ANY-ARTEFACT-O :
a model developed for history and heritage of cultural industrial landscapes

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SCIENCES HUMAINES ET SOCIALES

Approach by the UNESCO concept of « cultural lanscape »

The Committee acknowledged that cultural landscapes represent the "combined works of nature and of man" designated in Article 1 of the Convention.

They are illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal.

The term "cultural landscape" embraces a diversity of manifestations of the interaction between humankind and its natural environment.

Case Studies : cultural industrial landscapes and digital humanities

- **Portuary landscapes** :
  - Brest versus Rosario, Mar del Plata (Argentina). See Bruno Rohou thesis (https://brmdp.hypotheses.org/)
  - Arsenal of Brest versus Arsenal of Venice (Italia). See Marie-Morgane Abiven thesis (https://brestvenise.hypotheses.org/)

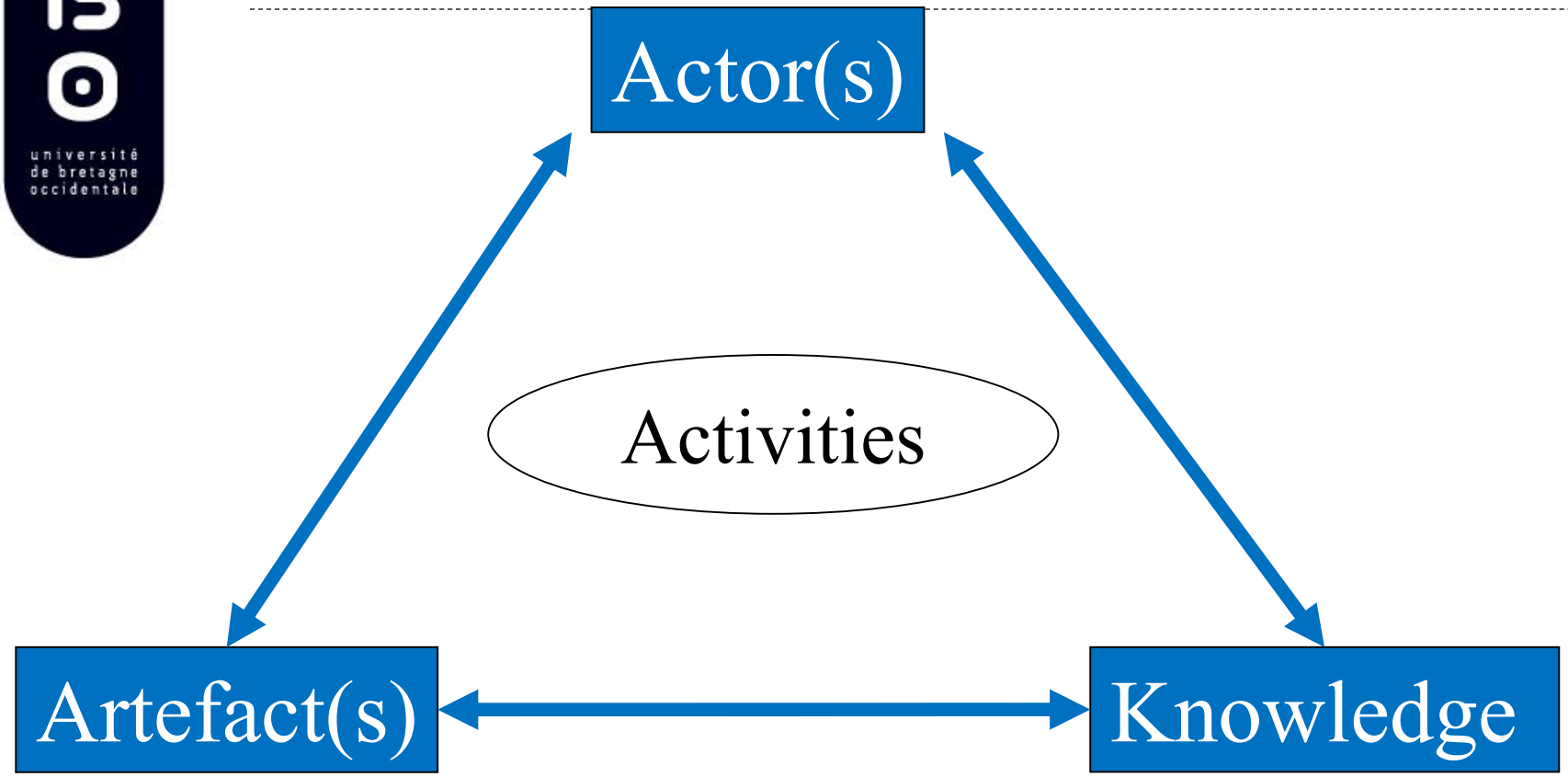
- **Industrial landscapes** :
  - Mining landscape of Atacama (Chile), collaboration with the LIA CNRS Mines Atacama (https://liamines.hypotheses.org/1169)

- Rabardel, Pierre, Les hommes et les technologies : Une approche cognitive des instruments contemporains, Paris, Armand Colin, 1995.

Anthropo-centered approach:

« Human being occupies a central position from which are thought relations to techniques, machines and systems. **This option places the activity of the man at the heart of the analysis** »

ANY-ARTEFACT model (for history)

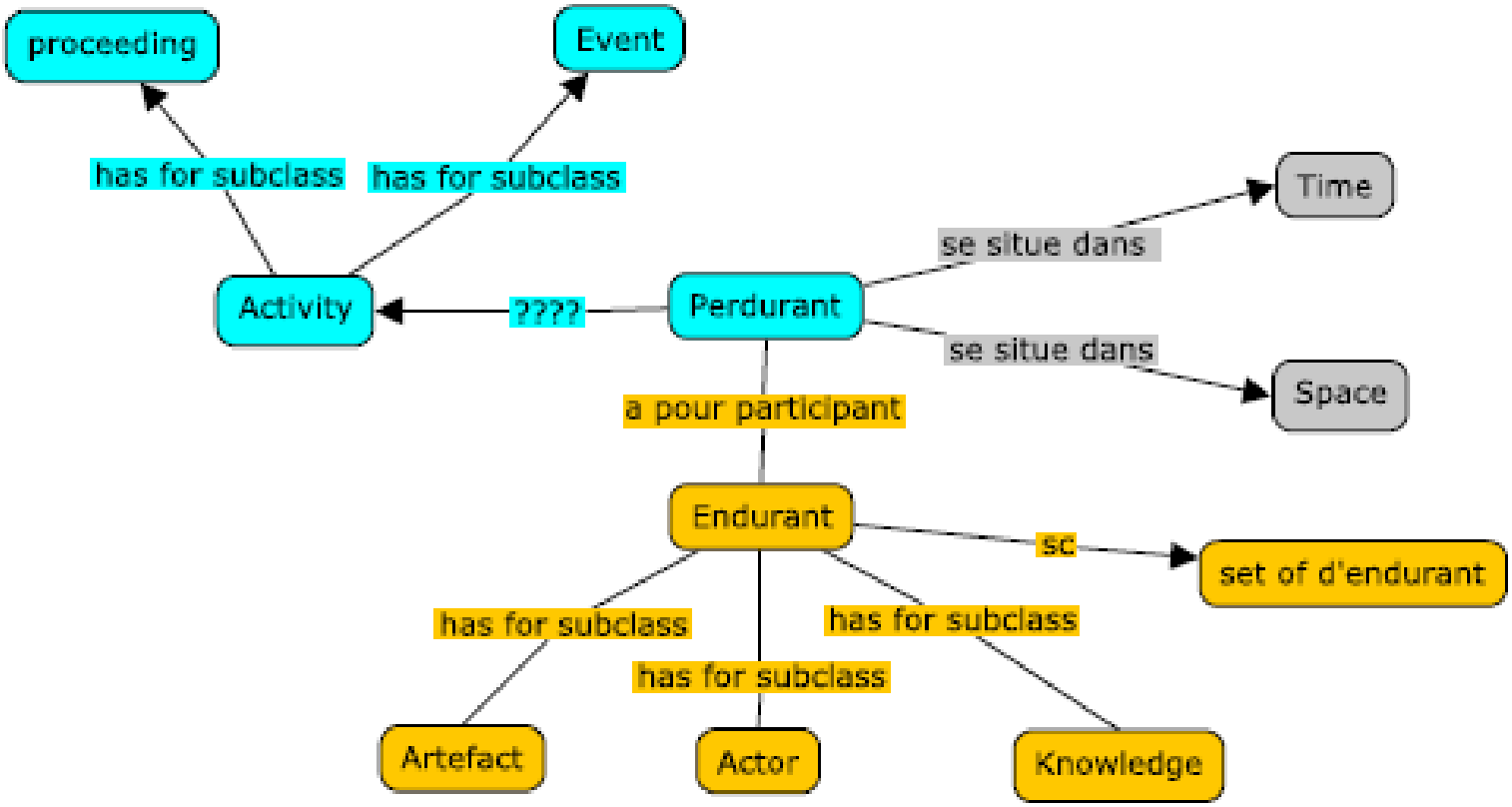


Time-evolution model

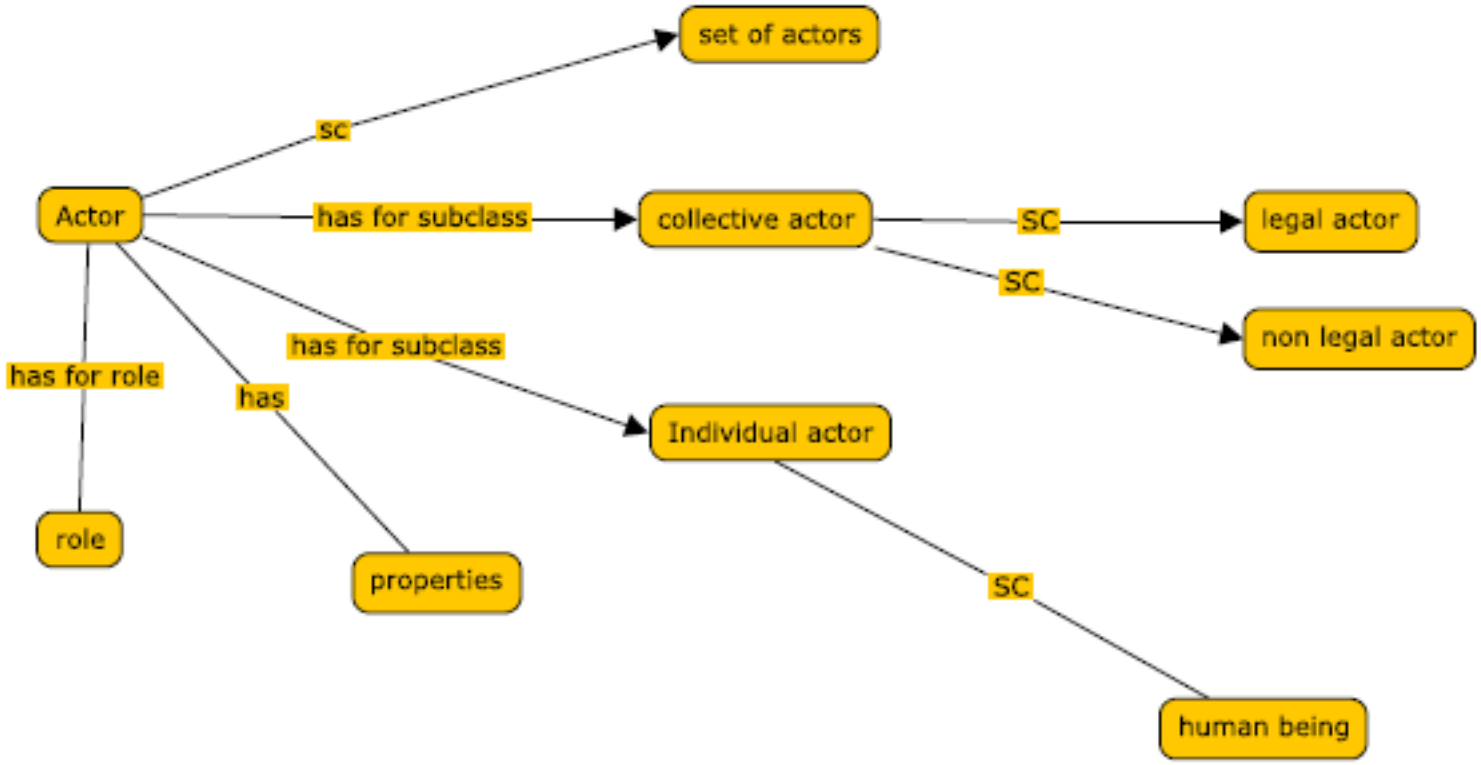
Time-evolution model :

- Step 0: emerging needs
- Step 1: translation of those needs into a technological or scientific problem, emergence of different solutions to the problem, choice of a solution
- Step 2: making the artifact
- Step 3: Use of the artifact including the maintenance and repair phases
- Stage 4: evolution or obsolescence or disappearance or destruction

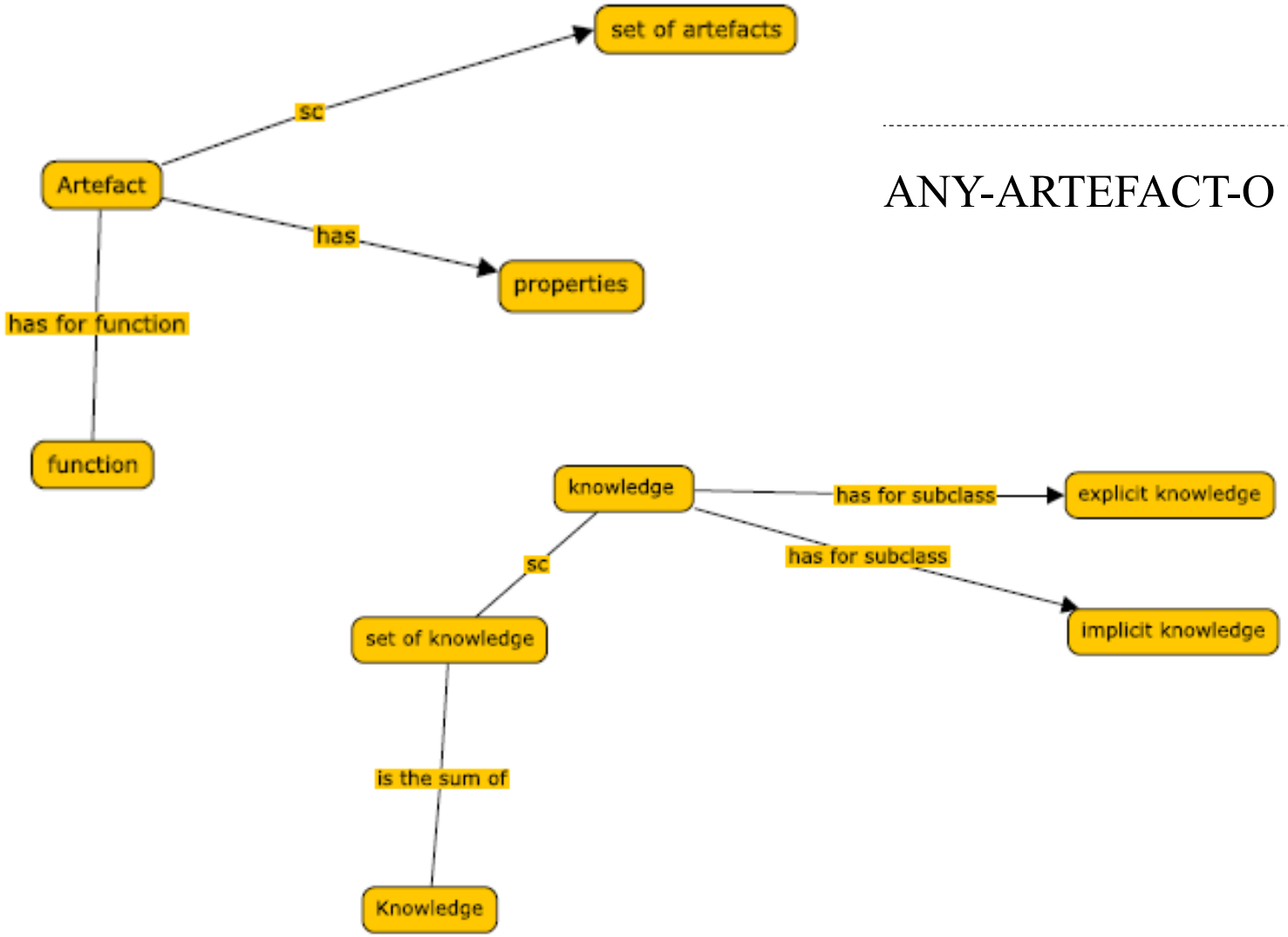
ANY-ARTEFACT-O



ANY-ARTEFACT-O

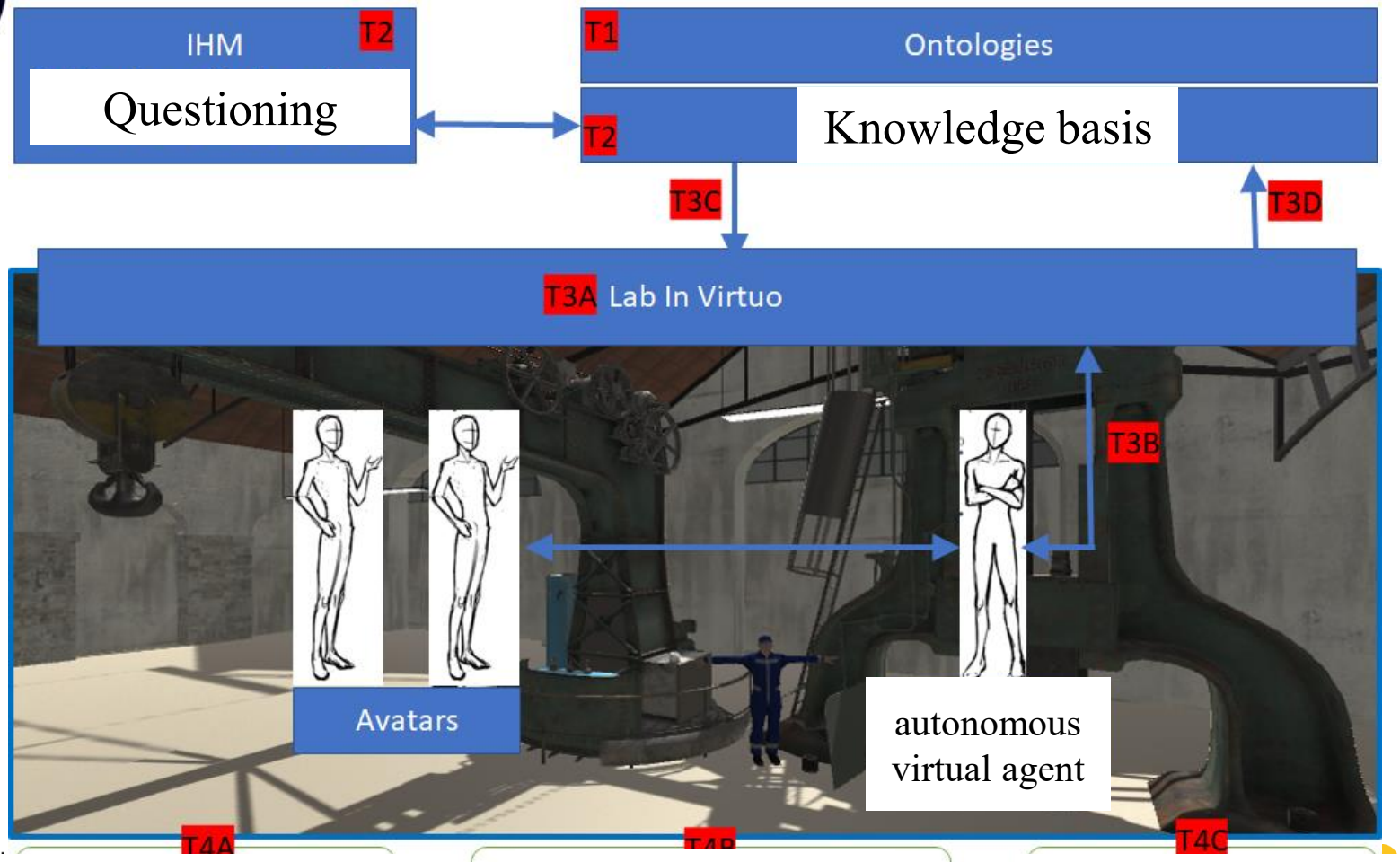


ANY-ARTEFACT-O



Lab In Virtuo Project

Implementation of a Virtual Intelligent Environment
in a 3D reconstruction of the forge of the arsenal of Brest :
see : https://www.youtube.com/watch?v=fnuPnRaYxeQ



Collecting history data | Working | Restoring activities

Niveau d'abstraction	Environnement Virtuel Intelligent	Ingénierie des connaissances	Histoire
M3 Métamodèle	Modèle MASCARET Entité ; Activité ; Action *Comportements Agent*	Métaconnaissances : ANY-ARTEFACT-O Artefact ; Activités ; Participants	ANY ARTEFACT
M2 Modèle (Instanciation des méta-modèles sur les domaines d'études)	Modèle métier Classes : MarteauPillon, Forge d'une ancre, Mine	Connaissances PH-O ; Atacama-O	HST port ; HST ATACAMA
M1 Instanciation des modèles	Instances Objets 3D Marteau 6T des forges de Pontaniou, Mr X joue le rôle de forgeron	Métadonnées sémantique	Information SHS
M0	Exécution des comportements métiers	Inférences / Raisonnement	
Ressources	*Assets*	Sources	Sources

F1
B2
B1

Données
Programme informatique

Works in progress

- Producing ontologies dedicated to the case studies (portuary and mining landscapes)
- Matching ANY-ARTEFACT-O with CIDOC-CRM, symogih, DOLCE
- Matching with MASCARET (activity model for Virtual Reality developed by R. Querrec/LabSTICC) : see Lab In Virtuo project