

Opening Archaeological Public Finds Data with Semantic Web Technologies: Demonstrating FindSampo, CoinSampo, and PASampo

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Abstract

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This demonstration presents three Linked Open Data (LOD) services and semantic portals for searching, exploring, and analyzing data related to collections of archaeological public finds in Finland and UK.

1. *FindSampo – Finnish Archaeological Public Finds on the Semantic Web* (in use at <https://loytosampo.fi>) is based on the finds collection of the National Museum of Finland (Rantala et al. 2022). Project homepage: <https://seco.cs.aalto.fi/projects/sualt/>
2. *CoinSampo – Finnish Numismatic Public Finds 2013–2023* (in use at <https://rahasampo.ldf.fi/>) (Rantala et al. 2024) is based on the systematic recordings of numismatic finds in Finland at the National Museum of Finland. Project homepage: <https://seco.cs.aalto.fi/projects/diginuma/>
3. PASampo is a related, as of yet unpublished, system based on the database of over one million finds of the Portable Antiquity Scheme of the British Museum (<https://https://finds.org.uk/>) (Lewis et al. 2024).

It is shown using practical examples, how the underlying SPARQL endpoint and the semantic portals on top of the data services available at the Linked Data Finland platform (<https://ldf.fi>) (Hyvönen et al. 2014; Hyvönen and Tuominen 2024) can be used in opening Cultural Heritage

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(CH) data. Our aim is also to demonstrate the “FindSampo framework” (Hyvönen et al. 2021) for publishing archaeological public finds developed on top of the Sampo model (Hyvönen 2022). The examples also demonstrate the use of Sampo-UI framework (Ikkala et al. 2022; Rantala et al. 2023) for developing user interfaces is re-usable and easy to use in developing new applications for Digital Humanities research.

The web applications offer especially users with limited technical background, such as metal detectorists, an easy way to visualize the data with various charts and maps. The demonstrators also show how LOD can be used to enrich data, for example by fetching coordinates for places, such as minting places of coins, from outside sources to be visualized on maps.

The LOD services and portals demonstrated are part of the Sampo series of over 20 systems (<https://seco.cs.aalto.fi/applications/sampo/>) in 20 years 2004–2024 that publish CH data.

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