

Image 1: The Polifonia Web Portal homepage with a carousel of accessible resources (musoW, CORPUS, MELODY etc.)

Explore European musical heritage with Polifonia Web Portal

Polifonia, a project funded by the EU's Horizon 2020 program, recently completed and is excited to share the results of four years of research and development in the intersection of Musicology, Semantic Web Technologies and Music Information Retrieval. The *Polifonia Web Portal*, which increases the discoverability of European musical heritage with Linked Open Data and Knowledge Graphs can now be explored.

Solving the problem of disjointed music heritage datasets

The <u>Polifonia Web Portal</u> is a massive step towards seamless access, interconnected narratives, and boundless exploration of music heritage. Before Polifonia, our musical heritage was fragmented, scattered across disjointed datasets, available via limited search capabilities. Now, the Polifonia Web Portal changes this situation for good.

The Web Portal serves as the primary entry point to Europe's extensive musical heritage. It gathers diverse musical resources and data, from historical data to melodic patterns, and allows both general users and experts to perform research across sources. A great asset, according to one of the project's stakeholders: "I love the concept. This brings music Knowledge Graphs content to people without knowledge about Linked Data."

Serendipitous discoveries

The Web Portal provides five specialised search sections, each corresponding to access points preferred by users, as evidenced in dedicated user studies. This approach enables efficient search and exploration of the musical heritage and it is supported by autocomplete suggestions and filtering options to refine the research.

By harmonising information from various sources, the portal unveils hidden connections and narratives within the musical landscape, providing users with a comprehensive and interconnected view of our cultural heritage. The User eXperience of the portal is designed to favor such serendipitous discoveries, rather than offering pre-determined paths.

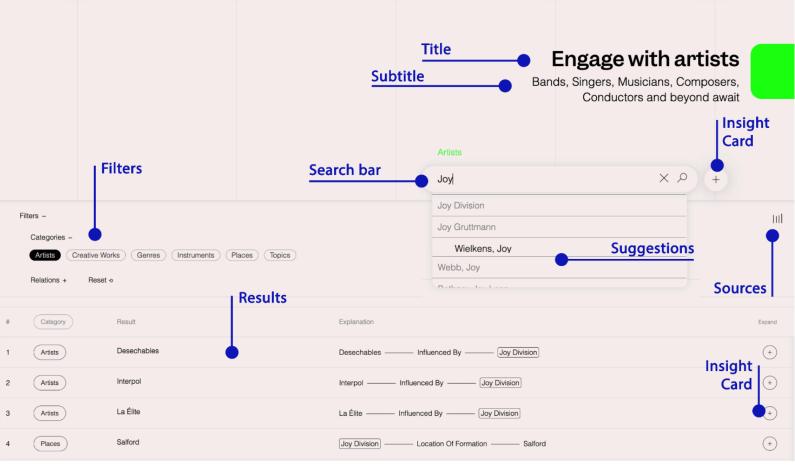


Image 2. Polifonia Web Portal: an example of search section and its elements

First positive stories from end users, and especially regarding these serendipitous discoveries, have already been recorded during demonstrations of the tool: "*This is a dream come true, I didn't know such a tool existed. A search about punk rock led me to discover digitised comics about Rancid and punk subcultures.*"

The work done is a collaborative effort between UNIBO, OU, NUIG and KCL, and is based on several datasets produced by Polifonia partners and beyond, namely: musoW, MEETUPS, CHILD, BELLS, MusicBO, ORGANS, FONN, TUNES and Wikidata.

Additional tools developed by Polifonia

This is by no means all that this four-year project has yielded; research and development within the work packages and its 10 pilots also included the release of open source software, datasets and ontologies, such as: *Pitchcontext, MELODY, Polifonia Knowledge Extractor, Polifonia Corpus Annotation, Sparql Anything, Polifonia Corpus, CLEF, LHARP, FACETS, Frequently Occuring Patterns, TONALITIES, Roman Chord Ontology, Music Meta, Jams Ontology, Roman Chord APIs, ChoCo, Polifonia Lexicon and MOZ.* Additionally haptic devices for hearing impaired audiences have been developed and experiments with 'Deep Listening' were conducted. These outputs collectively represent the culmination of the project's efforts and are part of the <u>Polifonia Ecosystem</u>, aiming to advance research and innovation in Musicology, Digital Humanities, Heritage Preservation and related fields.

Learn more

Polifonia Web Portal

Access the Polifonia Web Portal here: <u>https://polifonia.disi.unibo.it/portal/</u>

Ecosystem

Polifonia data, tools and reports are open access and can be found here: <u>https://polifonia-project.github.io/ecosystem/</u>

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Websites & socials

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Consortium

