

# Project Proposal: CemoMemo-AI – Revitalizing Intangible Heritage through Intelligent Memorial Spaces

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**Topic:** Safeguarding & transmission of intangible cultural heritage (HORIZON-CL2-2027-01-HERITAGE-08)

**Type of Action:** HORIZON Research and Innovation Action

**Objective:** To create a software platform to allow communities to document, preserve, and transmit the intangible cultural heritage (ICH) embedded in cemeteries and memorial sites using advanced digital technologies, making them accessible to global audiences through immersive, AI-driven experiences.

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## 1. Project Context and Current State

Cemeteries are vital repositories of **Intangible Cultural Heritage (ICH)**, reflecting burial customs, religious rituals, and community identities. Cemetery and gravestone digitization platforms such as [CemoMemo](#), [epidat](#), and [BillionGraves](#) document graves from cemeteries across the world, enabling genealogical and historical research. Integrating automation for textual analysis, spatial analysis, and multi-lingual **Optical Character Recognition (OCR)** can incrementally improve scalability and usability, but cutting-edge artificial intelligence and agentic systems show how memorialization and heritage platforms can take a quantum leap forward.

## 2. Proposed Innovation: The Next Generation Platform

This project aims to develop an **interactive, intelligent platform** that empowers communities to take ownership of their heritage and memorial spaces. The proposed AI-driven features include:

- **Automated Spatial Intelligence:** Using AI to process cemetery imagery and metadata to generate **interactive digital maps**. This enables precise **GPS-guided navigation** for self-guided tours, highlighting notable burials and local history for on-site visitors.
- **Immersive 3D & Audio Experiences:** The platform will allow curators and tour guides to create **virtual 3D tours** for remote "Couch Tourism." To support intergenerational transmission, curators and community members can record **audio and video overviews** of local burial customs and personal histories, which are then embedded directly into the visitor's digital interface using Extended Reality (XR) tools.
- **Conversational Heritage Interfaces:** We will deploy **Generative AI chatbots** trained on cemetery data and external data sources. Visitors will be able to "interact" with the memorial space or virtually chat with notable individuals buried there, gaining deep insights into historical social norms and cultural values.

Many communities have built custom websites and content portals to present their heritage to the world. The goal of this project is to create a software stack and portal engine that communities can use to create their own websites and experiences, taking control of their heritage and telling their own stories.

### 3. Expected Outcomes and Impact

In alignment with the EU Call, this project will:

- **Safeguard Intangible Cultural Heritage:** Create an advanced digital platform that helps communities document living heritage before it is lost to weathering or neglect.
- **Empower Remembering Communities:** Provide memorial organizations with tools to enhance their memorial spaces and achieve global reach.
- **Drive Social Innovation:** Mobilize ICH as a resource for education and "Dark Tourism," fostering a harmonious relationship between the public and memorial spaces.

### 4. Transdisciplinary Partnership & Division of Labor

This project requires an international transdisciplinary consortium to meet the call’s requirements.

Partner Type	Proposed Roles
<b>Research Universities and Institutes</b>	Lead the <b>historical and anthropological research</b> for background on burial traditions and memorial language; manage project goals and ICH convention alignment.
<b>AI &amp; Technical Institutes</b>	Develop and refine <b>Multi-modal LLMs</b> for conversational and agentic interfaces, 3D reconstruction algorithms, and multi-lingual OCR refinement.
<b>Software/Tech Companies</b>	Develop the <b>mobile application infrastructure and web backend</b> , 3D visualization engines, and cloud-based media storage systems for the software stack and website generators.
<b>Memorial Organizations</b>	Act as <b>data providers and curators</b> ; record oral histories and manage community engagement to ensure participatory safeguarding.

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*Note: This proposal builds upon the existing memorialization frameworks such as CemoMemo and seeks to integrate into the European Collaborative Cloud for Cultural Heritage (ECCCH) to ensure long-term data sustainability.*