, art. 12 subsections 10 and 11 of the Law Decree [Decreto legge] No. 158 of 2012 now Law No. 189 of 2012 and art. 2 of Law No. 3 of 2018. For some details on the discipline see C. MUGELLI, *Le cautele procedurali ed il richiamo ai comitati etici nel caso Cappato*, in *Giurisprudenza italiana*, 5, 2020, 1062 ss.

remains will be examined by a forensic examiner from the Department of Health. The resulting report will then be submitted to the mayor and the same judicial authority to authorize burial in a communal cemetery. Where an archaeological interest is established, cultural heritage legislation applies.[13]

But how is the chance discovery of human bones covered in the Italian context? It would seem that activities/research on human bones are only allowed in the case of suspected crimes or archaeological interest.

Nevertheless, pursuit of such valuable interests as identification suggests something different. To avoid any discrepant treatment and allow standard procedures, research on the bones of unidentified persons is also necessary in cases other than suspected criminal offences.[14] In fact, taking biological samples from unidentified bones can facilitate matching with *ante-mortem* DNA samples, thereby avoiding potential exhumations – a direction wished for by the families of missing persons.[15]

Norway was probably one of the first countries to adopt specific legislation concerning ethics and research integrity: the Research Ethics Act. The first act was adopted in 2007, while the current act entered into force on 1 May 2017. Besides ensuring that public and private research is conducted according to accepted research ethical principles, the statute is the legal basis for the different national Research Ethics Committees covering all disciplines. In the case of research concerning human bones, the Research Ethics Act must be considered together with the guidelines of the National Committee for Research Ethics on Human Remains, a committee established in 2008 by the Norwegian Ministry of Education and Research at the proposal of the National Committee for Medical and Health Research Ethics and the University of Oslo.[16] Here again, human remains, and in particular human bones, are mainly understood as human material that might be unearthed during archaeological excavations, for instance of graves, cemeteries or are retained by museums and collections. But the Committee is also in charge of evaluating studies on human remains (including bones) stemming from "*other investigations*" (emphasis added).[17] When evaluating such research, the Committee must of course take existing legislation into due consideration. As far as the protection of human remains is concerned, the 1978 Cultural Heritage Act and the 1996 Burial Act are important.[18] For in-

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[13] D. Piombino-Mascali, A.R. Zink, *Italy*, cit., 225 and the Regulation of the Mortuary Authorities, Decree of the Italian President of the Republic No. 285 of 1990. As far as the cultural heritage legislation see the Legislative Decree No. 42 of 2004.

[14] The Commissario straordinario del Governo per le persone scomparse [the Government Commissioner for missing persons] in the document No. 0007608 of November 22 of 2017, recalling d.P.R. n. 87 of April 7 of 2016 and in particular Article 6, explains the necessity of a standard procedure also for situations other than suspected crimes in order to make best use of the DNA database and take advantage of the experience already gained thanks to the memorandum of understanding with different Italian regions such as Tuscany, Lombardy and the Lazio region.

[15] In theory, the approach of the Government Commissioner for missing persons is in line with the best practices also suggested in the humanitarian context see S. Robins, *op.cit.*, 48.

[16] https://www.forskningsetikk.no/en/about-us/ (last visited 05/01/2022).

[17] Scope of the Guidelines for Research Ethics on Human Remains available at https://www.forskningsetikk.no/en/guidelines/social-sciences-humanities-law-and-theology/guidelines-for-research-ethics-on-human-remains/ (last visited 10/01/2022).

[18] For a more comprehensive list of relevant legal documents, see B.J. Sellevold, *Norway*, in N. Marquez-Grant, L. Fibiger (eds.), *The Routledge handbook of archaeological human remains*, cit., 322 ss. and the legislation di-

stance, Section 4 of the Cultural Heritage Act lists the monuments and sites which are automatically protected as the archaeological excavation sites of human remains from the period before the Reformation in 1537 as well as Sami finds more than 100 years old. By contrast, non-Sami archaeological remains from the period following the 1537 Reformation, and Sami remains less than 100 years old lack legal protection. Even so, any research on such material, whether protected or unprotected, requires ethical clearance from the National Committee for Research Ethics on Human Remains.

As far as chance discoveries are concerned, police involvement is required. In the event of the bones being considered less than 20 years old, a forensic case needs to be opened. If older, the competent administrative authority is contacted by the police and the site duly secured.[19]

2.2. The common law approach: the United States and the United Kingdom

Turning to the US as an example of a common law country, here we see that the use and handling of human bones is a state competence, meaning that practice varies from one state to the next. Any comprehensive analysis of the discipline involves looking not only at the relevant state legislation but also at the decisions of each state court. Generally speaking, a corpse is a "quasi-property", giving the next of kin the right to burial, as well as the right to receive the deceased body in the same state as it was alive.[20]

As far as legislation is concerned, there is no common approach in the fifty US states. Here again, the existing legislation refers to burial and cemeteries (laws protecting cemeteries and the deceased with the primary aim of preventing illicit grave-robbery). As a result, any legal suits generally concern damage related to the theft or desecration of bodies, though may also involve the improper retention of human tissues by hospitals, coroners or medical examiners.[21] In a similar vein and with a view to remedying the disrespectful treatment of Native Americans' bones, many states have passed laws aimed at duly protecting recovered human remains. Such laws state that attention is to be paid to the kind of bones recovered, allowing Native Americans' descendants to eventually repatriate the bones. Generally speaking (i.e. looking at different states), when human remains are found during excavations, the coroner or other local law enforcement team establishes how old the bones/remains are and whether they are of American Indian origin. If so, possible descendants are to be contacted. Local law enforcement teams and coroners are of course also involved in the event of the chance discovery of human remains, though different legal frameworks apply, dependent on the

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rectly recalled by the Guidelines for Research Ethics on Human Remains (section 8 of the Norwegian edition available at https://www.forskningsetikk.no/globalassets/dokumenter/4-publikasjoner-som-pdf/forskningsetisk_veileder_for_forskning_pa_menneskelige_levninger_a5_low.pdf last visited 10/01/2022).

[19] B.J. SELLEVOLD, *op.cit.*, 323-324.

[20] In this context it can be of relevance to point out that, in a common law country, judicial decisions, on account of the so-called *stare decisis* principle (or doctrine of binding precedent), are sources of law. For a discussion on US common law and court decisions in different state courts please see D. T. HOLLAND, *op. cit.*, 617 ss.

[21] For states case law see D. T. HOLLAND, *op. cit.*, 628 ss. and N.V. PASSALACQUA, M. A. PILLOUD, *op. cit.*, 53 ss.

place of discovery (private, state or federal land). At federal level this aim is covered by the Native American Graves Protection and Repatriation Act (1990).[22]

As for legislation, there is no common approach to research on the bones of unidentified persons. The point of reference for scientific research on corpses, and therefore also on bones, is the Uniform Anatomical Gift Act of 1968, one of the many US uniform laws aimed at achieving uniformity in US law, notwithstanding the federal system. Revised several times, its interpretation varies from one court to the next in an attempt to achieve a balance between the next of kin's right to burial and the need for organs for transplantation. The majority of states now agree with Section 8(a) according to which "in the absence of an express, contrary indication by the donor, a person other than the donor is barred from making, amending, or revoking an anatomical gift of a donor's body or part".[23]

Here again, the cornerstone of the gift is informed consent, meaning that ambiguities remain insofar as research on unidentified human bones is concerned. Taking advantage of such ambiguities, apparently "even today, medical corpses largely come from the poor and/or minority groups in the United States […], with as many as 20% of anatomical corpses going unclaimed in the United States […]".[24]

Lacking specific legislation on the topic, relevant hints can be drawn from the policy on living subjects. Reference is therefore made to the so-called Common Rule of 1991 regulating the criteria for conducting research on living human subjects.[25] Besides ethical considerations, the Common Rule defines the function and role of Institutional Review Boards (IRBs), especially with regard to the criteria used by an IRB when approving research.[26]

Turning to the United Kingdom, until recently the legal position of human remains could only be inferred by looking at common law, namely at court decisions according to which "there is no property in a corpse". As a consequence, a corpse cannot be owned or stolen, making any buying or selling of human bodies or parts thereof 'not unlawful' unless they were illegally obtained. Before the entry into force of the 1832 Anatomy Act, research on human bodies had to cope with a shortage of corpses,[27] while legislation on the deceased mainly related to burial activities. The Anatomy Act made the dead bodies of paupers available for research purposes when no relatives claimed the body.[28]

Exhumations for research purposes became possible once a burial licence had been granted by Her Majesty's Principal Secretary of State for the Home Office. While the 1857 Burial Act did not directly regulate the use and treatment of human remains, in general terms, a burial licence called for due

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[22] For a general discussion on the cultural heritage protection legislation in the US see D.H. UBELAKER, *United States of America*, in N. MARQUEZ-GRANT, L. FIBIGER (eds.), *The Routledge Handbook of Archaeological Human Remains*, cit., 534 ss.

[23] D. T. HOLLAND, *op. cit.*, 640.

[24] See N.V. PASSALACQUA, M. A. PILLOUD, *op. cit.*, 56 and apparently this situation is replicated in Canada.

[25] According to the Code of Federal Regulations Subpart A 46.102 (e)(1) a human subject for the purpose of the Common Rule is only a living subject.

[26] 45 CFR 46.107 (IRB membership), 108 (IRB functions and operations), 109 (IRB review of research), 111 (Criteria for IRB approval of research).

[27] Actually, in the event of murder, the death penalty also entailed the transfer of the murderer's body to anatomists for research purposes. However, numbers of hanged criminals were less than the corpses needed in the medical schools. B. WHITE, *The United Kingdom*, in N. MARQUEZ-GRANT, L. FIBIGER (eds.), *The Routledge Handbook of Archaeological Human Remains*, cit., 483.

[28] For past developments of the Burial Act see B. WHITE, *op. cit.*, 482 ss.

care, attention to decency and respect to be exercised, at least during removal.[29] Revised several times, the Burial Act remains in force. However, its aim did not directly regulate research on human bones, instead protecting buried human remains from unauthorized disturbance, whereby scientific research was considered a justification for disturbing human remains.[30]

Misunderstandings continued to occur in pursuing 21st-century needs and archaeological needs, with the focus remaining on buried human remains and not generally on the use and treatment of any human remains.

The chance discovery of human remains in the UK entails a coroner's inquest if they are less than 100 years old, even if, in practice, no inquest is generally necessary for the remains of a person who died at least 50 years ago: although the remains could still have forensic relevance (e.g. a murder), the persons involved (e.g. the suspected murderer and/or witnesses) would likely be dead or at least very old.[31]

Post-mortem examinations in England, Wales and Northern Ireland are now regulated by the 2004 Human Tissue Act (HTA), under which the principle of consent being given by the individual concerned (or the next of kin) and authorisation by the Human Tissue Authority (foreseen by the Act itself) are pivotal. Of course, the Act also foresees exemptions, where appropriate.[32]

Different to what we have seen in the Italian and US legal systems, the UK act explicitly refers to the removal, use and storage of the human tissues of both the living and the deceased.

Consent is not legally required for research on non-identifiable samples, provided that approval has been granted by the National Health Service Research Ethics Committee (NHS REC). However, REC clearance is project-specific and must include the use of samples not subject to consent (if the samples are identifiable, consent for research is necessary).[33]

Even if the bones of an unidentified person can be defined as 'identifiable', this is probably outside the scope of the HTA which refers to coded or anonymized samples, meaning that the identification case was not considered by the legislative intent. Moreover, the existence of NHS REC approval also implies exemption from the need to obtain a Human Tissue Authority license, as is also the case for human material (for the sake of this paper in the case of bones) coming from the body of a person who died more than 100 years ago.[34]

It seems therefore that the HTA does not cover research on the remains of unidentified (but identifiable) bones. This is probably due to the fact that the HTA was adopted to restore trust and public confidence in medical research after organs and tissue were removed from persons who had died (also children) and were stored without proper consent.[35]

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[29] *Ivi*, 484.

[30] *Ivi,* 487.

[31] *Ivi,* 483 ss.

[32] See the first sections of the Act and for an early comment see D. PRICE, *The Human Tissue Act 2004*, in *Modern Law Review*, 68, 2005, 798.

[33] See section 1(9) of the 2004 Human Tissue Act. See also J. WHITBURN, G. MARSDEN, P. SOORIAKUMARAN, *The Human Tissue Act: A Guide for Clinical Researchers*, in *Journal of Clinical Urology,* 11/1, 2018, 49.

[34] Section 1 (5) of the 2004 Human Tissue Act.

[35] D. PRICE, *op.cit*., 798-799.

This was due to the interpretation of the 1961 Human Tissue Act (repealed by the 2004 Act) under which a person or institution in lawful possession of the body (e.g. a hospital) was authorized to remove and use human material for therapeutic, educational or research purposes provided that "s/he had no reason to believe, having made such reasonable enquiries as were practicable, that either the deceased or any surviving spouse or relative objected to it".[36]

3. A comparative overview

On the basis of this comparative overview, we can state that every legal framework has gaps and/or ambiguities – something that is actually quite common when talking about science (understood in a broad sense) and law. Setting a legal framework for a scientific field is difficult. Scholars have underlined the difficulties encountered in establishing caring, adequate and up-to-date legislation for a scientific field[37]. As scientific issues are prone to evolution, freezing a legal framework in a statute (written legislation) might even worsen the so-called lag-behind issue.[38] Different factors play a role here: there is the difficulty of establishing a dialogue between legal science and 'the other sciences' (such as archaeology or forensic anthropology), while some scholars even list examples where science seems to be an antagonist of the law or the law an antagonist of science. Indeed, it is not rare for science to perceive legislation as hindering or limiting scientific development.[39] Nevertheless, this is often due to a breakdown of dialogue between scientists and policymakers, more often than not impacting public trust/confidence in both law and science.[40]

Research involving the remains of unidentified persons, even within a single legal system, lacks uniformity. The identification of missing persons obviously seems less important (and practicable) when talking about bioarchaeology, but can be relevant with regard to research on more recent unidentified bones, those suffering most from a lack of protection.

Interestingly enough, a common trait is to be found in all the legal systems analysed: the involvement of a research ethics committee.[41]

While the Italian legal system (in particular Law No. 10 of 2020) probably missed the opportunity to establish a framework for research on unidentified human bones and more broadly on human remains, it does now formally involve the ethics committees established within the country.[42]

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[36] D. PRICE, *op.cit.*, 799.

[37] C. CASONATO, *Le 3A di un diritto sostenibile ed efficace*, in V.BARSOTTI (ed.), *Biotecnologie e diritto*, Ravenna, 2016, 29 ss.

[38] M. TALLACCHINI, Scienza e diritto. Prospettive di co-produzione, in Rivista di filosofia del diritto, 2, 2012, 318.

[39] See C. CASONATO, *La scienza come parametro interposto di costituzionalità*, in *Rivista AIC*, 2, 2016, 3 ss.

[40] For a recent publication see W. A. THOMAS, *Science and Law: An Essential Alliance*, London, 2019.

[41] For a comparative overview of ethics committees, see G. LEBEER (ed.), *Ethical function in Hospital Ethics Committees*, Bruxelles, 2002. While these committees have their roots in the exigences related to medical science and clinical experimentation, they are now common in many universities and research institutes. Their mission is to provide guidance to researchers and to authorise research in all disciplines. As far as the universities research ethics committees see A. HOECHT, *Whose ethics, whose accountability? A debate about university research ethics committees*, in *Ethics and Education*, 6, 2011, 253 ss., and R. MCAREAVEY, J. MUIR, *Research ethics committees: values and power in higher education*, in *International Journal of Social Research Methodology*, 14/5, 391 ss.

In the US, the situation is to a certain extent similar and – as explained above – relevant hints can be drawn from the Common Rule which, besides regulating the policy on conducting research on living individuals, also regulates the functioning and the criteria for Institutional Review Board (IRB) research approval. Nevertheless, research on deceased people has recently been considered as low-risk, unfortunately resulting in exemption from IRB approval.[43]

Though the UK 2004 Human Tissue Act has deficits with regard to research on unidentified but identifiable human bones, it relies heavily on the role of the National Health Service Research Ethics Committee (NHS REC). REC approval allows research to be conducted on non-identifiable human bones/samples without consent, avoiding the need to request a licence from the Human Tissue Authority.[44]

In Norway the role of the ethics committees is so important that the guidelines drawn up by them integrate the relevant legislation.

Unsurprisingly, the dialogue between hard law and soft law is nothing new. When considering legislation on living human subjects, the pivotal principle, namely informed consent and its corollaries, stems from a code of ethics, *in primis* the Nuremberg Code.[45]

So, legislative gaps can be filled by looking at the various guidelines, codes of conduct and codes of ethics developed by the authorities or research institutions.[46] They form a common framework for research on human bones (regardless of whether bioarchaeological or forensic research), reflecting

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[42] In Italy the relevance of the ethics committee has been clear since 1990's through the Comitato Nazionale per la Bioetica [National Bioethics Committee]. From 1992 to now the Committee published several opinions pointing out their relevance and the practical problem to be solved (see in particular the opinions on 1992, 1997, 2001, 2017, 2021). Differences between clinical trials committees and clinical practice committees remain unclear, especially from a legislative point of view. EU Regulation 536/2014 on clinical trials on medicinal products for human use calls for European uniformity. The Italian ministerial decrees and ordinary legislation for the specific implementation of the directly applicable EU Regulation was a missed occasion for Italy to tidy up the discipline which is now scattered in Ministerial Decree of 8 February 2013 on the criteria for the composition of ethics committees and their functioning [Criteri per la composizione e il funzionamento dei comitati etici], Law No. 189 of 8 November 2012, and Law No. 3 of 11 January 2018. Moreover, the European framework programmes for funding European research also encouraged the establishment of university research ethics committees.

[43] N.V. Passalacqua, M. A. Pilloud, *op. cit.*, 52-53.

[44] J. Whitburn, G. Marsden, P. Sooriakumaran, *op. cit.*, 48 ss.

[45] The Nuremberg Code is considered as the starting point of ethical principles when conducting research on human subjects. The Code is to be seen as a reaction to the experiments performed by Nazi doctors during World War II. The principles have since been further elaborated in many other documents, such as the Declaration of Helsinki and the Belmont Report. In many countries they continue to function as soft law, though are commonly accepted in the majority of legal systems. The impact of the Nuremberg Code and its developments on the human remains topic is dealt in D. T. Holland, *op.cit.*, 622.

[46] Among the main codes of ethics in the bioarchaeological and forensic research on human bones there are: British Association of Biological Anthropology and Osteoarchaeology (BABAO) Code of Ethics (revised version 2019), the Scientific Working Group for Forensic Anthropology (SWGANTH) Code Of Ethics and Conduct (revised in 2013), the Guidelines for Research Ethics on Human Remains of the Norwegian Committee for Research Ethics on Human Remains (2018), the Codice di etica e deontologia per i ricercatori che operano nel campo dei beni e delle attività culturali [the ethics and deontological code for researchers working in the field of cultural goods and activities] drafted by the Commission of ethics and research integrity of the Comitato nazionale delle ricerche [Italian National Research Council] (2019).

the simple fact that the bones of a now dead person have – or at least should have – a special status. As far as forensic anthropologists (and related legislation) are concerned, it goes without saying that there are overriding interests (e.g. public security) possibly facilitating or justifying research on human bones. But even here, ethical considerations not finding a satisfactory solution in a forensic context must always be respected.

In the same vein, the ethics committees of the different legal systems should oversee the proper handling of human remains on a case-by-case basis, thereby to a certain extent obviating the law-lag issue.

4. How to deal with ethical issues when conducting research on the bones of unidentified persons

Scientific developments not only bring legal challenges, but very often also imply ethical challenges, with new biotechnologies obliging researchers to reflect on their application with a view to understanding to which point research and science can advance and still be ethically compliant.

When discussing research on human bones, the documents offering the greatest help are usually codes of ethics, codes of conduct or guidelines, in other words 'soft law'. They are usually drawn up by ethics committees or research integrity commissions within universities or other research institutions.

In our specific case, even if a difference continues to be made between archaeological and forensic research, they generally list principles common to both disciplines.

In fact, even if archaeological and forensic research on bones appears different, the subject under study is always human bones. The only difference is their age.[47] While human dignity does not disappear with the death of a person, legislation and codes of ethics regarding research on human living subjects can help in responding to some ethical issues relating to the dead.[48]

Below I will try to list the ethical principles to be taken into account when conducting research on unidentified but identifiable human bones.

Respecting human dignity should be interpreted as also showing respect for a person who has died. When talking about people still alive, this primarily entails respect for their instructions about what is

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[47] The age boundaries between old and non-old bones are not uniform worldwide. For instance, in the UK a bone is considered as old if it has more than 100 years old, see section 1(5) of Human Tissue Act 2004. By contrast, age boundaries in the USA are governed by state legislation, meaning that there are different approaches in different states, for instance 50 years in Minnesota and 150 years in Iowa. D.H. UBELAKER, *United States of America*, cit., 536.

[48] For different reasoning on the topic which then arrive at the same conclusions see L. DE TIENDA PALOP, B.X. CURRÁS, *The Dignity of the Dead: Ethical Reflections on the Archaeology of Human Remains*, in K. SQUIRES, D. ERRICKSON, N. MÁRQUEZ-GRANT (eds.), *Ethical Approaches to Human Remains. A Global Challenge in Bioarchaeology and Forensic Anthropology*, 2019, corrected publication 2020, 19 ss. See also C. MOON, *What Remains? Human Rights After Death*, in K. SQUIRES, D. ERRICKSON, N. MÁRQUEZ-GRANT (eds.), *op. cit.*, 39 ss. and ODDBJØRN SØRMOEN, *'To balance the rights of the living and the dead': Reflections on issues raised in the Norwegian National Committee for Evaluation of Research on Human Remains*, in H. FOSSHEIM (ed.), *More Than Just Bones. Ethics And Research On Human Remains*, 2012, 11 ss. available at https://www.forskningsetikk.no/ressurser/publikasjoner/more-than-just-bones--ethics-and-research-on-human-remains/%20(last%20visited%2010/01/2022).

to happen to them once they die, insofar as such instructions are known. If this is not the case, relatives can play an important role, but here again they must be identified.[49]

When *post-mortem* instructions are impossible or impracticable to obtain (e.g. in the case of unidentified bones) either from the records of the dead or from their next of kin, it should always be borne in mind that the object of a study is also a subject of dignity and that, even if unidentified, there may be cultural and/or religious reasons influencing the *post-mortem* handling of human remains, including bones. For this reason, as soon as the (accidental or non-accidental) discovery is made, attention should be paid to the context of the discovery.[50] When information cannot be inferred directly from the deceased or from relatives, a lot can be gained by consulting (ethnic) experts in an attempt to avoid mishandling.[51] Understanding and having the same consideration and respect for groups different (from a cultural and/or religious point of view) from the one to which the researcher belongs is at the core of ethical considerations,[52] as is made clear by the Norwegian Committee for Research Ethics on Human Remains, which not only underlines the importance of respect but also that of handling remains from all countries and areas with the same respect.[53]

This leads to another important principle: avoiding discrimination when conducting research.[54] When talking about studies involving forensic anthropologists, this principle can be divided into two main strands. The first is concerned with the scope of the research, stating that it should have no discriminatory intent (e.g. any research aimed at demonstrating the racial superiority of an ethnic communi-

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[49] The Nuremberg Code made clear the centrality of dignity, important observations can be found in G. RESTA, *La dignità*, in S. RODOTA`, P. ZATTI (eds.), *Trattato di Biodiritto*, Milano, 2010, 259. Potential research might be focused on discovering new identification techniques, meaning that the possibility of research examinations of unidentified human bones leading to concrete identification even in non-crime situations should be considered.

[50] Guidelines for Research Ethics on Human Remains of the Norwegian Committee for Research Ethics on Human Remains (2018).

[51] Consultation with experts on the presence of a particular ethnic group can be pivotal: «Sometimes the researcher will have access to the community in question through historical knowledge. Other times the community will be accessible in the form of living representatives. Even if there are many interpretative possibilities and difficult grey zones as regards differentiating between the individuals who rightfully belong to the same community, this is something that a researcher has a duty to take seriously and to be fully informed about». See the English version of the Guidelines for Research Ethics on Human Remains of the Norwegian Committee for Research Ethics on Human Remains (2018) available at https://www.forskningsetikk.no/en/guidelines/social-sciences-humanities-law-and-theology/guidelines-for-research-ethics-on-human-remains/ (last visited 10/01/2022).

[52] See H.J. FOSSHEIM, *Research on Human Remains: An Ethics of Representativeness*, in K. SQUIRES, D. ERRICKSON, N. MÁRQUEZ-GRANT (eds.), *op. cit.*, 63-64. In fact, the Norwegian Guidelines for Research Ethics on Human Remains (2018) states that "[t]hroughout the course of history, some groups have been oppressed, humiliated or in some other manner badly treated by the majority society or national authority. These groups may have reasons for being particularly sensitive to research which in one way or another represents a risk of this history being continued or repeated. Part of this history is often that research, too, has played a discriminatory role. Research on remains of members of these groups demands insight into history, extreme caution and willingness to communicate and hold a dialogue".

[53] See https://www.forskningsetikk.no/en/guidelines/social-sciences-humanities-law-and-theology/guidelines-for-research-ethics-on-human-remains/ (last visited 10/01/2022)

[54] See point 1(g) of the Codice di etica e deontologia per i ricercatori che operano nel campo dei beni e delle attività culturali available at https://www.cnr.it/sites/default/files/public/media/doc_istituzionali/codice-etica-deontologia-per-ricercatori-patrimonio-culturale-cnr.pdf?v=03 (last visited 20/01/2022).

ty over another).[55] The second relates to the requirement to conduct research objectively and is strictly linked to the conflict-of-interest concept (e.g. tailoring results to support one opinion to the detriment of another).[56]

Respect should also be shown for future generations,[57] especially when the research involves destructive analysis. Ethically speaking, destructive analysis should only be performed when no other non-destructive methods are available and only if the research purpose warrants such. In other words, research purposes and scope should be so relevant as to justify the destruction of the specimen. The reason why this involves respect for future generations is twofold: on the one hand, future scientific developments may allow non-destructive analyses achieving the same result; yet if the specimen is no longer available, problems can arise. On the other hand, bone specimens are finite, meaning that destructive analysis may also imply the non-replicability of the experiment in question and therefore of the results. Taking all such considerations into account automatically demonstrates respect for the rarity or uniqueness of the material.[58]

This can be of a certain importance. In fact, the specific ethical principles pertaining to this field need to be merged with research integrity principles.

One of the most important codes defined at European level is the European Code of Conduct for Research Integrity. Initially drawn up in 2007, it was revised in 2017, it is also used as a reference by the European Union’s main research funding programme.[59]

The principles above concern research methodology, but this is not the only important factor. The whole aim of research is to promote people’s understanding of the context in which they live. For this reason, not only the methodology, but also the economic and professional feasibility as well as the scope, aims and impact need to be evaluated when discussing ethical issues.[60]

For instance, while a project may be scientifically valuable, if the available funding is insufficient, it may be unethical to approve it. Similarly, professionalism (as well as the availability of proper infrastructures) is a key element in all disciplines: good research ideas cannot be implemented by unprepared researchers. If a project’s scope and aims do not go hand in hand with an advancement in a particular discipline for the good of society, the balance between research risks/harm and benefits will always be to the detriment of the researcher and ethical approval will not be obtained. Risks and

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[55] The case of the Sámi population can be one example: I. HOLAND, I. SOMMERSETH, *Ehical issues in the semi-darkness. Skeletal remains and Sámi graves from Arctic Northern Norway,* in H. FOSSHEIM (ed.), *More Than Just Bones*, cit., 21ss.

[56] N.V. PASSALACQUA, M. A. PILLOUD, *op. cit.*, 8.

[57] K. SQUIRES, T. BOOTH, C.A. ROBERTS, *The Ethics of Sampling Human Skeletal Remains for Destructive Analyses*, in K. SQUIRES, D. ERRICKSON, N. MÁRQUEZ-GRANT (eds.), *Ethical Approaches to Human Remains,* cit., 265 ss.

[58] Ethical principles can initiate a virtuous circle. In fact, respect of future generations may also entail respect of the next of kin (where they are known) when trying to preserve skeletal integrity as far as possible, see K. SQUIRES, T. BOOTH, C.A. ROBERTS, *op. cit.,* 267.

[59] Rules for the current framework programme are to be found in Regulation (EU) 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination, and repealing Regulations (EU) No 1290/2013 and (EU) No 1291/2013.

[60] For a general reference see the Preamble of the European Code of Conduct for Research Integrity (2017).

potential harm can occur when conducting research, meaning that they need to be managed and balanced.[61]

A further key element is the dissemination of findings. This can imply the publication of research papers and/or the use of institutional repositories for research data.

In the field in question, any publication should, for instance, avoid undue harm: a shocking picture should only be published when it adds a relevant aspect otherwise unexplainable.[62] Research data should as far as possible by anonymized. Following the integrity principles drawn up by the European Code of Research Integrity, «Researchers, research institutions and organisations ensure access to data is as open as possible, as closed as necessary», whatever the case, the data made available should, where appropriate, be Findable, Accessible, Interoperable and Re-usable (the so-called FAIR principle) in order to avoid any re-funding of similar research in the future. Respecting all or, where appropriate, part of this principle make results verifiable and allows progress in research.[63]

Notwithstanding the importance of research results, it should be pointed out that research on human bones entails privacy issues. In the event of DNA extraction from unidentified bones, privacy issues may at first sight seem less relevant. But DNA can tell us a lot about not only the deceased, but also their relatives.[64] Where research on bones is instrumental to identification, DNA data is collected in the hope of matching it with other samples, leading to identification. Such samples could be part of the *ante-mortem* data. Guidelines in the forensic field seem to be moving in the direction of an *ante-mortem* collection to improve the identification process (e.g. as soon as a person is posted as missing and a relative contacts the competent authority, it is now quite common for the latter to ask for something featuring the DNA of the missing person).[65] Of course, in the event of a natural and/or human disaster this is not always possible and *post-mortem* collection is still very important (e.g. the voluntary collection of DNA by relatives of the missing person).[66]

To comply with the research integrity principle, sensitive data should be stored with limited access only for the time necessary for the research and subsequently destroyed.[67]

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[61] Each research project application must explain how risks are addressed and eventually managed. They cannot be ignored if research integrity principles are to be respected, see point 2.4 of the European Code of Conduct for Research Integrity.

[62] Specific comment on the issue can be found in N. Márquez-Grant, N. V. Passalacqua, *Ethical Concerns in Forensic Anthropology*, in K. Squires, D. Errickson, N. Márquez-Grant (eds.), *Ethical Approaches to Human Remains,* cit., 354 ss. Rules related to exhibition of human remains in museums should follow the same principle. In this context the international code of ethics (soft law) to be taken into account is the International Council of Museums (ICOM) code of ethics.

[63] See section 2.3 of the European Code of Conduct for Research Integrity

[64] S.A. Roodenberg et al., *Ethics of DNA research on human remains: five globally applicable guidelines*, in *Nature*, 599, 2021, 41.

[65] The Commissario straordinario del Governo per le persone scomparse, cit.

[66] S. Robins, *op. cit*., 47 ss.

[67] International Committee of the Red Cross, *Missing People, DNA Analysis and Identification of Human Remains*, Geneva, 2009, 42. The starting point of the European approach could find its basis in recital 27 of the EU Regulation 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, which states: "Member States may provide for rules regarding the processing of personal data of deceased persons".

Last but not least, even if not comprehensive, due account should always be taken of the relevant legislation. When human remains are transferred to another country, ethical compliance may mean respecting stricter legislation. One should therefore avoid bringing bones to countries where practices allowed elsewhere are forbidden.[68]

Different legal and ethical approaches can obviously pose legal and technical problems when running a DNA database. This can be understood in a migration context where different legal systems could be involved. Discrepancies can regard the understanding of the right of privacy or technical problems arising for instance from linking up different databases.[69]

5. The search for a common approach

As we have seen, codes of ethics and guidelines drawn up by archaeological and/or forensic associations (private or public) are an important source of soft law, filling legislative gaps. This seems to be one of those cases where soft law acts as post-law, namely as a hermeneutic tool.[70]

With regard to research, the relevance of ethics committees (whether known as research ethics committees, Institutional Review Boards, or otherwise) should also be recognized. While their organisation varies depending on the country in question, their functions are similar, namely legally and ethically evaluating research projects. Their importance is demonstrated by the fact that they are now the organs to which also policymakers refer when dealing with sensitive cases. They have many advantages. First, their position/role is based on the analysis of concrete cases, in most cases giving rise to reasonable and accommodating solutions. Second, they are usually made up of experts from different disciplines, thus allowing an interdisciplinary and cross-sector approach – a circumstance promoting openminded analysis, solutions taking different interests into account, and direct dialogue with researchers. Third, they can usually provide training and educational activities in addition to drawing up specific codes of conduct/codes of ethics/guidelines.[71]

Being in touch with research projects allows effective codes of conduct to be drawn up, understood as living documents updated regularly and allowing for local or national differences in their implementation – features hardly achievable through written legislation, but fundamental when dealing with developing sciences. As soft law, codes of conduct are not enforceable, though their persuasive role is not to be underestimated.[72]

In common law countries, ethics committees and ethics appraisal have a longer tradition. Described above for the USA and the United Kingdom, the legal approach requiring the participation of an ethics committee in cases in which obtaining consent is impracticable bears witness to the influence of

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[68] British Association of Biological Anthropology and Osteoarcheology (BABAO) Code of Ethics (revised version 2019).

[69] S. ROBINS, *op. cit.*, 14.

[70] M.R. FERRARESE, *Soft law: funzioni e definizioni*, in A. SOMMA (ed.), *Soft law e hard law nelle società postmoderne*, Torino, 2009, 76-77.

[71] See the US Common Rule at 45 CFR 46.107 and the Italian Ministerial Decree of 8 February 2013 on the criteria for the composition of ethics committees and their functioning. See also C.A. SCHUPPLI, D. FRASER, *Factors Influencing the Effectiveness of Research Ethics Committees*, in *Journal of Medical Ethics*, 33/5, 2007, 294.

[72] M.R. FERRARESE, *La* governance *tra politica e diritto*, Bologna, 2010.

the Declaration of Helsinki.[73] Nevertheless, the gaps and ambiguities of the US approach mean that deceased individuals are not typically included in ethical research practice and such projects will often be considered exempt and will receive little ethical oversight – a dangerous deviation.[74]

As we have seen, recent developments in the discipline have not really solved the problem that (old) bones are considered as something different from a body, even though recent scientific advances have demonstrated how important the discipline can be in the private law field and, in particular, in the humanitarian one. Such archaeological and forensic research thus deserves greater attention.

Overriding interests seem also to be recognized outside the forensic environment. For instance, there is the suggestion of conducting research and collecting data (also genetic data) in cases in which there is no legal obligation to intervene. For missing migrant cases (outside the scope of International Humanitarian Law (IHL) and Human Rights Law (HRL)) and more generally in cases of presumption of death, each state seems to have the obligation to search for the remains, identify them and return them to the families, with due respect for cultural customs.[75] Many experiments using different identification techniques involve the collection of *post-mortem* data, possibly entailing research on unidentified bones. Standardization of ethics-oriented methodologies could do away with other difficulties such as obtaining testimonies from survivors or collecting personal belongings, especially for crime-related cold cases or other past events. Similar attitudes are also emerging from protocol agreements and memoranda of understanding within various local or national authorities.[76]

While respect of ethical principles is necessary when conducting research on the bones of unidentified persons, it is not sufficient in itself. The use of standard – and thus comparable – procedures remains distant. For instance, if the research entails DNA extraction, a matching with DNA samples is necessary – and this usually also involves the family of the missing person permitting such *post-mortem* data matching.

This brings us to the issue of DNA databases and their interaction. Yet, the lacking availability of an international DNA database is only part of the problem, for example in the case of missing (presumed drowned) migrants. While collecting information about them is desirable at both national and transnational levels, countries follow different data collection paths, thereby impairing an effective dialogue. This is why in many countries more than proceeding with a 'wholesale' discipline, i.e treating all missing person cases in accordance with the same legal and ethical principles, go on with a 'retail' approach, i.e. focusing on striking events or cases drawing special media attention.[77] Though high-quality research is important, it can be frustrating when scientific efforts are nullified by a lack of

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[73] The Declaration of Helsinki (1964) recognises a distinction between clinical research and nontherapeutic clinical research in which there is not therapeutic benefit to the person subjected to research, nevertheless the purely scientific aim shall always be balances with the expected benefits for the society. See D. T. HOLLAND, *op. cit.*, 625.

[74] N.V. PASSALACQUA, M. A. PILLOUD, *op. cit.*, 53.

[75] S. ROBINS, *op. cit*., 29.

[76] *Ivi*, 13 and 23, see also Commissario straordinario del Governo per le persone scomparse [the Government Commissioner for missing persons], Piani provinciali per la ricerca delle persone scomparse [provincial memorandum of understanding for searching missing persons], available at https://www.interno.gov.it/sites/default/files/2021-01/circolarepersonedisperseprot.pdf (last visited 13/01/2022).

[77] This is, for instance, the case of Italy for the ship sinkings of 3 and 11 October 2013, see S. ROBINS, *op. cit*., 19.

centralised data storage facilities even within the same country, with many university departments and/or other laboratories working independently of national authorities.[78]

The availability of shared ethical principles on conducting research on unidentified human bones can be a first step towards solving (not only migrant) identification issues, while probably also helping restore trust in science.

A recent investigation in Mexico demonstrated how terrible a system can be in the face of unethical behaviour, breaching confidence in institutions and in some ways in a centralized research system. In 2013, Mexico established a central DNA laboratory with access to genetic data stored by the Public Prosecutor's Office, the only body permitted to use the data (for judicial purposes). Given the sensitivity of the data, access naturally needed to be limited and confidential. The genetic data was used in matching DNA found in bones recovered from common graves with DNA from relatives who had voluntarily given their consent with a view to finding out what had happened to their missing loved ones. Directors and other persons close to the higher levels of the political establishment were found to be selling genetic codes to the desperate families of the missing persons, bypassing the Public Prosecutor's Office and infringing ethical and legal rules.[79]

6. Concluding remarks

In the absence of clear legal rules, ethics have an important role to play as part of a regulatory framework.

Whether in a country like Italy that recently adopted new legislation directly pertaining to research on dead bodies, the UK and USA which, as common law countries, are more attentive to practice from which rules are inferred, or Norway where its legal system is apparently keen on regulating research integrity principles by (hard) law, while leaving specific aspects to soft law (e.g. codes of ethics), all countries make specific reference in their legislation to research ethics committees (with different names). This often results in an ongoing dialogue between hard law and soft law over better interpreting the complexities of a given scientific field. While an international standardisation of procedures is conceivable and desirable, each country should first do everything to standardise procedures within its own boundaries.

Yet differences will remain between countries on account of legal and cultural traditions. For instance, the European approach to privacy differs from that of the US,[80] the backgrounds of forensic and bioarchaeological anthropologists vary a lot, and, overall, legislation is still very much country-oriented, due also to historical experiences (e.g. colonisation, Norway's Sami population, etc.). But here again, common ground exists in the field of ethics, even if ethics is a subject not frequently discussed in the respective courses.[81] Many of the issues discussed stem from the relatively young nature of the disciplines in question. When public confidence in a scientifically and ethically compliant

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[78] S. Robins, *op. cit.*, 21-22.

[79] M. J. Castañeda, *Una investigación revela el oscuro mercado para analizar restos humanos en México*, in *EL PAÍS México*, 14 December 2021 see also D. Mastrogiacomo, *Messico, traffico di Dna per lucrare sul dolore dei parenti delle persone scomparse*, in *laRepubblica*, 20 December 2021.

[80] As for human remains and privacy rights in the US see D. T. Holland, *op. cit.*, 644.

[81] See N.V. Passalacqua, M. A. Pilloud, *op. cit.*, 7ss.

context exists or is generated, a virtuous circle can be created between (hard and soft) law, science and society.

As far as the ethical principles covering research on unidentified human bones are concerned, hints can be drawn from the legislation governing research on the living and on the dead, and soft law such as guidelines and codes of practice. Following ethical principles when conducting research on the bones of unidentified persons means, in the event of identification, also paying attention to the ethics regarding the next of kin. For instance, in the case of human bones recovered after a migrant boat has sunk, when a researcher invests time in investigating the context (provenance of the boat and other non-forensic elements helping to identify the provenances of the drowned), specific cultural and religious beliefs are more likely to be respected (e.g. choosing one bone instead of another, if scientifically acceptable, as in some cultures the a bone can be more representative of the once living person than other bones). If destructive analysis is necessary and acceptable in consideration of the beneficial impact of the research for society (including the family of the missing person), in the event of a successful identification, not only will the family find relief in the possibility of having the corpse back, but most likely undue harm will be avoided and the relatives' rights (e.g. right of burial) will be respected.[82]

Upholding the study, respect and implementation of ethical principles is synonymous with promoting a research culture fuelling genuine advancement of the discipline. Making ethics committees relevant in discussing research on the bones of unidentified persons will foster dialogue between different disciplines and help solve non-trivial ethical issues in a constructive manner. Ethics committees are not intent on impairing research, but instead on guiding researchers towards ethically compliant research paths.

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[82] "[…] analysis and research conducted on unidentified human remains is presumptively permissible, provided that the research does not otherwise interfere with, or prevent, the next of kin from receiving remains – in whatever form they presently exist – […]", D. T. HOLLAND, *op. cit.*, 651.