THE LEGISLATIVE AND ETHICAL CHALLENGES SURROUNDING THE DNA ANALYSES OF ARCHAEOLOGICAL HUMAN REMAINS IN TURKEY

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TURKEY: A RICH REPOSITORY OF ANCIENT-DNA

For millennia, Anatolia has been a bridge for migrating human populations and has witnessed the domestication of different animals and plants whose genomes are the source of many research projects.

Currently, 207 archaeological excavations, 224 rescue excavations and 135 archaeological survey projects are being conducted in Turkey.

The vast collection of archaeological human remains collections within Turkey range from the Paleolithic era to World War I and present a great research potential that can shed light on the history of this region and the human populations that inhabited it. As part of the Fertile Crescent, Turkey is a rich repository for ancient-DNA (a-DNA).

To study this rich history the first ancient-DNA laboratory was established in 2012 at the Middle Eastern Technical University in Ankara with the support of the Scientific and Technological Research Council of Turkey (TÜBITAK). Currently, this is the only ancient-DNA laboratory in Turkey.

CHALLENGES OF DNA RESEARCH: LEGISLATION AND LABS

The management and study of archaeological human remains in Turkey has many challenges, most which originate from limited legislation, religious beliefs, and the lack of professional frameworks. The Ministry of Culture and Tourism (MoCT) in Turkey has no specific standards and guidelines concerning the excavation, study or display of archaeological human remains.

The current heritage law (2863) defines archaeological human remains (and other artefacts) as “state properties” and does not permit archaeologists to send human remains abroad for scientific analysis. The only exception to this law is if it can be proven that these analyses cannot be done in labs in Turkey. With only one ancient-DNA research lab and 431 excavation projects, this law considerably restricts researchers from carrying out DNA analyses efficiently.

The state “ownership” of archaeological human remains also poses ethical questions and provides no legal mechanism for community-based decision-making processes such as repatriation, a process which usually relies on DNA analyses.

One particularly important region where DNA analysis would be extremely useful is the WWI battlefields of the Gallipoli Peninsula. Here unidentified human remains pose a great challenge to heritage professionals and government authorities due to diverse repatriation legislation of the Turkish, British, Australian, New Zealand and French nations.

DNA studies have been conducted successfully around the world on the remains of the war dead found in former WWI battlefields, and preliminary steps to include this type of research are now being taken at Seddülbahir on the Gallipoli Peninsula.

A CASE STUDY OF WORLD WAR ONE (WWI) HUMAN REMAINS: SEDDİLBAHİR, GALLIPOLI

One of the major battlefields of WWI in Turkey is Seddülbahir, a battlefield in the Çanakkale region on the Gallipoli Peninsula.

Seddülbahir was the site of a crucial battle between the Ottoman Empire and the Allied forces during WWI. The battle lasted from 25 August to 29 November 1915, and the Ottomans eventually surrendered on 10 May 1916.

Many French graves were discovered on the Seddülbahir battlefield in 2017, with only two sets of remains identified through grave artifacts. DNA analyses can help identify the remains, but it also enables the team to recognize the possible stakeholders other than the state and to introduce new concepts such as repatriation and stakeholder engagement into Turkish heritage management practices.

SELECTED BIBLIOGRAPHY


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Fifteen French WWI graves containing human remains were discovered and exhumed at the Seddülbahir Fortress on the Gallipoli Peninsula in 2017. Two sets of remains were identifiable through grave artifacts.

DNA analyses can help identify the remains of the fallen soldiers at Seddülbahir; but it also enables the team to recognize the possible stakeholders other than the state and to introduce new concepts such as repatriation and stakeholder engagement into Turkish heritage management practices.

The Gallipoli Cemetery, Seddülbahir Fortress. Source: ÇATAB

The Seddülbahir Fortress in 1922 with the Gallipoli cemetery outlined in red. Source: ÇATAB

Aerial photo of the Seddülbahir Fortress and the area of the Gallipoli cemetery outlined in red where the French graves were discovered. Source ÇATAB.

French Grave 4. This soldier’s remains were discovered in 2017. Photograph by the Directorate of Gallipoli Wars and Gallipoli Area (ÇATAB).

Map of Turkey, created on ArcGIS Pro by Elifgül Doğan.