J.Y Blaise, I.Dudek
UPR 2002 CNRS MAP (Models and Simulations for Architecture and Heritage)

The unit's scientific profile

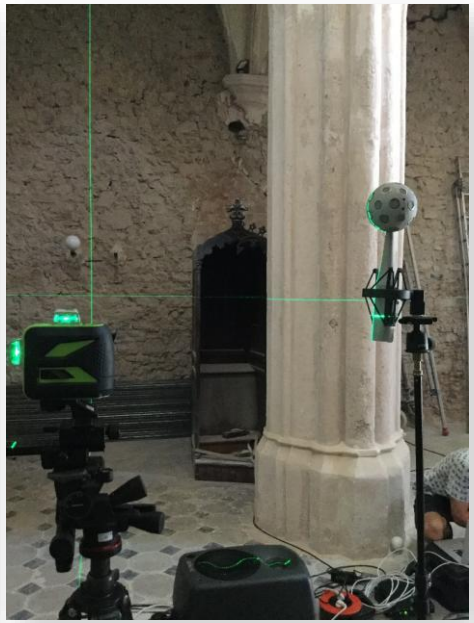
Our profile as researchers

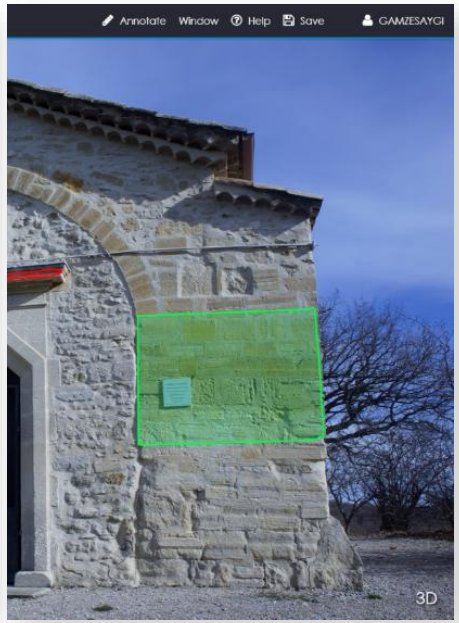
Contribution(s) to PlaceMUS XR

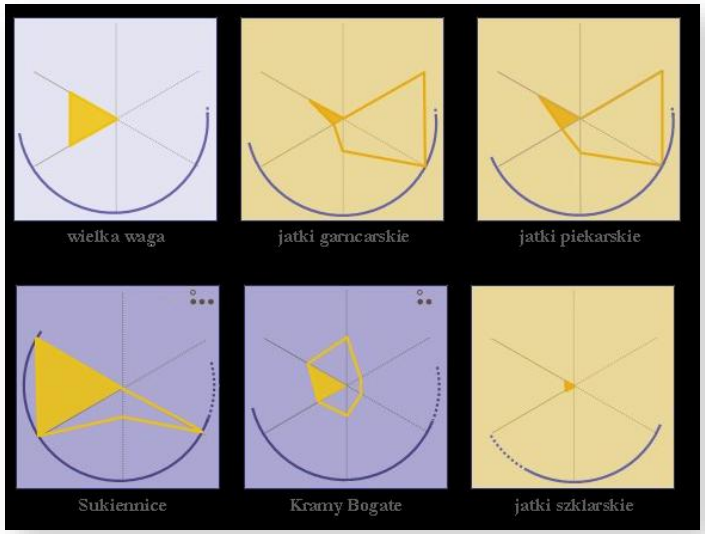
Key projects – inspiration

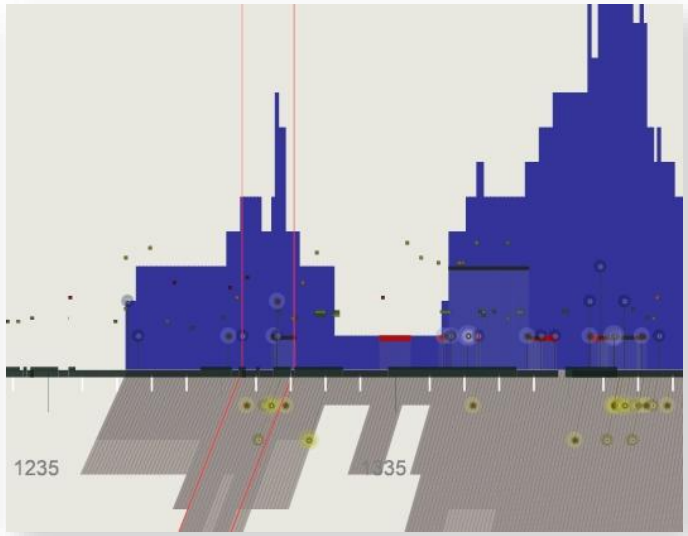
Staff involved

www.map.cnrs.fr







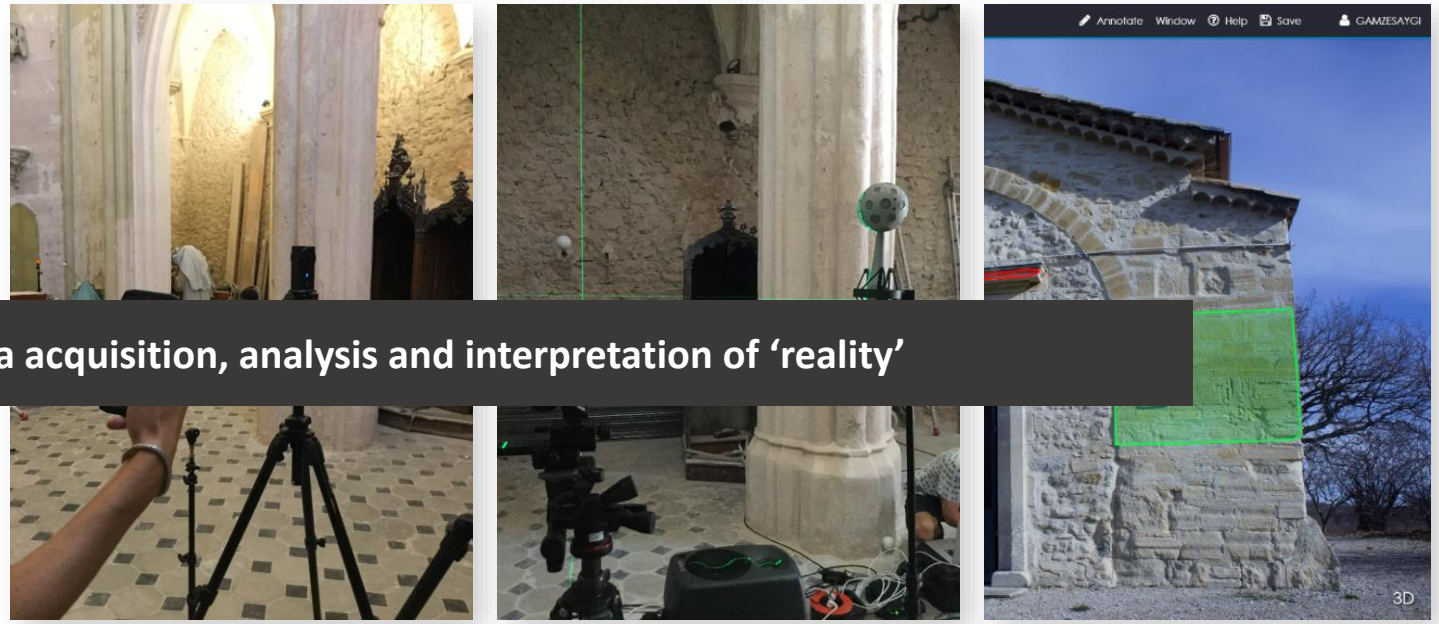


The MAP research unit's **object of study**: heritage, with a focus on the *architectural heritage*

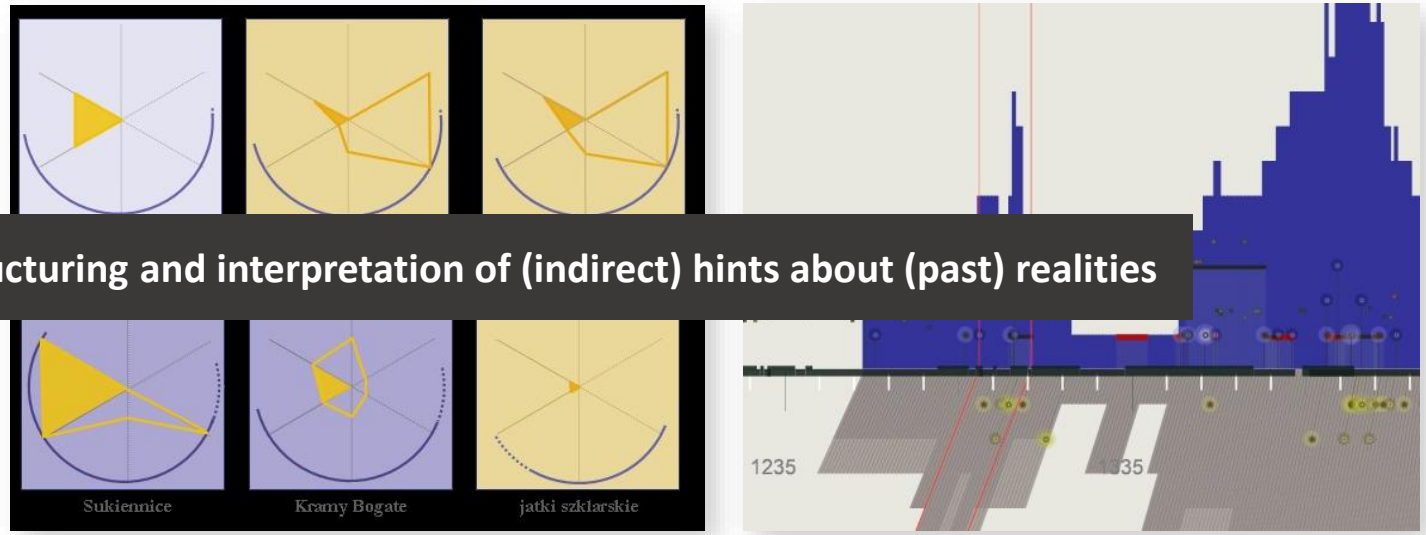
2 main fields of activity

Surveying techs and methods, 3D data post-processing pipelines *(the «asset» seen as a physical entity – geometry, colours, etc. – and observed as a synchronic entity)*

Information visualisation *(the «asset» seen as an anchor for heterogeneous information sets, unevenly distributed in time – and observed as a diachronic entity that may not exist any more)*



Data acquisition, analysis and interpretation of ‘reality’



Structuring and interpretation of (indirect) hints about (past) realities

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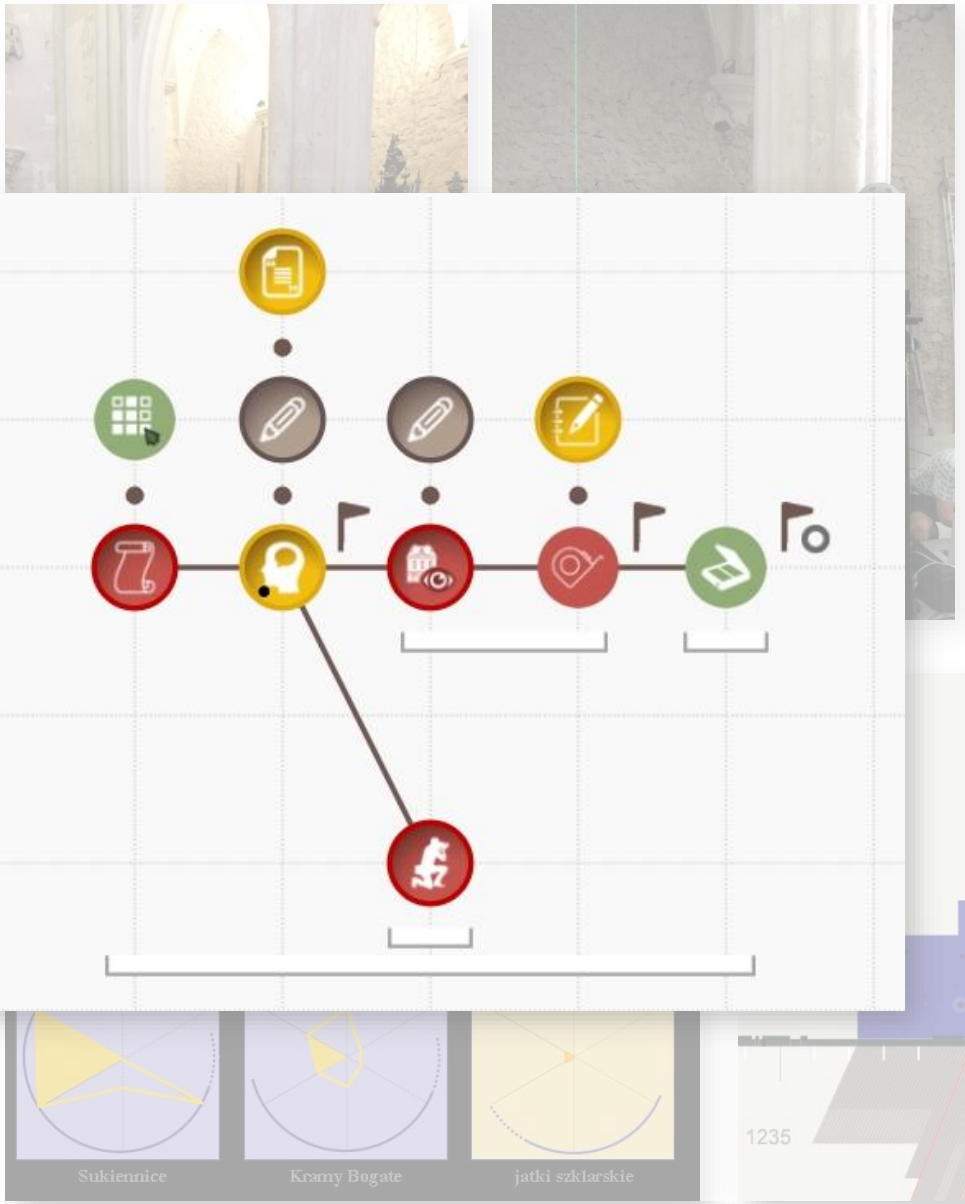

The MAP research unit's **object of study**: heritage, with a focus on the *architectural heritage*

2 main fields of activity

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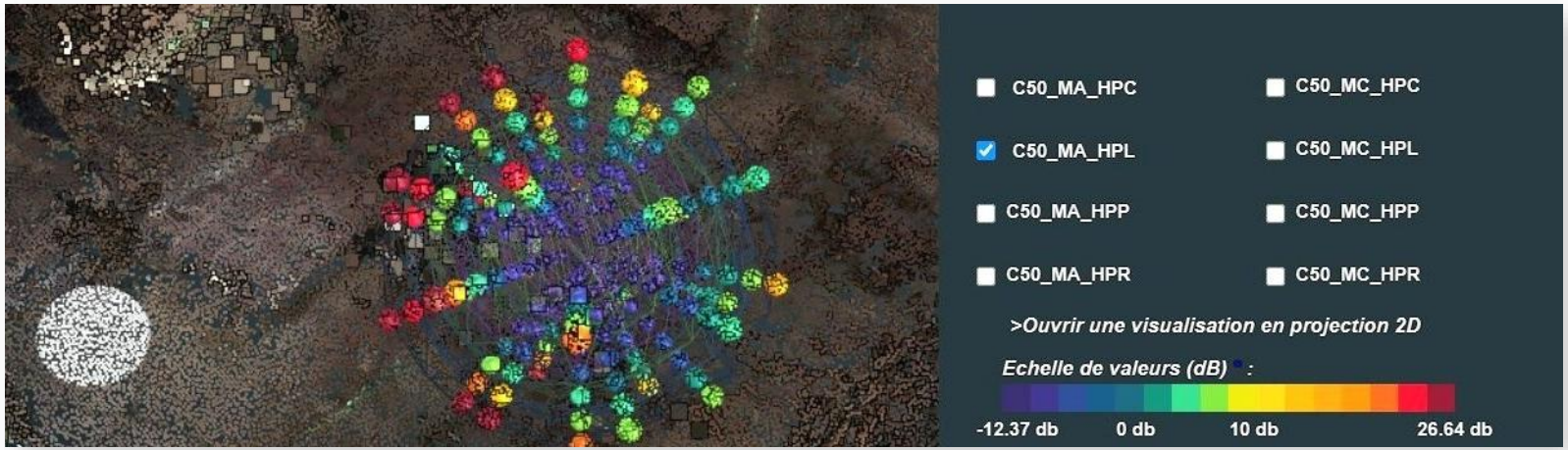
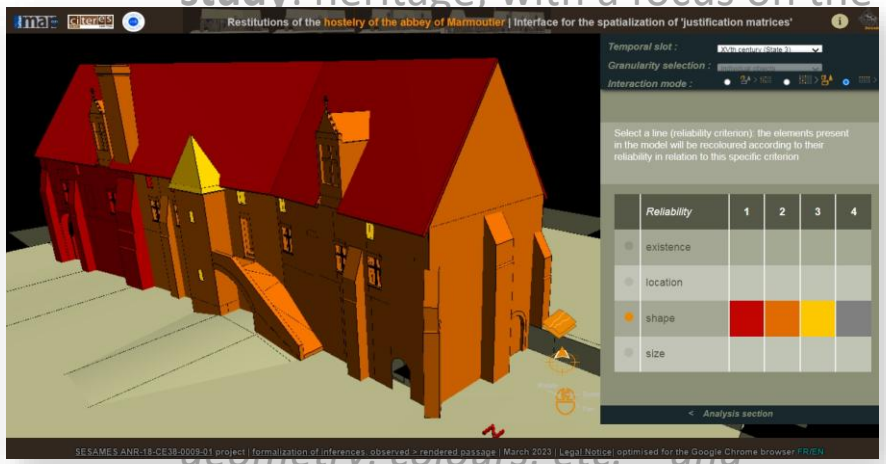
With, bridging those two fields of activities, a growing scientific concern for workflows traceability (reproducibiliy, verifiablity, ..) issues

In other words a 'quest' for better practices : how can we efficiently and on the long run document research protocols, at a time when the instrumentation (computer-based solutions) tends to haze where the decisions are taken and why?

The MAP research unit's **object of study**: heritage, with a focus on the





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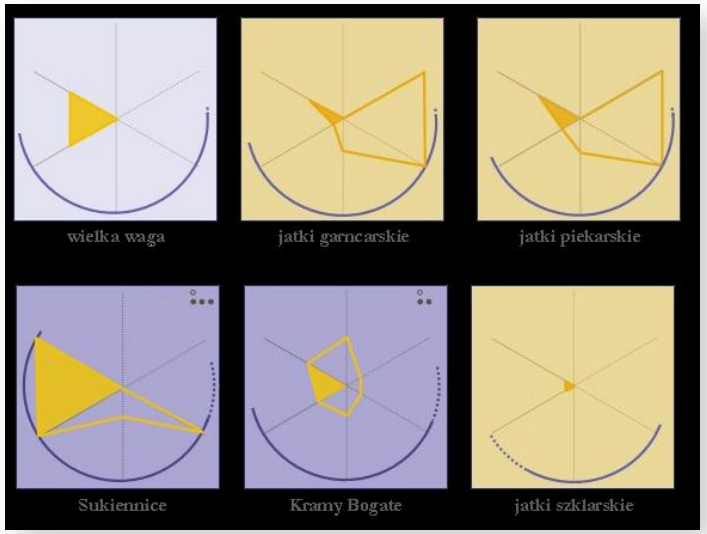

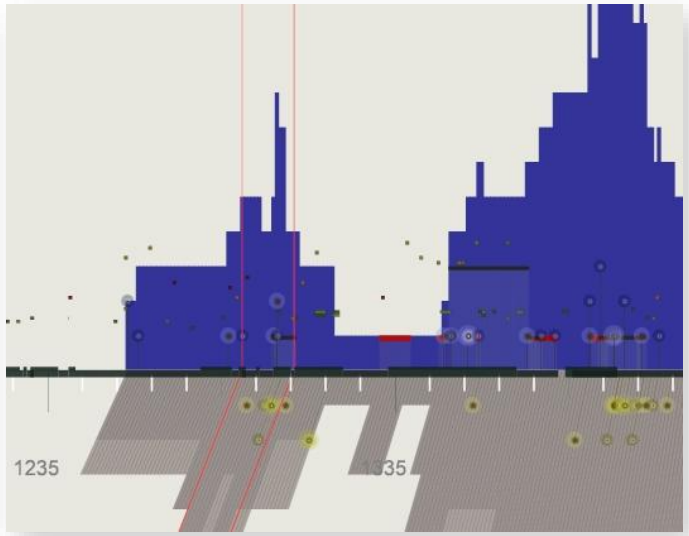

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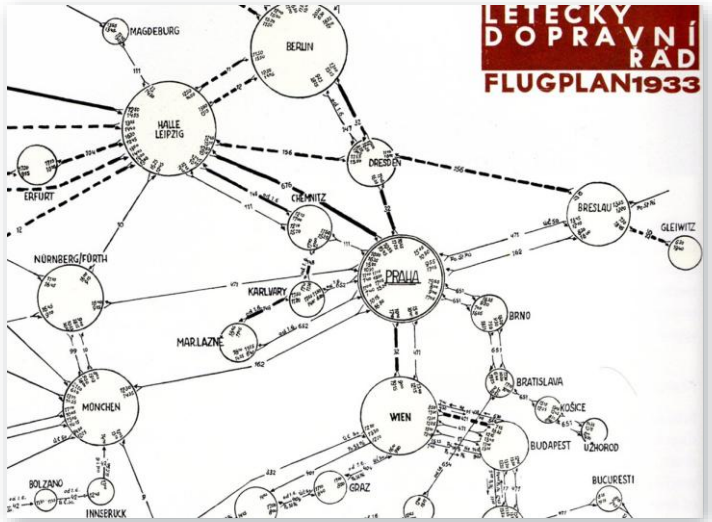
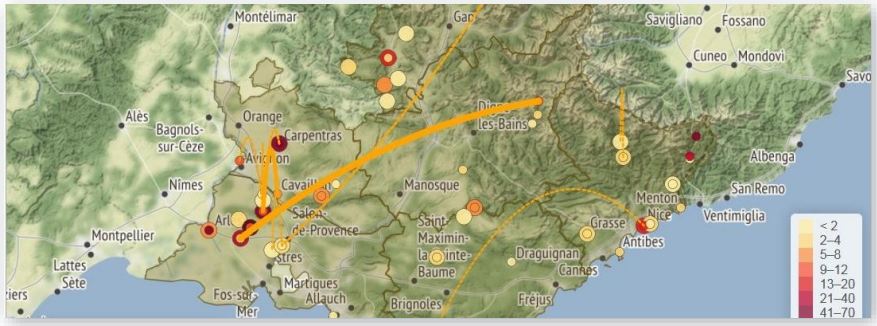
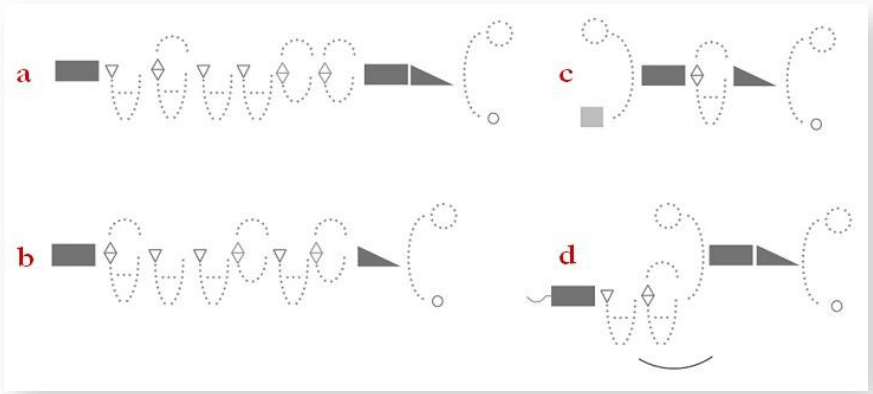






The Information visualisation (InfoVis) research line

In the context of PlaceMUS we will build on two legacies/practices

Thematic cartography / geovisualisation – distributing information in space so as to analyse trends, exceptions, etc.

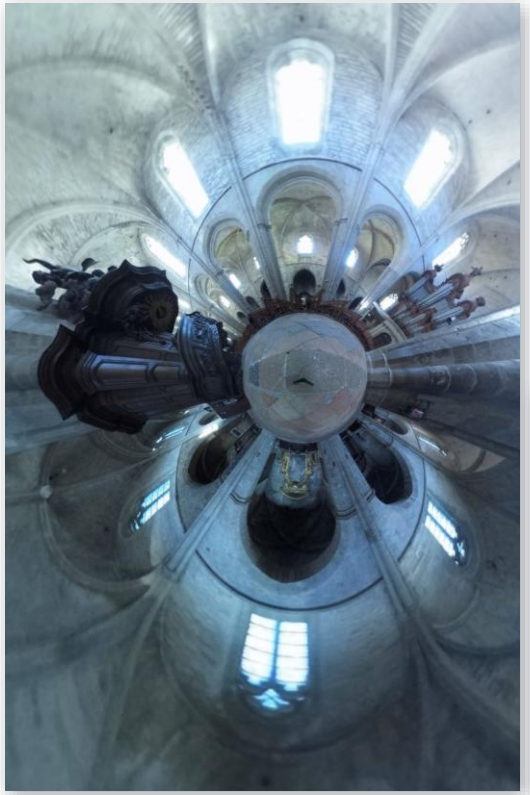
Handling of time-oriented data – in our case diachronic analyses – distributing information in time, with for us a challenge to deal with «imperfections» - contradictions, lacks, interpretations, etc. – a marker of historical sciences

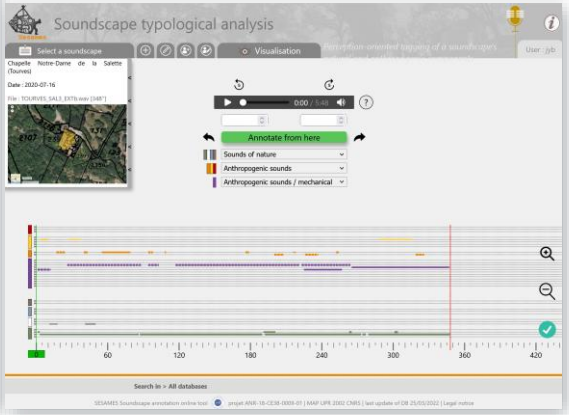
A generic geovisualisation solution

A web based cartographic component with « narrative layers »

Key challenges : data selection / model, options to investigate such as soundwalks techs

The Krakow case study





Visual mapping of acoustic data (soundscapes, simulations)
Sonification of quantitative information in relation to architecture and history

Underlying challenges: Data acquisition protocols, mapping strategies

A generic geovisualisation solution

Provide experiences of *places of music* in spots usually inaccessible

A web based cartographic component with « narrative layers »

Key challenges : data selection / model, options to investigate such as soudwalks techs

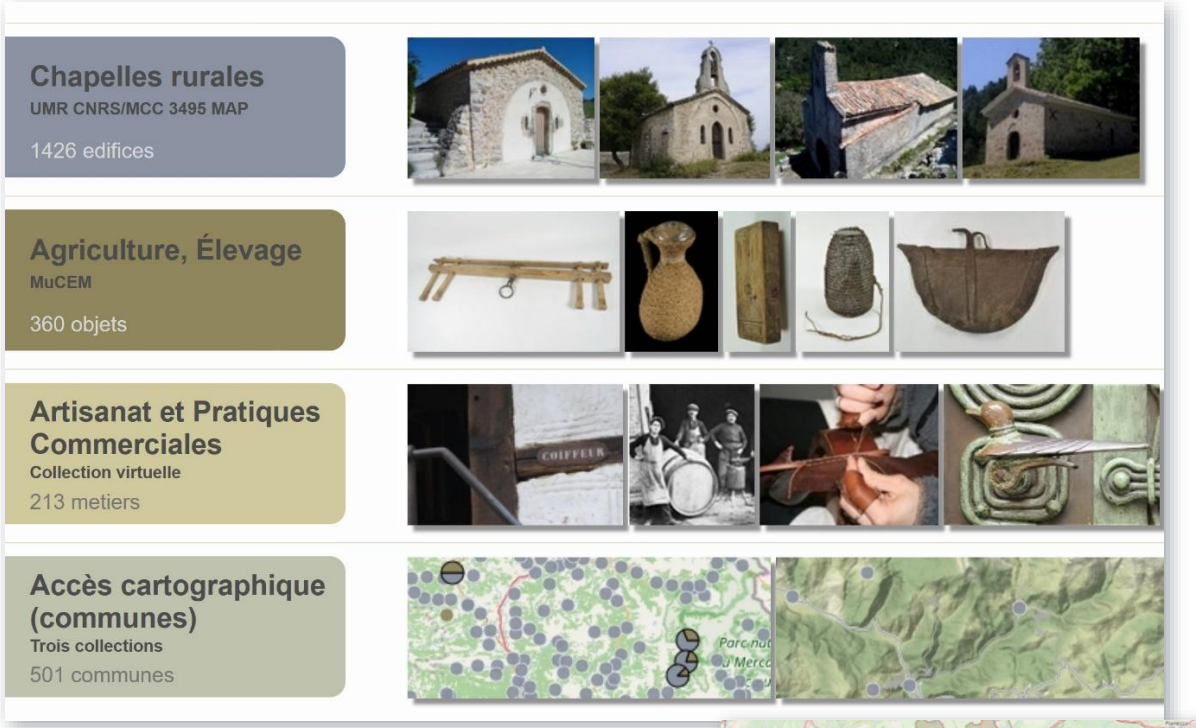
The Krakow case study

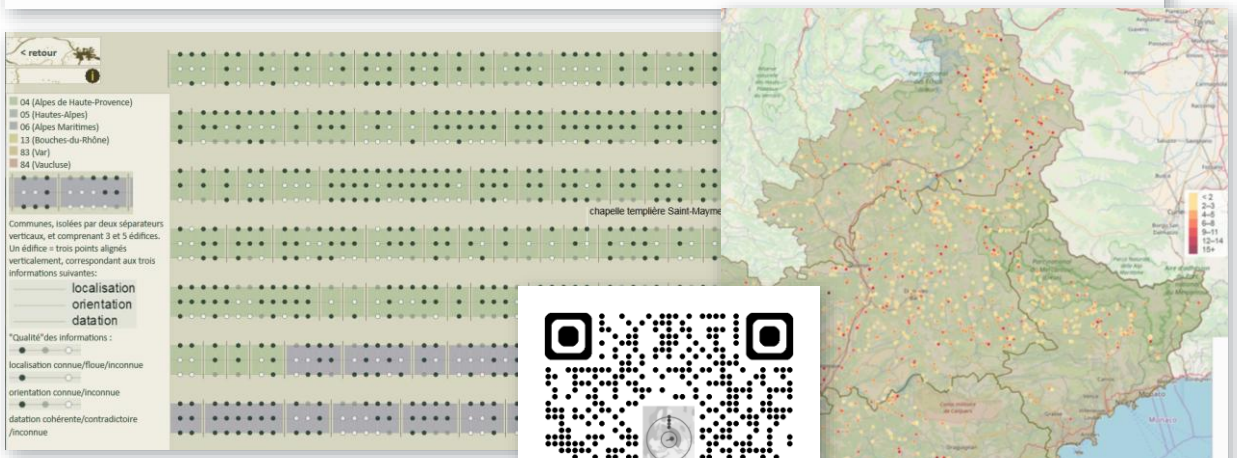
Provide experiences of *places of music* at times when you cannot be there

Visual mapping of acoustic data (soundscapes, simulations)
Sonification of quantitative information in relation to architecture and history

Underlying challenges: Data acquisition protocols, mapping strategies

At this stage, what we imagine to be a common denominator between these lines is a narration bias that would rely on the concept of “ubiquity” and in particular on “temporal ubiquity”





Cooperation with Mucem

Territography

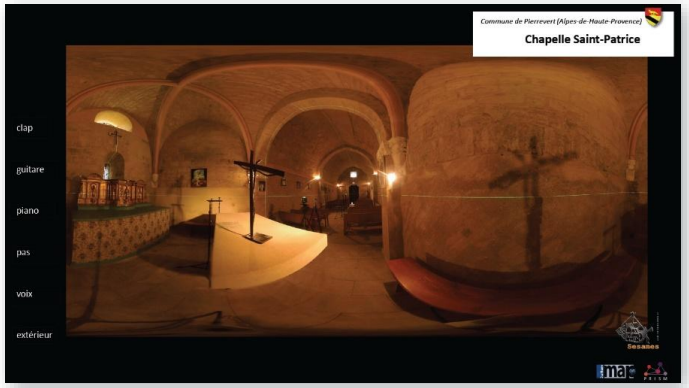
A research on how citizen contributions can impact the documentation of minor heritage assets and help raising public awareness

Connections with PlaceMUS

- *Heterogeneous data and information sets associated with locations, places (online sources, geoinformation, dates and durations, etc.)*
- *Harvesting of online content (citizens as data producers – in practical terms referencing of autonomous content)*
- *Cartographic components (and other visual products) based on simple web-compliant formats*

Differences

- *A “large data” approach (1426 small-scale rural chapels for instance)*
- *An ambition to analyse collections as such, more than individual items inside collections*
- *Desk-based research (almost no on-site survey campaigns)*



SESAMES

Architectural, acoustic and historical characterisation of comparable edifices (15 rural chapels) with an aim to foster comparative analyses but also to help foreseeing potential reuses (acoustic simulation)

Connections with PlaceMUS

- *An original interdisciplinary survey protocol (and processing chain) combining acoustic and spatial data,*
- *In situ recordings (> impulse responses + soundscapes)*
- *Perception-oriented human tagging of soundscapes*
- *Repurposing of data sets in web applications and other end products dedicated to the wide public – either in the context of dissemination events or as online content*
- *Simulation of how pieces of music would sound in the various interiors (“immersion”)*

Cooperation with PRISM Perception Représentations Image Son Musique · citeres LAT UMR 7324 · LIFAT EA 6300


Tourves - Notre Dame de la Salette
1. Selectionnez une source :
ou
Choisissez votre fichier
Play
Stop
2. Choisissez :
la position de la source
votre position d'écoute
3. Mixeur :
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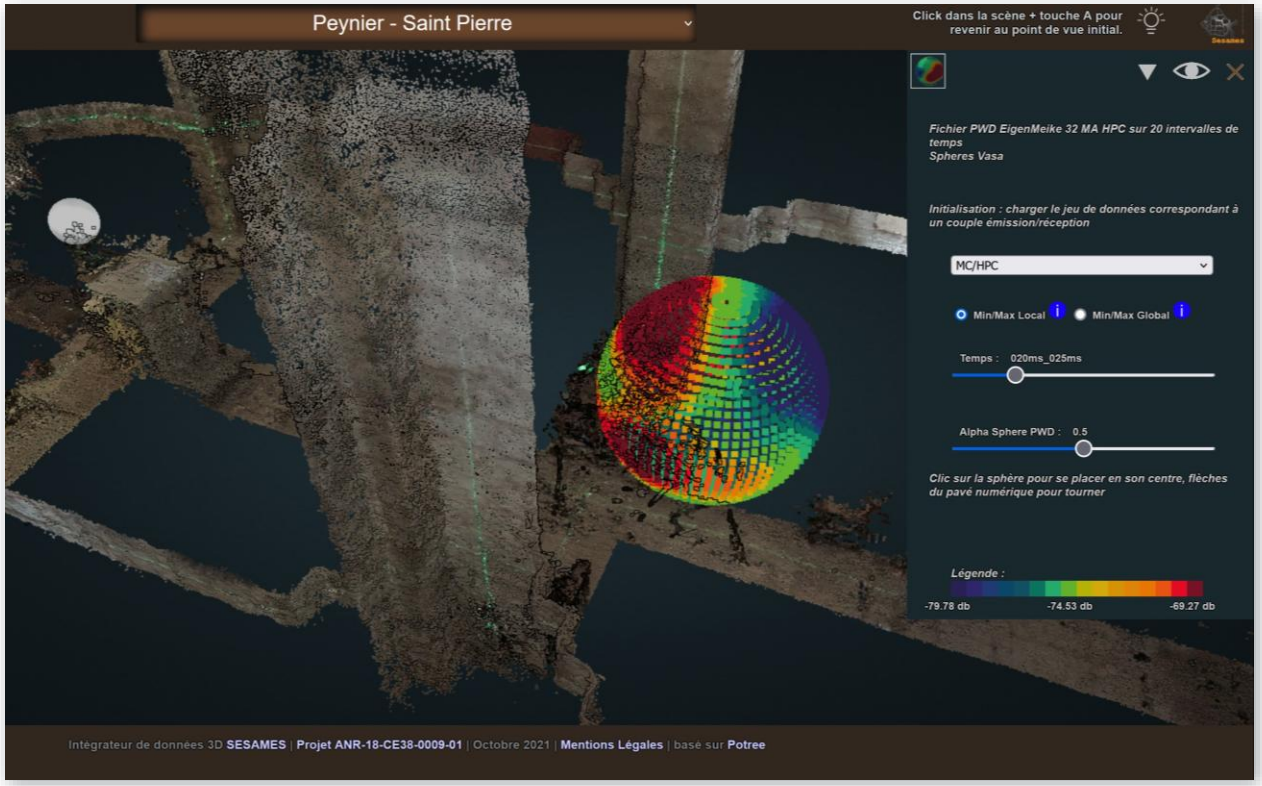
Tourves - Notre Dame de la Salette
Mentions légales

SESAMES

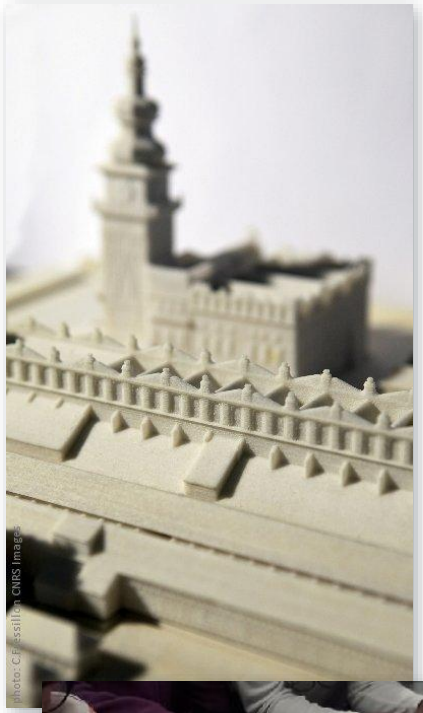


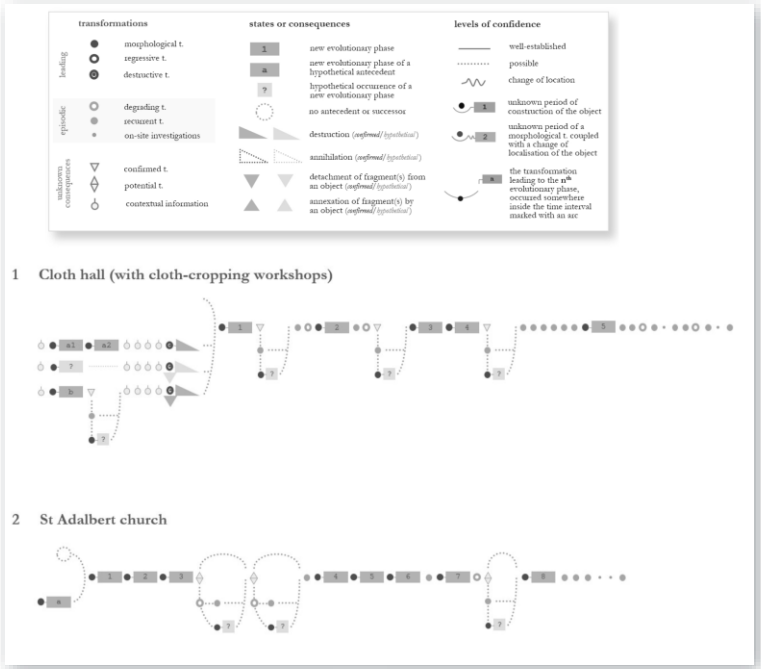
Architectural, acoustic and historical characterisation of comparable edifices (15 rural chapels) with an aim to foster comparative analyses but also to help foreseeing potential reuses (acoustic simulation)

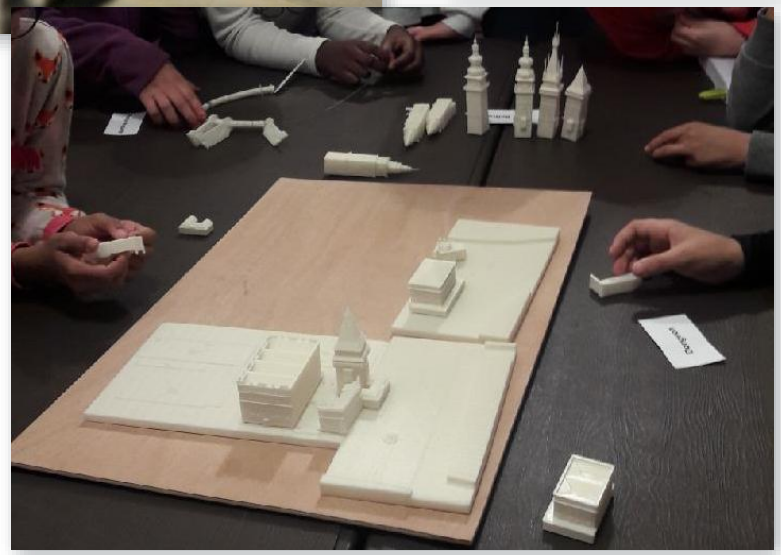
Differences with PlaceMUS

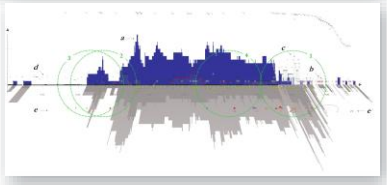
- *A methodological challenge more than a programme targeting the production of cultural assets – a significant part of the project was a technological and/or scientific exploration*
- *3D Point clouds (photogrammetric models produced on the basis of 360° panoramas) used as spatial background for abstract visual metaphors*
- *A vision that the edifice is an instrument in itself, no on-site recordings of musical performances*
- *Low-cost, low-tech protocol tailored to the particularities of the corpus studied (interiors of small scale edifices)*

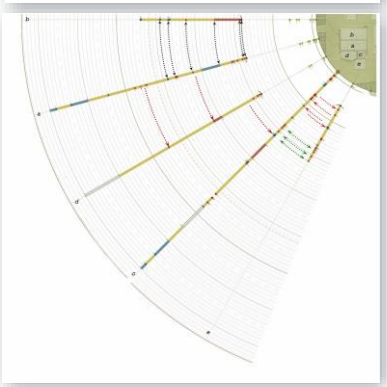
with PRISM Perception Représentations Image Son Musique — citerES LAT UMR 7324 — LIFAT EA 6300











10 years of research on the city of Krakow's evolution,

on changes over time in terms of architecture or urban structures – with a focus on the city's main market area. Over the year we gathered quite a number of information sets, and produced a variety of infovis solutions mostly targeting scientific actors. An exception though – the tangible chronology experiment targeting a wide public including the visually impaired.

Connections with PlaceMUS

- *The city as such, field of experimentation, but also its history, elements of context, etc.*
- *The notion of « urban path » or itinerary quite well suited to the city's layout*

Differences

- *No previous experiences in analysing the musical life of the city, or in acoustic data acquisition there*
- *A shift in scale (size of edifices) as far as survey aspects are concerned*
- *A challenge in terms of « exploitability » (rights issue)*

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map UPR 2002

Staff involved

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Jean-Yves Blaise

Simon Fargeot
Research engineer, acoustic environments
Ariane Néroulidis
Mediation and communication specialist

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