

SILKKNOW

WEAVING OUR PAST INTO THE FUTURE



What is SILKNOW?



SILKNOW is a research project that improves the understanding, conservation and dissemination of European silk heritage from the 15th to the 19th century.

It applies next-generation computing research to the needs of diverse users (museums, education, tourism, creative industries, media...), and preserves the tangible and intangible heritage associated with silk.

Based on records from existing catalogues, it aims to produce digital modelling of weaving techniques (a “Virtual Loom”), through automatic visual recognition, advanced spatio-temporal visualization, multilingual and semantically enriched access to digital data.

Its research activities and output have direct impact in computer science and big data management, focusing on searching digital content throughout heterogeneous, multilingual and multimodal databases.

SILKNOW is made possible through the close cooperation of a multidisciplinary team, including areas as ICT, text analytics, image processing, semantics, big data, 3D printing, art history, terminology, textile fabrication and conservation.

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Why silk?

*European history is
woven in silk*

Throughout our past and present, few materials have had a similar presence: economic, technical, functional, cultural and symbolic. From flags to canopies, tapestries to furniture, fans to sword sheathes, wedding gowns to traditional costumes, we can find silk in countless contexts, over the last millennia.

Many people experience vivid, personal and social connections to this heritage, linked to so many life stories and collective narratives. Luxury, craftsmanship, beauty and comfort have been -and still are- associated with it. Additionally, silk trade also allowed for exchange of ideas and innovations. Punched cards were first used in Jacquard silk looms, long before modern computers were even imagined.

Nowadays, however, silk textiles are a seriously endangered heritage. There is also an associated intangible heritage -artisanal weaving techniques- at risk of disappearing. Countering those threats and making use of state-of-the-art technology, SILKNOW wants to showcase the splendor of silk, in Europe and worldwide, in the past and for the future.

Who are we?

We are a consortium of nine partners representing cultural heritage, academia, ICT and SME industries, all committed to keep silk heritage alive.

- Universitat de València Estudi General (project coordinator, Spain)
- Eurecom (France)
- Garin 1820 s.a. (Spain)
- Gottfried Wilhelm Leibniz Universitaet Hannover (Germany)
- Institut Jozef Stefan (Slovenia)
- Instituto Cervantes (Spain)
- Université de Lyon - LARHRA UMR CNRS 5190 (France)
- Monkeyfab s.c. (Poland)
- Università degli Studi di Palermo (Italy)



SILKNOW is based on digital information about historical silk textiles, provided by a number of European museums and collections. If you would like to know more about the data required for the project, or would be interested in sharing your records, do not hesitate to contact us. Collaborating institutions will benefit from expertise and best practices generated by the project

When?



SILKNOW begins in April 2018, and will last for 36 months. During these three years we will be offering publications, presentations, a traveling exhibition hosted by Instituto Cervantes and even a fashion event! An open access repository and its associated digital tools will be made public during the second year, and will remain available after 2021.



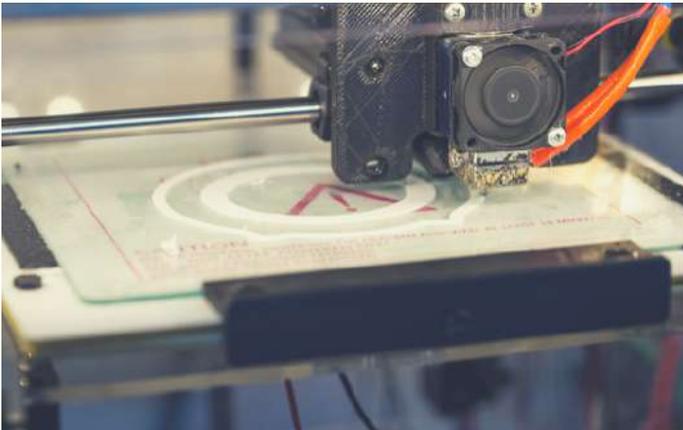
May I or my institution participate?

If you fit into any of the following profiles, SILKNOW is for you. If you don't... it is for you, too!

This project is intended for everyone who cares for silk heritage or simply wants to know more about it.

- Cultural heritage. Textile museums and collections, GLAMs (galleries, libraries, archives, museums), other heritage institutions, networks and international organizations; cultural digital content repositories and aggregators.
- Education. Including all forms and levels of learning, in different environments: from vocational (art and design schools) and university-based to adult education or foreign-language learning institutions.
- Information and Communications Technologies (ICT). University departments, research institutes, private companies, etc.
- Textile / creative industries. Sector professional associations, both on a national and a European level.
- Tourism. International organizations, regional public bodies, professional associations, travel guides' publishers, travel portals, local tourism boards and convention bureaus, etc.
- Policy makers and governmental bodies, tasked with responsibilities on digitization and cultural heritage, as well as their civil-society counterparts; national Ministries of Culture, and regional or local authorities.
- Journalists in magazines and newspaper sections about fashion & style, business, economy and international trade, popular history and culture...; heritage and cultural management newsletters, bloggers, etc.





WHAT ARE OUR MAIN GOALS?

- Semantically relating digitized European silk heritage, enabling data interoperability across different collections, for advanced searching abilities.
- Building a “Virtual Loom” to clone weaving techniques. This will allow users to discover the complexity, artistic and artisanal values of ancient silk textiles, while preserving them for future generations.
- Improve the understanding of the European silk heritage, thanks to visual tools that show the spatio-temporal relationships of data, including an open-access, multilingual thesaurus.

WHAT RESULTS ARE WE EXPECTING TO ACHIEVE?



- To provide many institutions, custodians of an immense textile heritage, with ICT resources that allow them to open their hidden wealth of European heritage to worldwide audiences.
- To contribute with strategies and best practices for the better curation of digital data in textile heritage institutions, particularly among those of small-to-medium size.
- To facilitate better strategies and the design of innovative tourism services about silk heritage, enriched through digital contents.
- To create enhanced didactic tools, scale models (in computer graphics and 3D printouts) of historical textiles that visualize their internal structure.
- To spark creative efforts by modern designers, putting silk heritage within the reach of today's consumers by well-informed reuse of its motifs.
- To pave the way for further R&D+I in 3D printing for the textile industries.
- To produce teaching units in digital format, according to different levels of the Common European Framework of Reference for Languages.
- To become a resource for project-based learning assignments, through a specific tutorial developed collaboratively with participating schools' staff.
- To connect content providers with fresh and interesting content, improving public knowledge of the Western Silk Roads, as well as their tremendous impact on our international relations, industry, technology and culture.
- To support regional policy makers in the implementation of their smart specialization strategies, with a focus on digital Cultural Heritage.



CONTACT US!

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