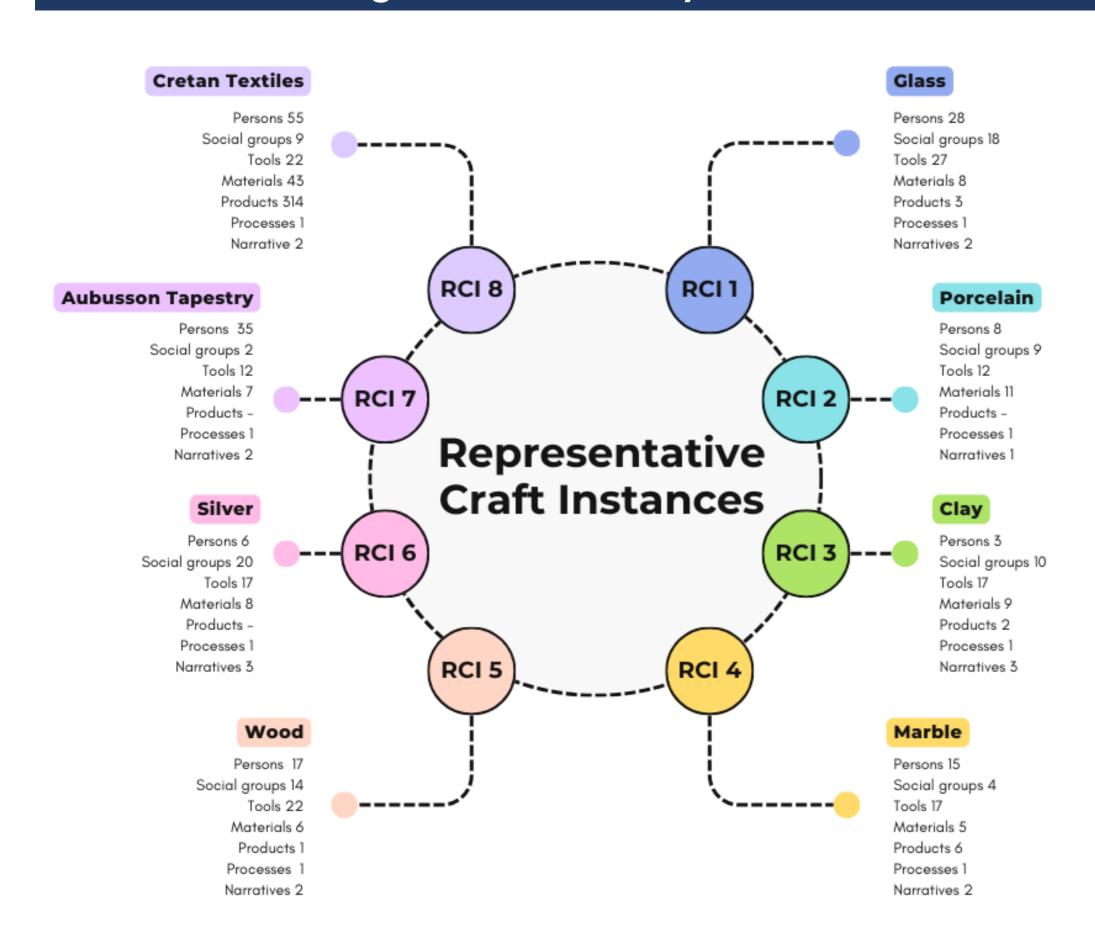
Weaving Knowledge: Building Narratives with Ontologies for Heritage Crafts

Nicolò Pratelli and Valentina Bartalesi

Institute of Information Science and Technologies "Alessandro Faedo" (ISTI) of the National Research Council of Italy (CNR), Italy

What Are Heritage Crafts and Why Narratives Matter?



Heritage Crafts (HCs) are living traditions—like weaving, porcelain-making, and woodwork—recognized by UNESCO as Intangible Cultural Heritage. They carry the knowledge, skills, and identities of communities across generations.

Narratives are essential for preserving this cultural richness. They help us understand the evolution, technical depth, and social meaning of crafts. The Craeft project uses semantic technologies and ontologies to model these stories as interconnected events, linking people, tools, materials, and places. This ensures that both the tangible and intangible aspects of craft traditions remain accessible and meaningful for future generations.

What's one craft tradition from your country or family?

How Narratives Become Graphs? 1 2 3 4 5 6 7 FABULA STORY NARRATION NARRATION 1 5 7 6

In the Craeft project, narratives are transformed into **knowledge graphs** using a specialized **ontology** that connects diverse elements of craft knowledge. This ontology integrates vocabularies like **CIDOC CRM**, **NOnt**, **FRBRoo**, and **OWL Time** to ensure **semantic interoperability**.

Central to this model is the split between **fabula** (the chronological sequence of events) and **narration** (the interpretive storytelling).

Entities, such as **people**, **materials**, **places**, and **processes**, are **semantically annotated** and linked using identifiers from trusted thesauri like **AAT**, **ULAN**, and **Geonames**.

The result is a **machine-readable**, **interoperable**, and **flexible** graph that captures the full richness of both traditional and contemporary craft narratives.

Fabula & Narration – What's the Difference?

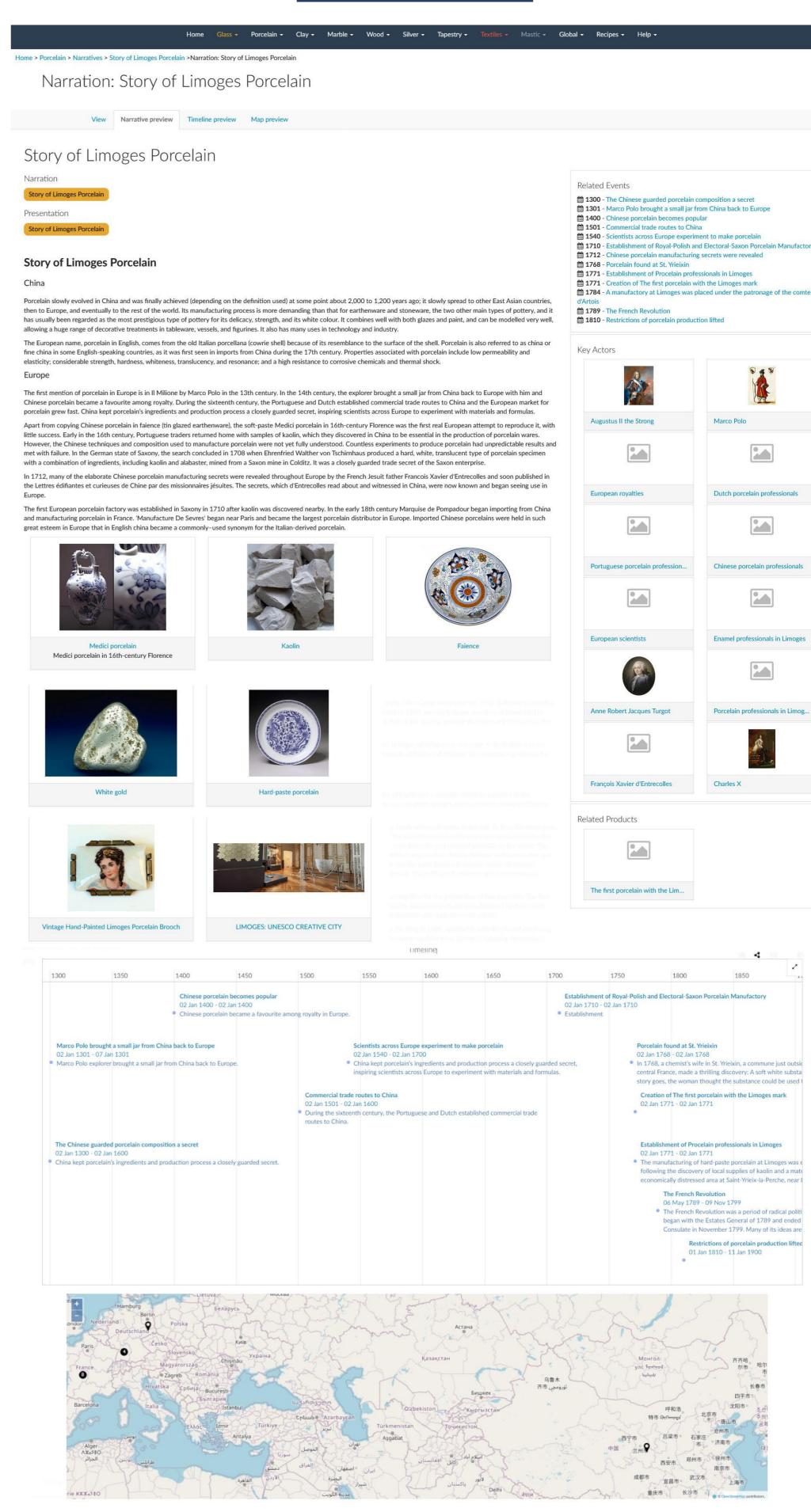
Porcelain with a Past

A key narrative in the Craeft project is the story of **Limoges Porcelain** (RCI 2), a craft marked by refinement, innovation, and cultural significance.

Though porcelain originated in China, its allure captivated European markets. A turning point came in **1768** with the discovery of **kaolin** near Limoges, leading to the rise of local production facilities by **1771**.

By the 19th century, Limoges had become the epicentre of French porcelain, known for its luminous white finish and exquisite craftsmanship, and was exported worldwide as a symbol of elegance and artistry.

Can We Preserve It All?



Acknowledgments

This work was externally supported by Craeft, funded under grant agreement No 101094349 by the European Union's Horizon Europe research and innovation programme. There was no additional external funding received for this study.