The SyMoGIH project and its gazetteer
Managing geo-historical information
in a collective and cumulative system

Francesco Beretta, Francesco.Beretta@ish-lyon.cnrs.fr
Claire Charlotte Butez, Charlotte.Butez@ish-lyon.cnrs.fr
Pierre Vernus, Pierre.Vernus@ish-lyon.cnrs.fr
Outline

1. Origins, aims and context

2. Data model and web application

3. From a gazetteer to a H-GIS
Origins, aims and context of the project

- A Modular System for Historical Information Management (Syteme Modulaire de Gestion de l'Information Historique, SyMoGIH)
- Why SyMoGIH?

- A method to model historical information

- At first, SyMoGIH was not a historical GIS
A generic model for historical information

The core of SyMoGIH
a simplified view of the data meta-model
A data model for each type of information

Birth (TyIn14)

- Actr
  - be born [TyRo40]
  - 0, 1

- Information
  - be the origin [TyR16]
  - 0, 1

- ImCo
  - locate [TyRo8]
  - 0, n

- NaPl
  - locate [TyRo8]
  - 0, n

- AbOb
  - 0, n

Parents’ union [TyIn13]

Type of place, of house, of region, etc.

2. Data model and web application

Implementation
Implementation: the web application
Information :
Mai 1895 Cuchet, François Léopold, Filateur-reeler à Aubenas (Ardèche)

Source : LH/638/13 Dossier de Légion d'honneur de Cuchet, François Léopold, états de service 31 mai 1895
2. Data model and web application
## Knowledge unit

### Cuchet, François Léopold – Activité: filateur-moulinier à Aubenas (Ardèche) (1875 p) - Info14914

<table>
<thead>
<tr>
<th>Rôles</th>
<th>Sources</th>
<th>Liens avec unités de connaissances</th>
<th>Web</th>
<th>Commentaires</th>
<th>Projets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annotions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Gestion des rôles

<table>
<thead>
<tr>
<th>Clé rôle</th>
<th>Clé objet associé</th>
<th>Objet associé</th>
<th>Sujet</th>
<th>Type de rôle</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>InRo31150</td>
<td>Actr13045</td>
<td>Cuchet, François Léopold</td>
<td>Oui</td>
<td>exercer</td>
<td></td>
</tr>
<tr>
<td>InRo242209</td>
<td>SoCh1122</td>
<td>Filateur-moulinier de soie (patron)</td>
<td>Non</td>
<td>exercé (être)</td>
<td></td>
</tr>
<tr>
<td>InRo40354</td>
<td>NaPl1692</td>
<td>Aubenas</td>
<td>Non</td>
<td>localiser</td>
<td></td>
</tr>
</tbody>
</table>
SyMoGIH : A geo-historical information management system

How can we geolocalize historical information, associate it with places which are recognizable, and take into account their toponymical, typological and spatial evolution?
2 categories of places, the same attributes

- **Named-place**

  As a surface: natural geographical elements (forests, rivers ...) or artificial, bounded by a more or less precise border (country or inhabited place, division of the land)

- **Immovable construction**

  Everything built by the Man and that we can represent as relief on the earth's surface (factory, habitation...)
How to distinguish between the place and its representation?
We introduce the concept of "concrete form"

The place as abstract entity is 'embodied' by a 'concrete form' to distinguish the place from its representation.

Any modification of a concrete shape is connected to an information.
How to manage geo-historical data?

Ternary association between the concrete forms, the geometries and their metadatas

F. Beretta, C. Butez, P. Vernus 5.1.2012 © CNRS
How to query geo-historical data?

The database can be accessed with an SQL-client to query the geo-historical datas. QGIS is a wonderful tool for that.
Historical information at the core of the geographical objects' evolution

Historical information becomes the attribute data associated to the geographical which are represented in a punctual, linear or surfacique shape.
Now, and soon...

► To redefine historical territories with historical information

All operation of production and qualification of spatial data will be stored, mutualized and valued in a collective system

► To implement a spatial data server

Serve the data as images (WMS) or maps (WFS) using the standards.

► Heuristic tool for the localization and display of the historical information

Publication of historical data localized with DRUPAL and Open Layer