

Methodological Proposals for Designing Federative Platforms in Cultural Linked Open Data: the exemple of ModRef

Linked Data in Libraries: Let's make it happen !

14 août 2014, Bibliothèque nationale de France

Antoine Courtin

Labex Les passés dans le présent

University Paris Ouest Nanterre La Défense

Jean-Luc Minel

MoDyCo

University Paris Ouest Nanterre La Défense, CNRS



I ModRef

- Objectives / Projects
- Methodology



II Analysis of the existing

- Five dimensions analysis
- Twelve variables
- Analyzes



III Choices and Challenges

- Exposure modes of data
- From a model to models
- URLs
- Vocabulary



IV *Proof of concept*

- Objectives and milestones
- Tools
- First initiative



ModRef

Modeling, Frames of Reference and Digital Culture

Objectives

Project leaders

Anne Faure (Quai Branly Museum) and Jean-Luc Minel (MoDyCo)

The objective of this collective project is, first, to inventory the characteristics of each digitization project in the cluster, to establish a panorama of innovative systems that could be implemented for these digitization projects, and to complete a study of the actual uses of these innovative systems by cultural institutions.

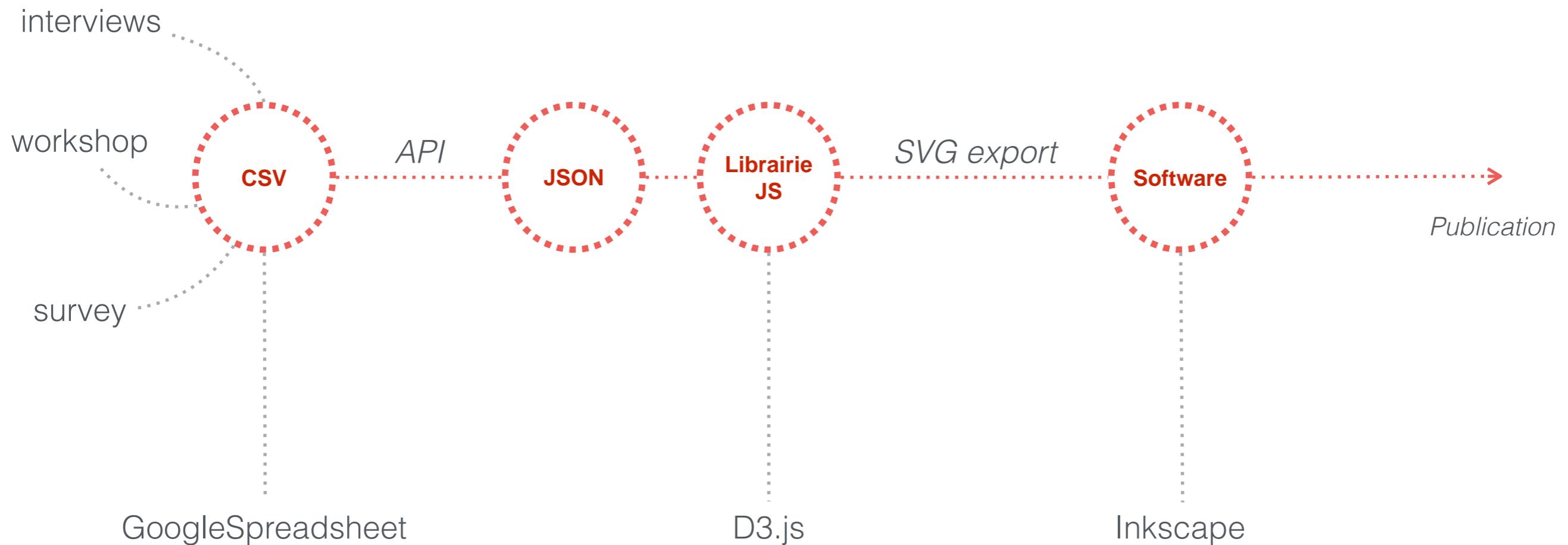
Second, the project will engage thinking about digital culture and its interconnection with the production and the circulation of cultural contents. It will tackle the question of the role played by digital technologies and the media in modes of diffusion and exchanges by linking digital culture to the evolutions of social, cultural, and political mediations. We will notably study the impact of frames of reference (thesaurus, ontologies, taxonomies) on the process of appropriation of concepts and ideas as much by the large audiences as by specialists.

Projects

Digitized collections of the BNF's Departement of Medals	ObjMythArcheo	BnF	MAE	ARSCAN
The Scholia to Homer's Iliad: from texto to hypertext	SchoHomère	ARSCAN	Partenaires associés hors du Labex	
European poster (1914-1945)	AffichEuro	BDIC	ISP	Partenaires associés hors du Labex
Photographs from the First World War, « Valois Albums »	AlbValois	BDIC	ISP	Partenaires associés hors du Labex
Memories of the decolonization (collection of oral archives)	CorpuOraux	BDIC	ISP	Partenaires associés hors du Labex
Sources of ethnomusicology	MusicoSource	BnF	MAE	MQB
Comedie-Française Register Project	Comédie	HAR-UPO	Partenaires associés hors du Labex	
Paris guidebooks (historians of art and digital collections)	ParisGuide	HAR-UPO	BnF	
The birth of French ethnology. The first ethnographic missions to Africa	NaissEthno	MAE	BnF	MQB
Archives of archeological digs at prehistoric and ancient sites	ArchiFouilles	MAE	ARSCAN	
The Commissions of « Topographie des Gaules » (1858-1879)	TopoGaules	MAN	BnF	Autres partenaires hors du Labex
Putting online experimental and ethnoarcheological frames of reference on archeological techniques	EthnoArchéo	MAE	Autre partenaires hors du Labex	

↑
Project Names ↑
Acronym ↑
Institutions engaged

> Methodology

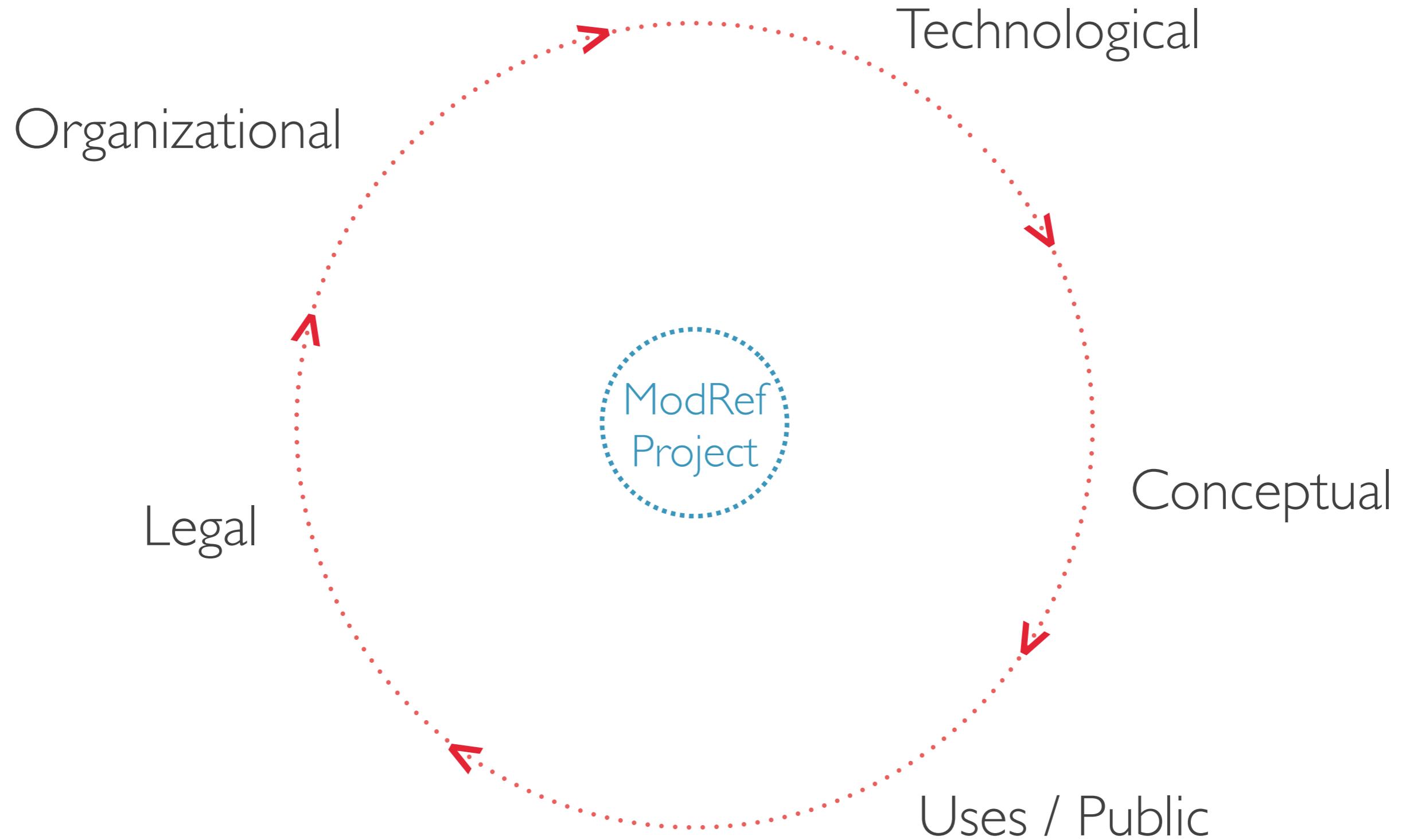




Analysis of the existing

Modeling, Frames of Reference and Digital Culture

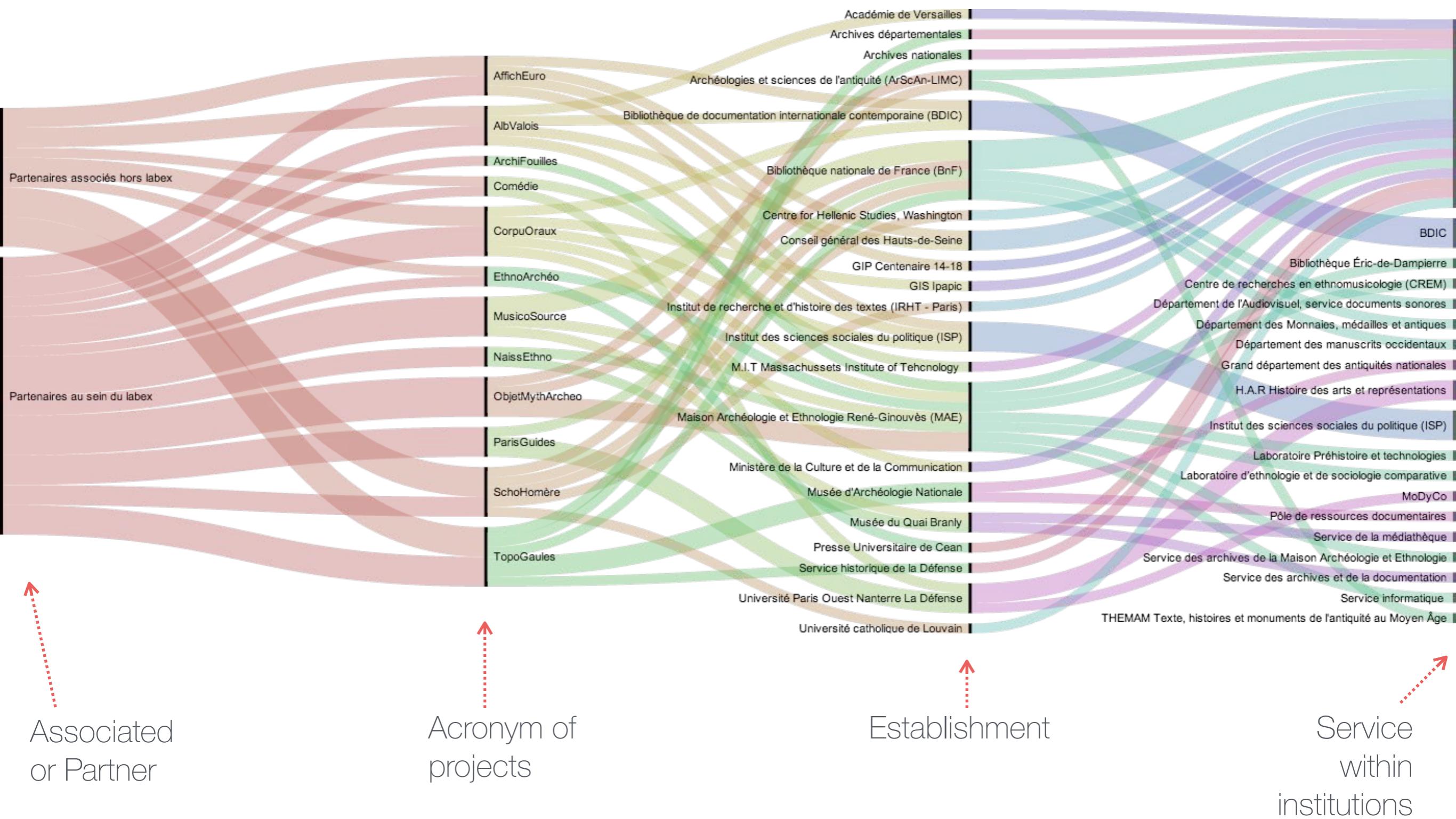
➤ Five dimensions analysis



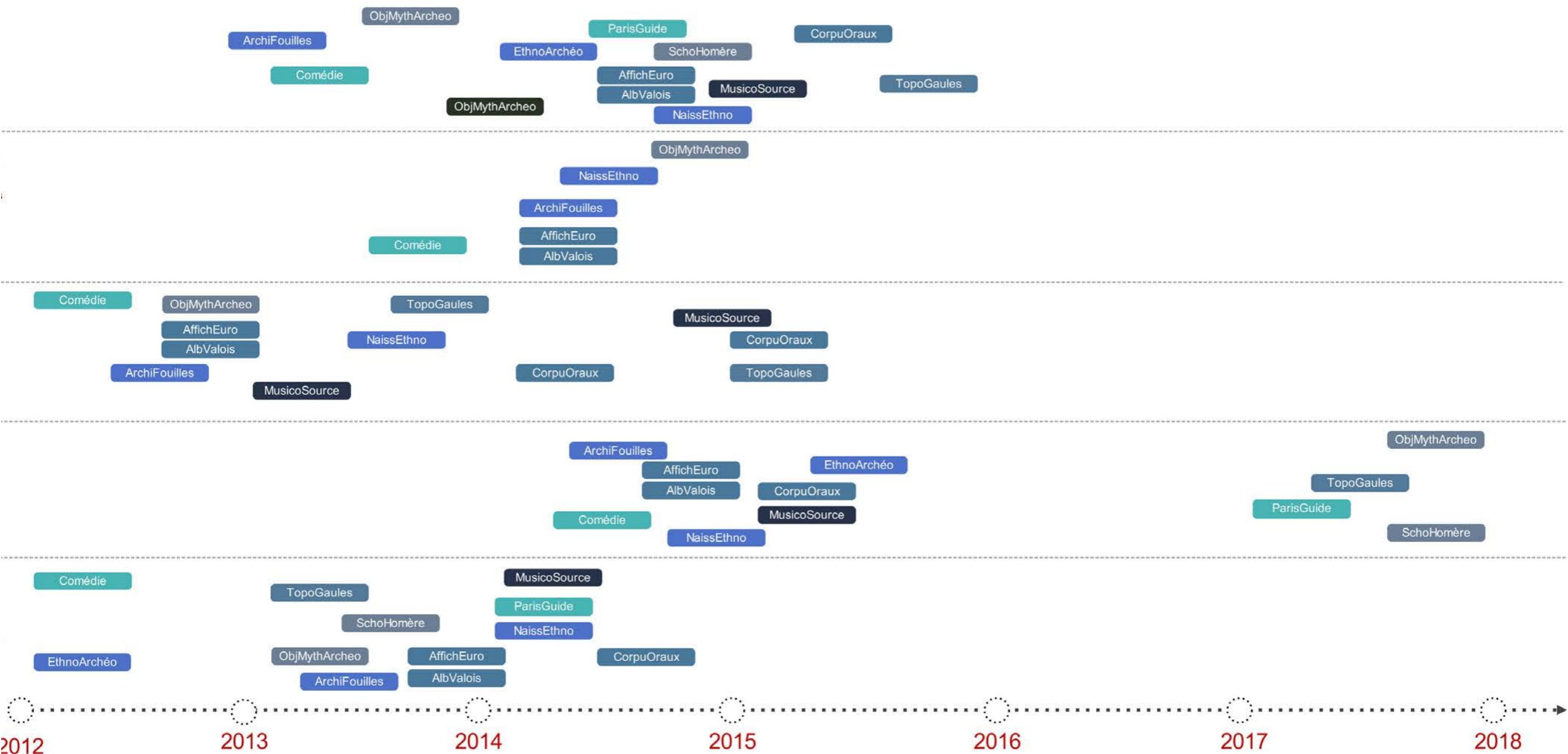
> Twelve variables

- ▶ **Ultimate goal** of publication materials (corpus) or editorialisation content (virtual exhibition with scientific discourse) ?
- ▶ **Target audience** (and uses)
- ▶ **Disciplines involved** : history, art history, archeology, ethnology,...
- ▶ **Multimodal aspects** of digital objects: text, images, sounds, 3D files,...
- ▶ **Number of partners** and their location
- ▶ **Institutional source projects** : research institutes (CNRS, University, museums, libraries, archives,...
- ▶ **Volume** of digitization and metadata
- ▶ **Conceptuel model** (origin and desired)
- ▶ **Choice of standards**
- ▶ The issue of **licences**
- ▶ **Team formation**
- ▶ The **Initial status** of projects

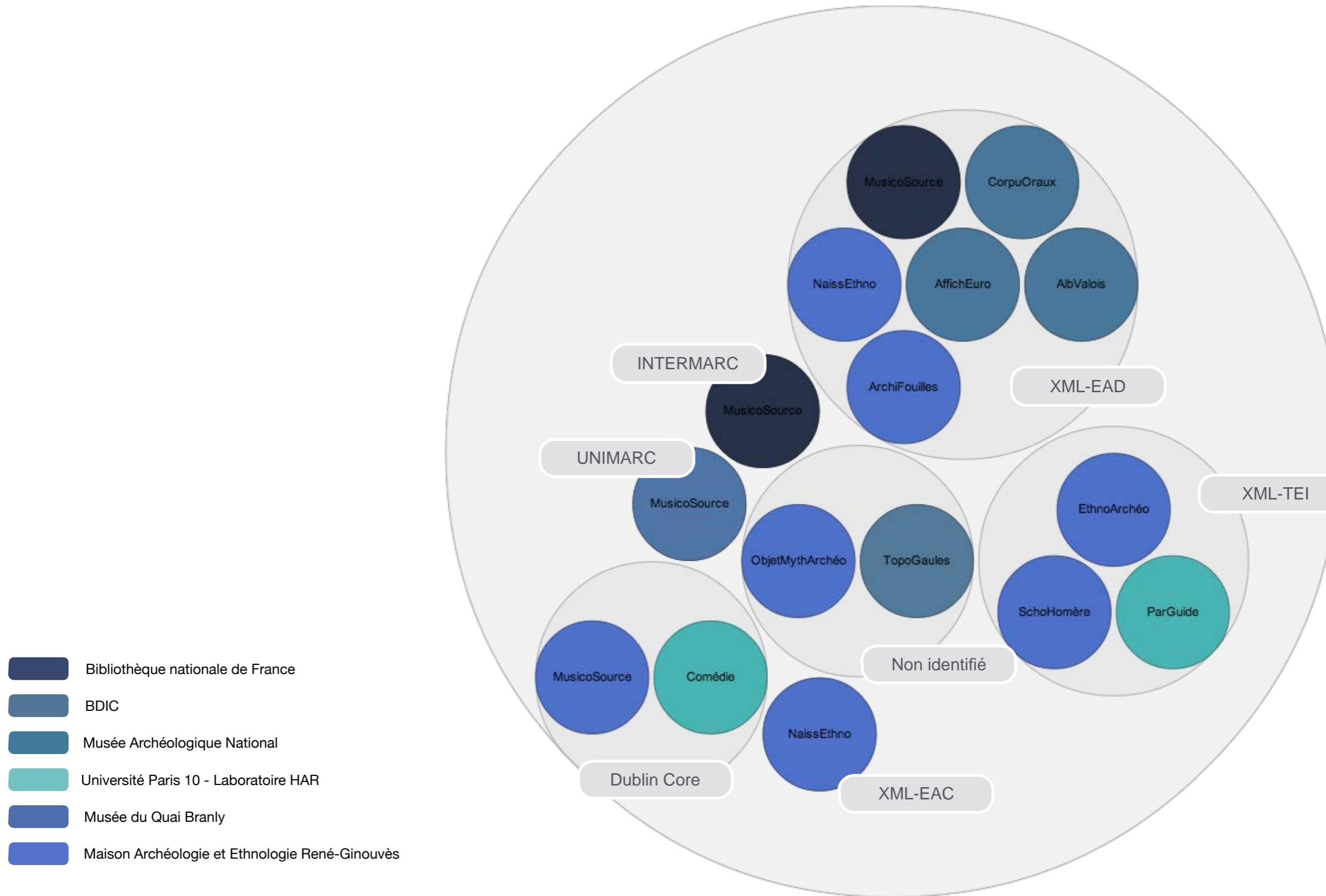
> Analyses : organizational complexity



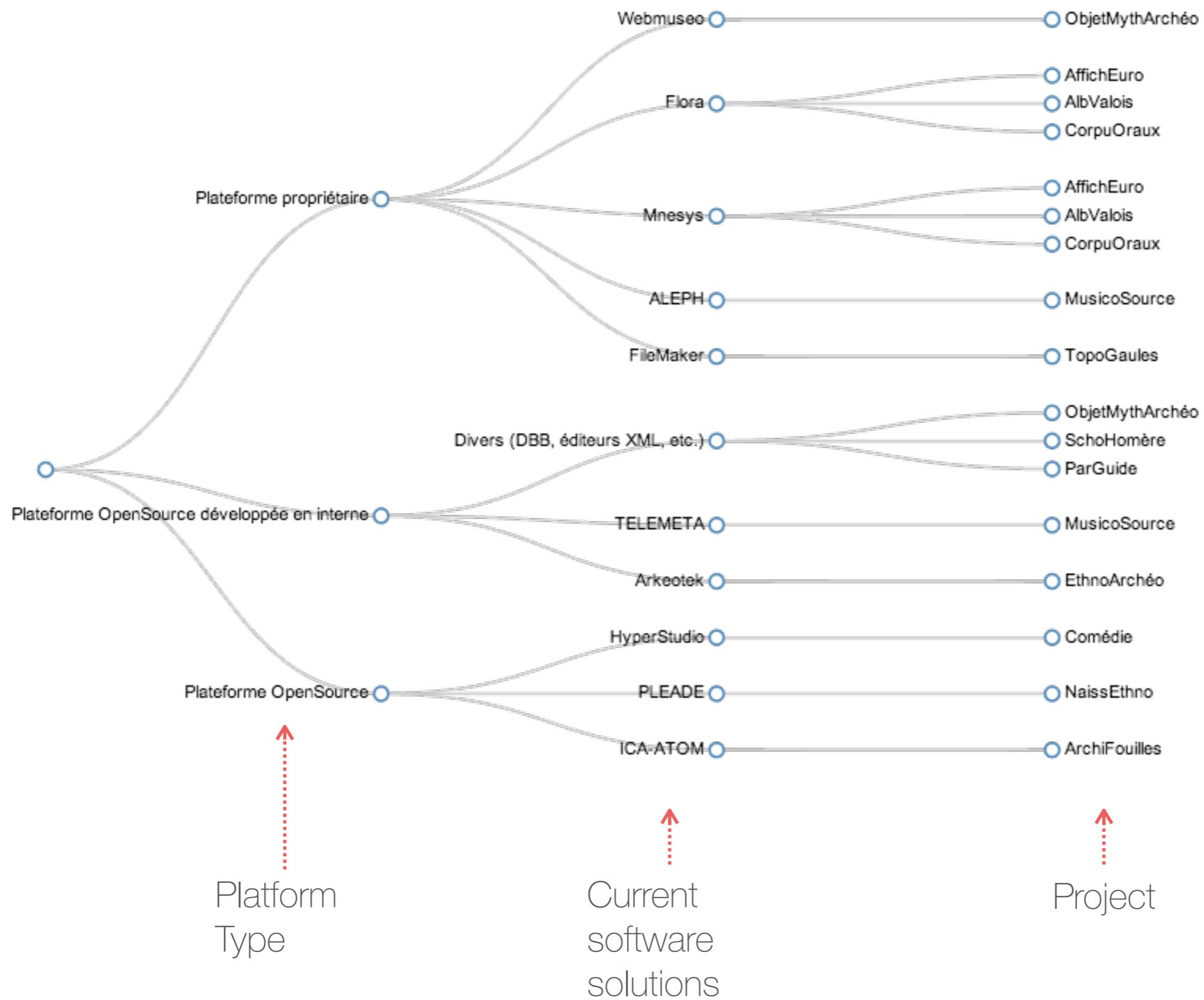
> Analyzes : time complexity



Analyzes : conceptual complexity

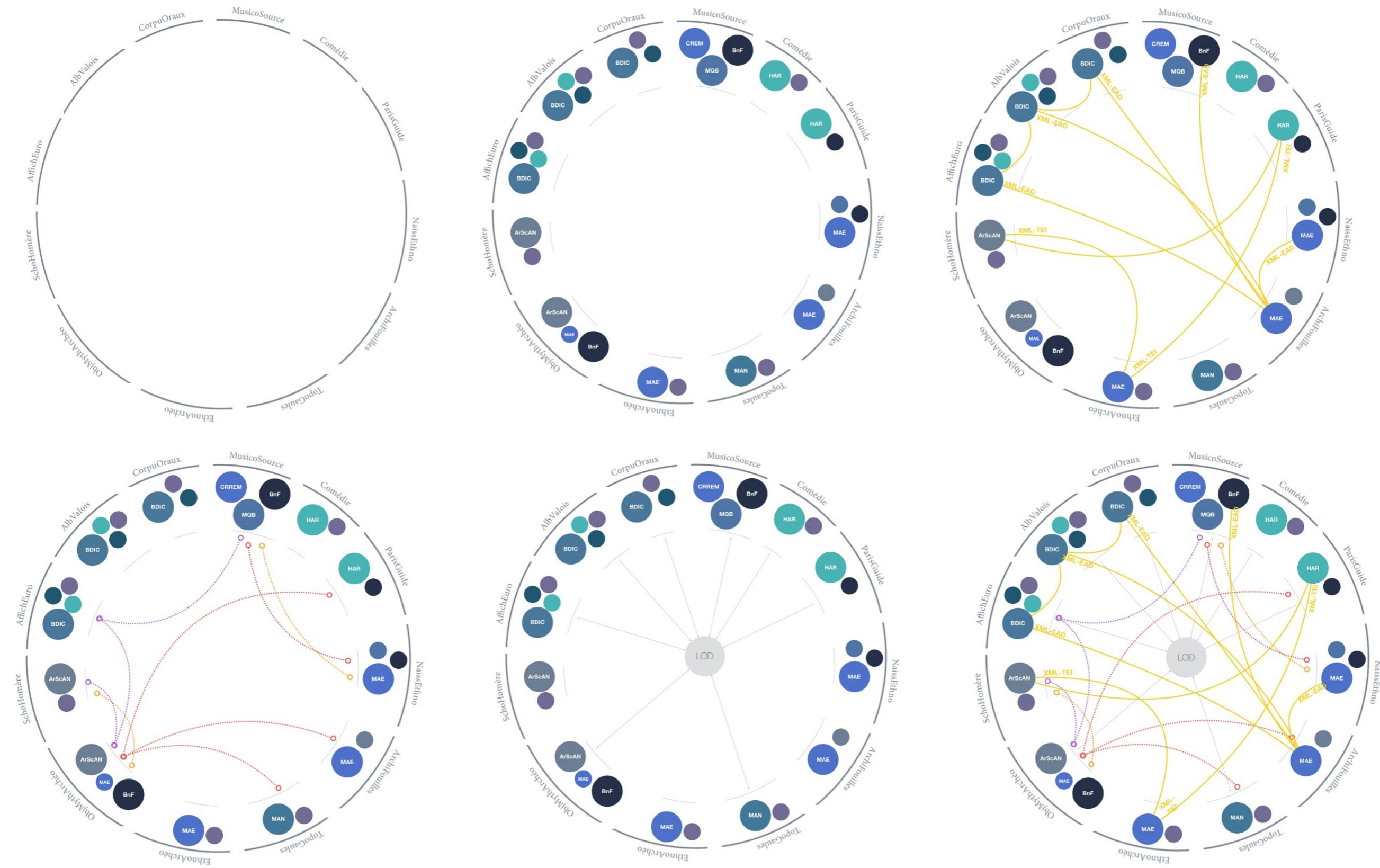


> Analyses : technological complexity

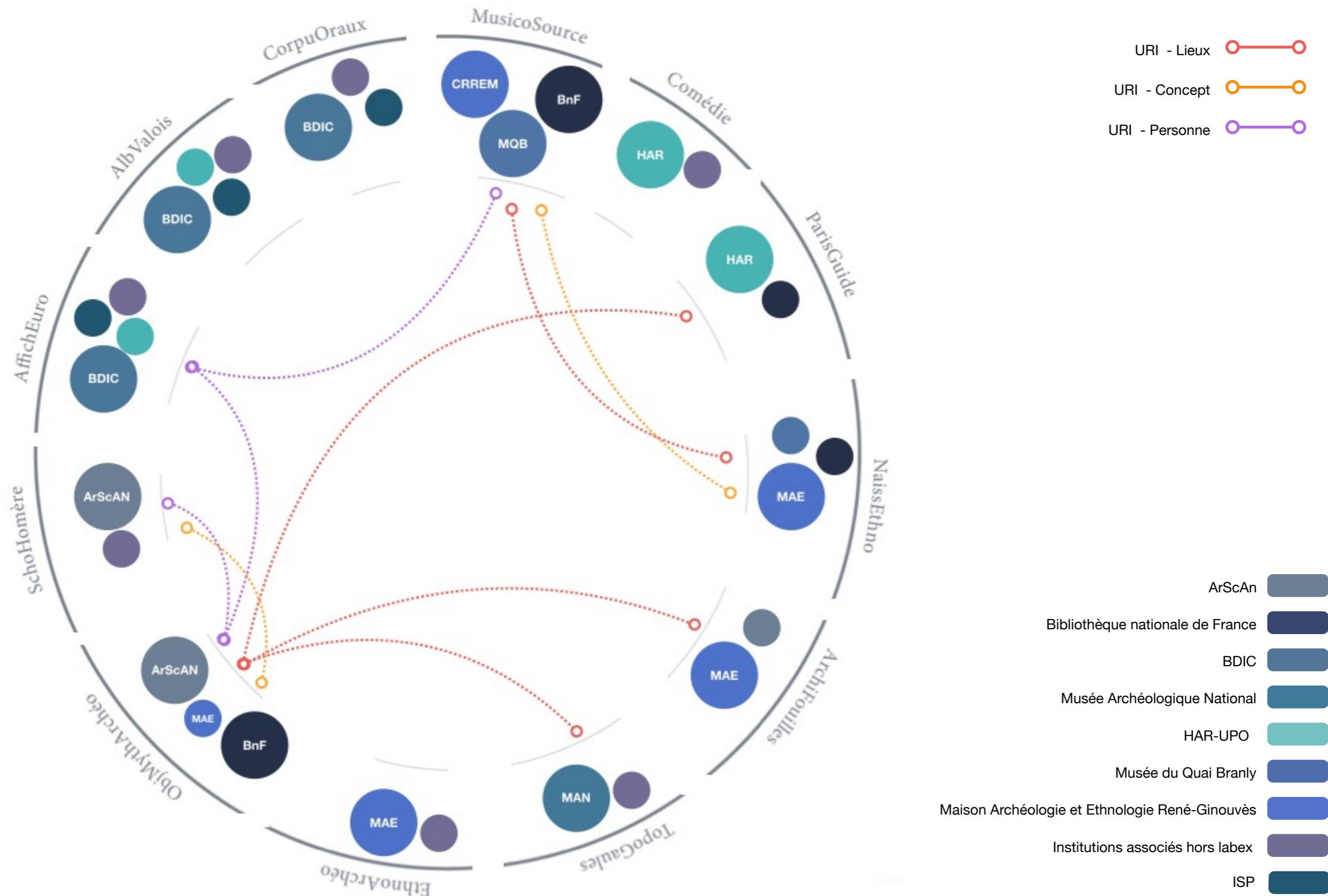




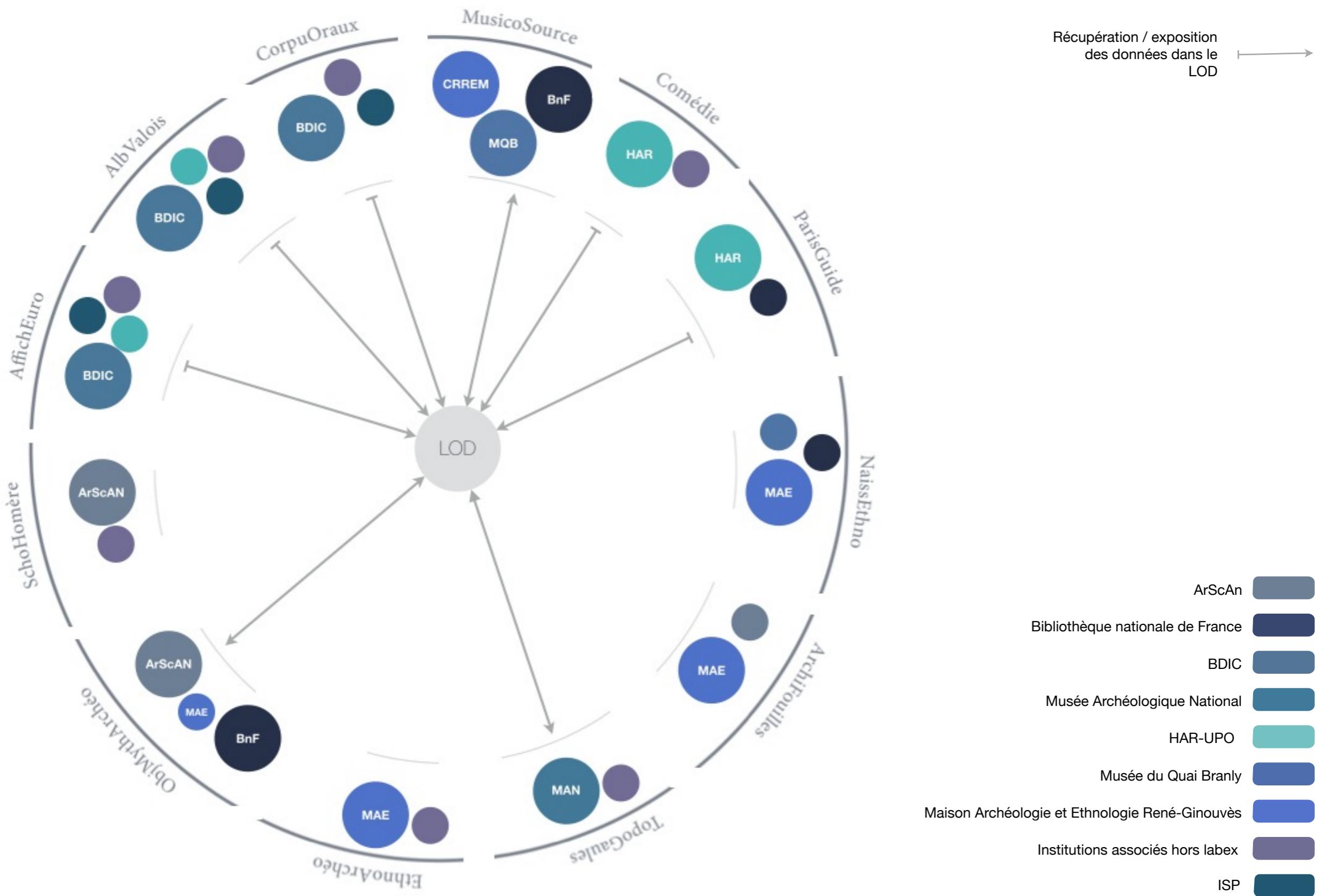
Analyzes : ModRef's sphere



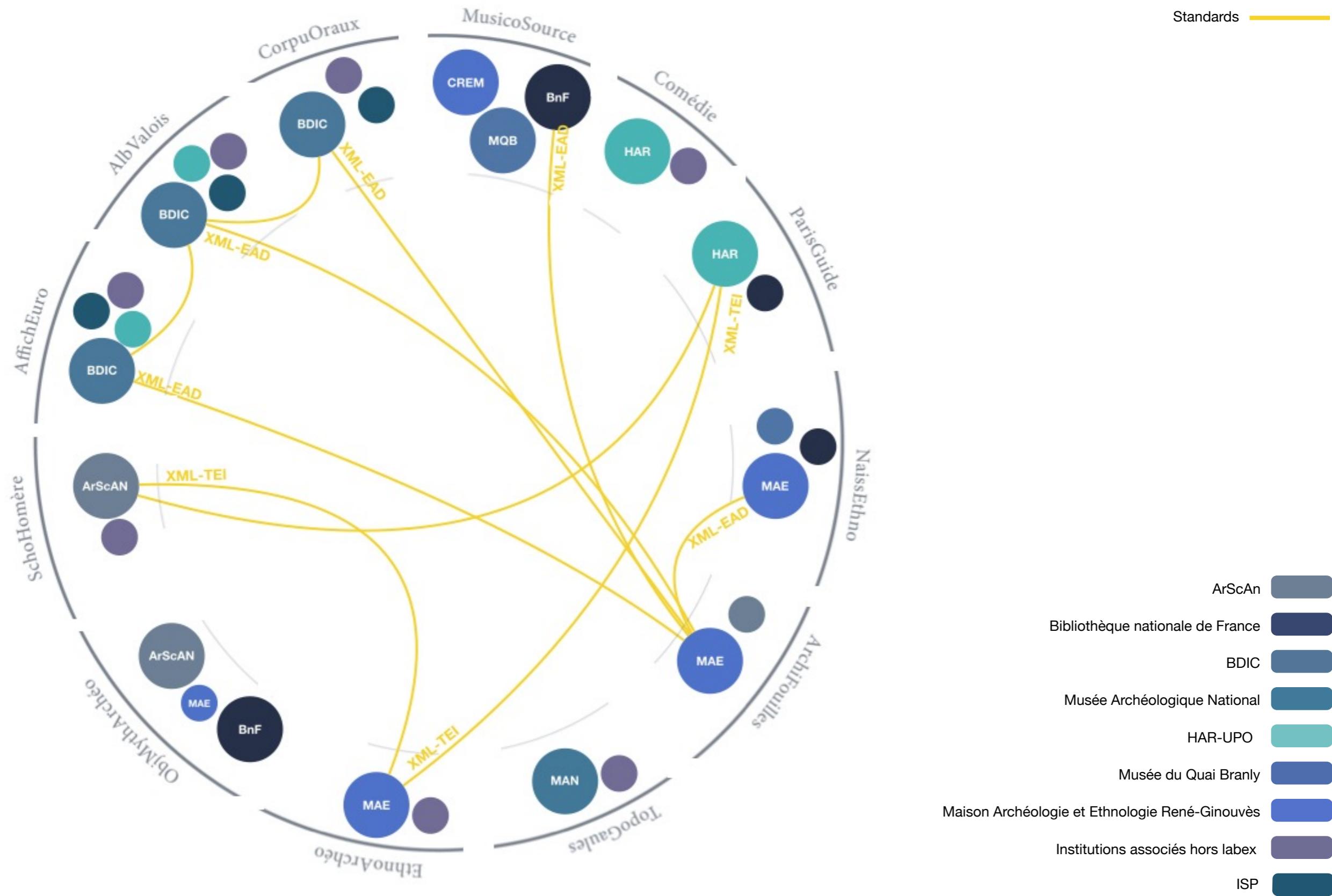
➤ Analyses : ModRef's sphere



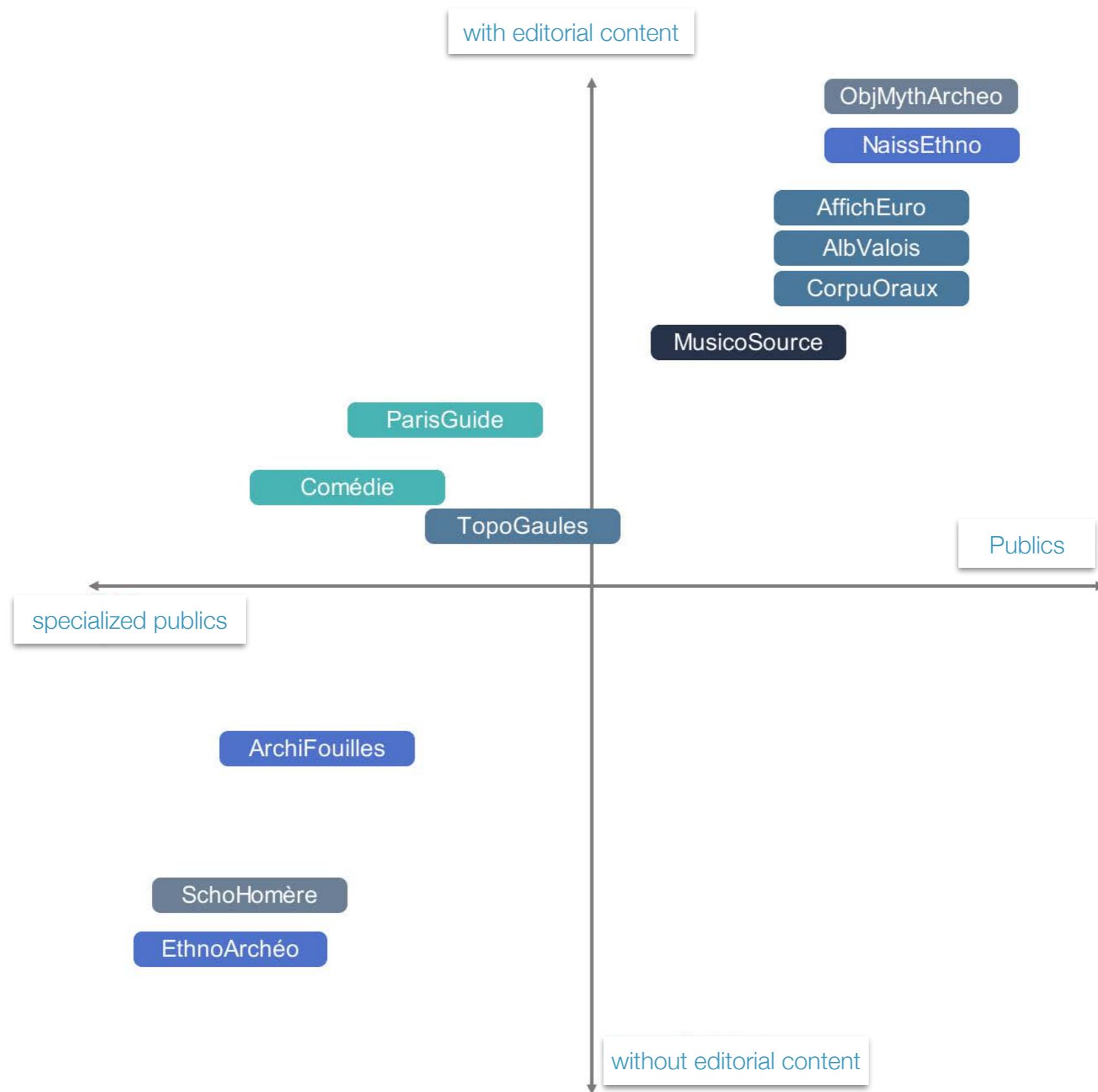
➤ Analyses : ModRef's sphere



➤ Analyzes : ModRef's sphere



> Analyzes : For which public ?





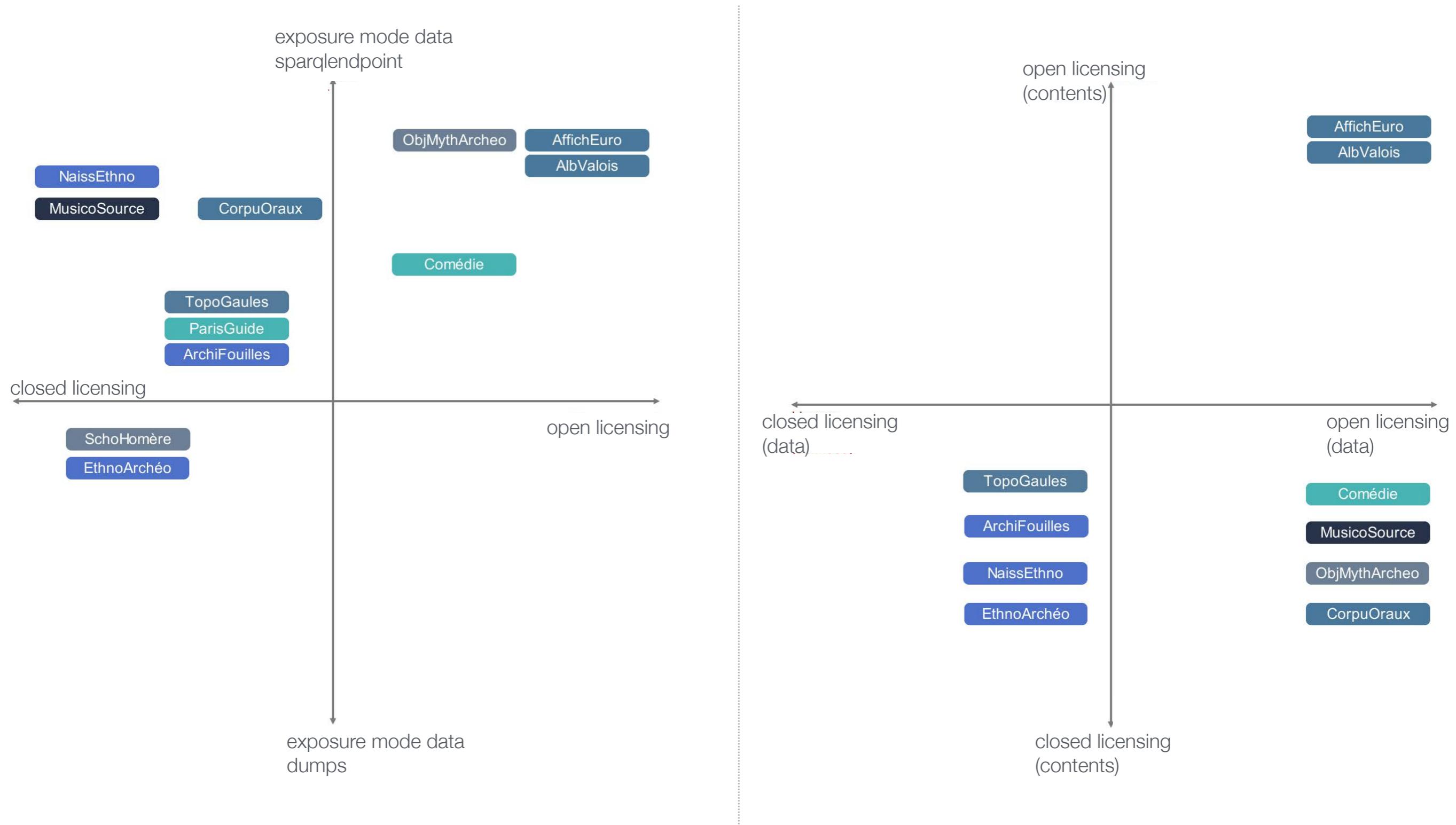
Choices and Challenges

Modeling, Frames of Reference and Digital Culture

> Exposure data



> Legal position



- One and more models ?

British Museum : CIDOC-CRM

Europeana : EDM

Smithsonian : EDM + Extensions

BNF : Modèle propre découlant de FRBR

Les possibilités offertes par RDF/RDFS/
OWL offrent une **bonne adaptabilité**

Exemples

Quelques éléments de réflexion

British Museum : local URI
Smithsonian : URI locales + links with DBPEDIA

Requires an integration process
One or more URI
Delegation of Authority
Enrichment uncontrolled properties
Inserts warehouse in the LOD
Network effect (attractor or unattractive)

Globalization of URI
Search engines and recommendation engines



Getty Vocabularies and Linked Data

Patricia Harpring

revised 17 June 2013

Current Status: Linked Open Data (LOD)

- We plan to publish all Getty vocabularies to the LOD cloud
- Implementation project begins July 2013
 - We will begin with AAT and then move on to TGN, ULAN, and finally CONA, from late 2013 through 2015
 - Sequence was chosen to take advantage of the way the vocabularies are connected: AAT is linked to itself; TGN pulls from AAT; ULAN from AAT and TGN; and CONA from all three
 - We also intend to publish LOD versions of our lookup lists (e.g., languages, roles, nationalities, place types, and bibliographic sources)
- We anticipate that the data will be published as SKOS and SKOS-XL formats under the ODC-BY 1.0 license
- We are fairly confident that our base URI will be <http://vocab.getty.edu/>
- Examples from the prototype - with other classes falling into place accordingly:

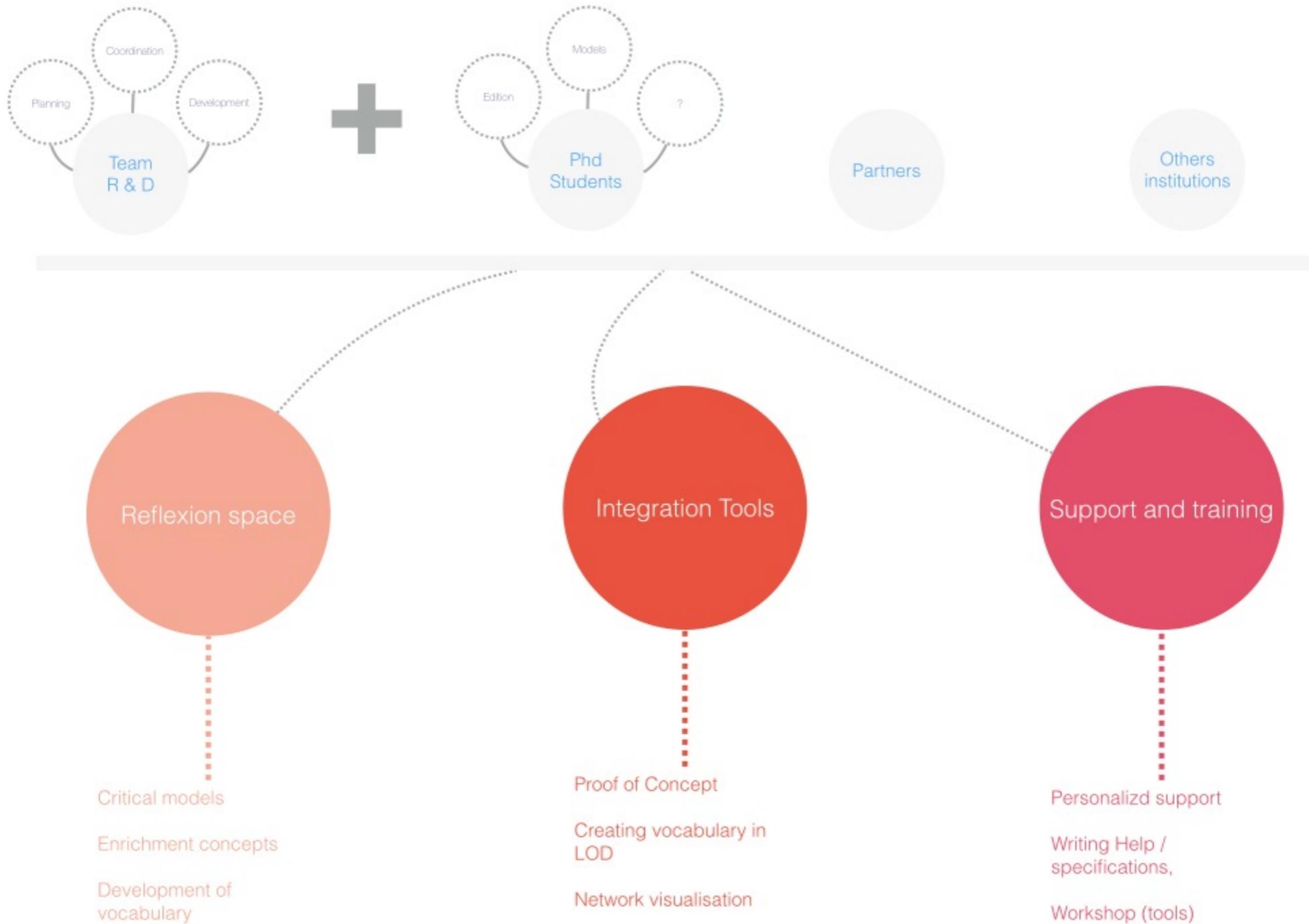
- <http://vocab.getty.edu/resource/aat/subject/300028576> [content-negotiated 303 (See Other) redirect to...]
- <http://vocab.getty.edu/data/aat/subject/300028576> [200 (OK) - application/rdf+xml]
- <http://vocab.getty.edu/page/aat/subject/300028576> [200 (OK) - application/xhtml+xml]

IV

Proof of concept

Modeling, Frames of Reference and Digital Culture

> Objectives and milestones





Tools

Outils	URL	Créateur	Licence	Evalutation par rapport aux besoins
Antidot Information Factory	http://www.antidot.net/produits-services/produits/antidot-information-factory/	Antidot	Propriétaire	****
Armadillo... ?	http://www.armadillo.fr/app/photopro.sk/web/	Armadillo	Propriétaire	***
D2RQ	http://d2rq.org/	University of Mannheim	OpenSource	**
Datalift	http://datalift.org/	7 membres initiateurs: INRIA, LIRMM, Eurécom, Mondeca, Atos, IGN, INSEE	OpenSource	****
DataTank	http://thedatatank.com/		Propriétaire	**
Intelligence Topic Manager	http://www.mondeca.com/fr/Produits/Knowledge-Browser	Mondeca	Propriétaire	**
Karma	http://www.isi.edu/integration/karma/	Information Siscence Institute - University of Southern California	OpenSource	****
OpenRefine + Extension RDF	http://refine.deri.ie/	Volontaires + DERI's pour l'extension RDF	OpenSource	***
OpenSemanticBus	http://www.perfect-memory.com/nos-solutions/les-offres/	PerfectoMemory	Propriétaire	****
OWLIM	http://www.ontotext.com/	Ontotex	Propriétaire	**
Silk	http://wifo5-03.informatik.uni-mannheim.de/bizer/silk/	University of Mannheim	OpenSource	**
Talend	http://www.talend.com/		Propriétaire	**
Triplify	http://triplify.org/Overview	Research Group Agile Knowledge Engineering and Semantic Web (AKSW) is hosted by the Chair of Business Information Systems (BIS) of the Institute of Computer Science (IfI) /University of Leipzig as well as the Institute for Applied Informatics (InfaI)	OpenSource	**
Virtuoso Sponger	http://virtuoso.openlinksw.com/dataspace/doc/dav/wiki/Main/VirtSponger		Propriétaire	**
Workbench	http://www.mysql.fr/products/workbench/		Propriétaire	**

Thanks