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## Twenty years of forensic archaeology and anthropology of the Spanish Civil War (1936–1939) and Francoist Regime

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Although the investigation of human rights cases often comes late, especially as many living relatives become older, the current investigations searching for victims of the Spanish Civil War (1936–1939) and the Francoist regime that followed until the end of the 1970s, bring better methods of search and identification, which would not have been available decades ago. In particular, the multidisciplinary work since the year 2000 by social anthropologists, historians, (forensic) archaeologists, (forensic) anthropologists, forensic pathologists, genealogists and geneticists (see Ref. [1]). It was in the year 2000 when the first scientific investigation of a Spanish Civil War mass grave took place, and since then over 850 graves or mass graves out of the estimated 2000 in Spain have been excavated, totalling almost 11,000 victims recovered; from an estimated 130,000 (Preston, 2012) to 150,000 (Espinosa, 2010) civilians who are thought to have died and whose bodies are still missing [2]. Whilst funding has been an issue since this was halted by the government in 2011, the current government passed a law in 2020<sup>1</sup> providing financial support and allocating a certain amount to each region in Spain. This money is and will be destined to the search and excavation of mass graves, research projects, education, outreach activities, and memory. Thus, according to government figures for the coming 4–5 years, the potential of exhuming 20,000–25,000 bodies is possible and a certain amount of money has been given to those regions in Spain with at least one grave.<sup>2</sup>

Of course, the archaeology of the Spanish Civil War is not all about finding the missing, presumed dead. There are many elements around memory and remembrance, the removal of certain Francoist street names as well as monuments, and the study of the military conflict in

itself and its legacy such as trenches, pillboxes, prisons, concentration camps and forced labour camps [3–6].

Within the humanitarian work of searching, locating and identifying the remains of the victims, in particular Republican civilians, the role of forensic science, forensic medicine and in particular forensic archaeology and forensic anthropology has increased in these investigations at the request of the families of the disappeared [1,7–9]. This has provided specialisation and immense experience for the Spanish teams working on these investigations. This increase in the search and identification of 20th century conflict casualties also runs in tandem with the search and recovery of WWI and WWII military casualties in Europe and elsewhere, although there is much variation in practice in the different countries (see Ref. [10]). The recovery of military dead has also become an issue recently in Spain. In Catalonia, large, systematic exhumations sponsored by the regional government, have retrieved the bodies of hundreds of soldiers from cemeteries near dressing stations,<sup>3,4</sup>. Efforts are underway to identify and rebury the fallen in a dignified manner.

This twenty year (2000–2020) journey in the application of forensic archaeology and anthropology to investigate the location of the deceased, to enable the recovery of human remains and their identification, has seen a number of processes and protocols, laws, changes in funding, education, political influence in the tasks of search and exhumation, ethical dilemmas and a number of other challenges (see Refs. [11,12]). Whether justice is sought or not, the primary aim is to provide a dignified (re)burial for the deceased and the return of the remains to their relatives where possible, which are often the direct surviving children or grandchildren. This article provides a current state of affairs,

<sup>1</sup> [https://english.elpais.com/historical\\_memory/2020-07-30/spain-to-release-funds-for-mass-grave-exhumations.html](https://english.elpais.com/historical_memory/2020-07-30/spain-to-release-funds-for-mass-grave-exhumations.html) (accessed May 2021).

<sup>2</sup> <https://elpais.com/espana/2021-03-04/el-gobierno-adjudica-15-millones-de-euros-para-la-apertura-de-114-fosas-del-franquismo.html> (accessed May 2021).

<sup>3</sup> <https://www.lainformacion.com/espana/menores-en-la-batalla-del-ebro-una-fosa-con-restos-de-la-quinta-del-biberon/2834256/> (accessed June 2020).

<sup>4</sup> <https://www.elindependiente.com/politica/2018/07/21/recuperan-los-restos-246-soldados-la-guerra-civil-fosas-del-ebro/> (accessed June 2020).

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particularly relating to forensic archaeology (see Ref. [13] and forensic anthropology (see Ref. [14], in this case linked to the human remains of those civilians killed by the rebel forces (or rebel army) or Francoist regime (see Refs. [1,7]. Less attention has been given to the victims of the Republican repression as they were recovered, identified and reburied after the war, many of them, since 1959, in the Valley of the Fallen [15]. An unknown number of Republicans (thousands, in any case) were also buried there; whilst the recoveries of combatants have been fewer (see Ref. [16]. The work has been mainly driven by relatives, family associations and ultimately local institutions (see Ref. [11].

Most of the victims were executed extrajudicially between 1936 and 1948, resulting from the application of the so-called War Declaration Decrees (Bandos de Guerra). At the same time, from 1937 many of the detainees were dealt with by court martials in a pseudo-judicial system that functioned until 1945. Extrajudicial executions recrudesced in the late 1940s in the context of a brutal counterinsurgency campaign launched by the Franco regime to quench the leftist guerrillas. Many mass graves of guerrilla fighters with evidence of these summary executions by the armed forces have been exhumed [17]. Other deaths occurred while in custody. The search tasks (see Ref. [18], have focused on two main areas primarily: cemeteries; and clandestine graves outside cemeteries. In the former, these have been individual graves within cemeteries, graves with multiple individuals or mass graves in a clandestine location, and both within a Catholic cemetery or Civilian part of a cemetery [1]. Outside cemetery walls, human remains have been found in ditches by the roadside; mass graves in field, forests; and depositions in wells, caves, mines and other locations [9,19].

These investigations tend to start by exploring the available historical records and at times by social anthropologists interviewing the families of the missing (see Refs. [11,20,21]. This is followed by an archaeological evaluation of the area to be searched. The team defining the search parameters, the planning and initial excavation is often comprised by a team of archaeologists, anthropologists, pathologists and other professionals and non-professional volunteers. Exhumations and historical research have shown that 4% of those assassinated were women,<sup>5,6</sup>. Many were persecuted, tortured and raped. In fact, much research has focused now on the repression of the survivors too, who are also victims of the Civil War and the Francoist Regime. This repression towards women was related to their political affiliation or because their husbands had escaped, so that in some cases even pregnant women were killed [22,23]. A study by Muñoz-Encinar [22] <sup>7</sup> in the Spanish region of Extremadura, has shown that there was a different burial treatment between women and men, with the former often buried last and sometimes naked.

The excavation and exhumation of human remains killed during the war and the years after that, has yielded a number of objects and personal effects that has helped with the identification tasks (see Ref. [21]. Identification, thus, has resulted where possible from a combination of knowing who is buried there through documentary sources and witnesses, the archaeological exhumation and establishing in situ which object belongs to which individual, the anthropological analysis of the human remains to obtain a biological profile (age-at-death, sex, stature, any unique identifying features), and when possible, DNA analysis (see Refs. [24,25]. From the individuals that have been exhumed in Spain, Herrasti [26] found that most were males, ranging from adolescents to over 50 year-olds.

Once the identification process has been concluded and if identified

positively, the remains are returned to any surviving relatives for reburial. At times, it may be necessary to bury them in a dignified common grave if identification is not possible.

In addition, trauma has been documented on the remains. The analysis of trauma serves for judicial purposes if this becomes judicial in the future, but also because the relatives want to know what happened. Trauma analysis has indicated that most of those who were executed had gunshot wounds to the head, but patterns vary, depending on the execution squad and the context (judicial/extrajudicial) (see Refs. [27, 28].

The information obtained by forensic archaeologists and anthropologists has also been educational, trying to reconstruct what happened after so much silence or lack of awareness in the young generation. There are efforts for this recovery of historical memory and reparation in the arts including dance, theatre, poetry, music which has stemmed often from the work undertaken by the forensic scientists.

The work carried out in Spain can be considered forensic archaeology and forensic anthropology in that: a) it may go to court in the future so forensic protocols such as chain of custody are followed; b) if there are any misidentifications, this could be questioned in court, c) the work undertaken by geneticists is often in forensic laboratories; d) sometimes the judge and police have been involved after the discovery, e) there is more involvement by the institutes of legal medicine. Overall, it is humanitarian work, or perhaps as others may term this, 'Forensic Humanitarianism' or 'Humanitarian Forensic Action' [29], and work that has repercussions and echoes in other countries which are also starting this process of uncovering their past and look to Spain and other countries to see how the process of exhumation started, and how they should plan for training and capacity building. It is late, but perhaps too at the right time.

#### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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<sup>6</sup> <https://www.lavozdelarepublica.es/2020/08/castigadas-mas-alla-de-la-muerte-una.html>

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