Moving ahead:
The integration process

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Integration in ARIADNE

- Creation of an integrated ecosystem of archaeological information

- To guarantee interoperability among data coming from different archives

- To use data as if they were stored in a single archive

  - Unique access point

  - Uniform interfaces

- To ensure retrieval of information in a coherent and meaningful way

  - Semantics

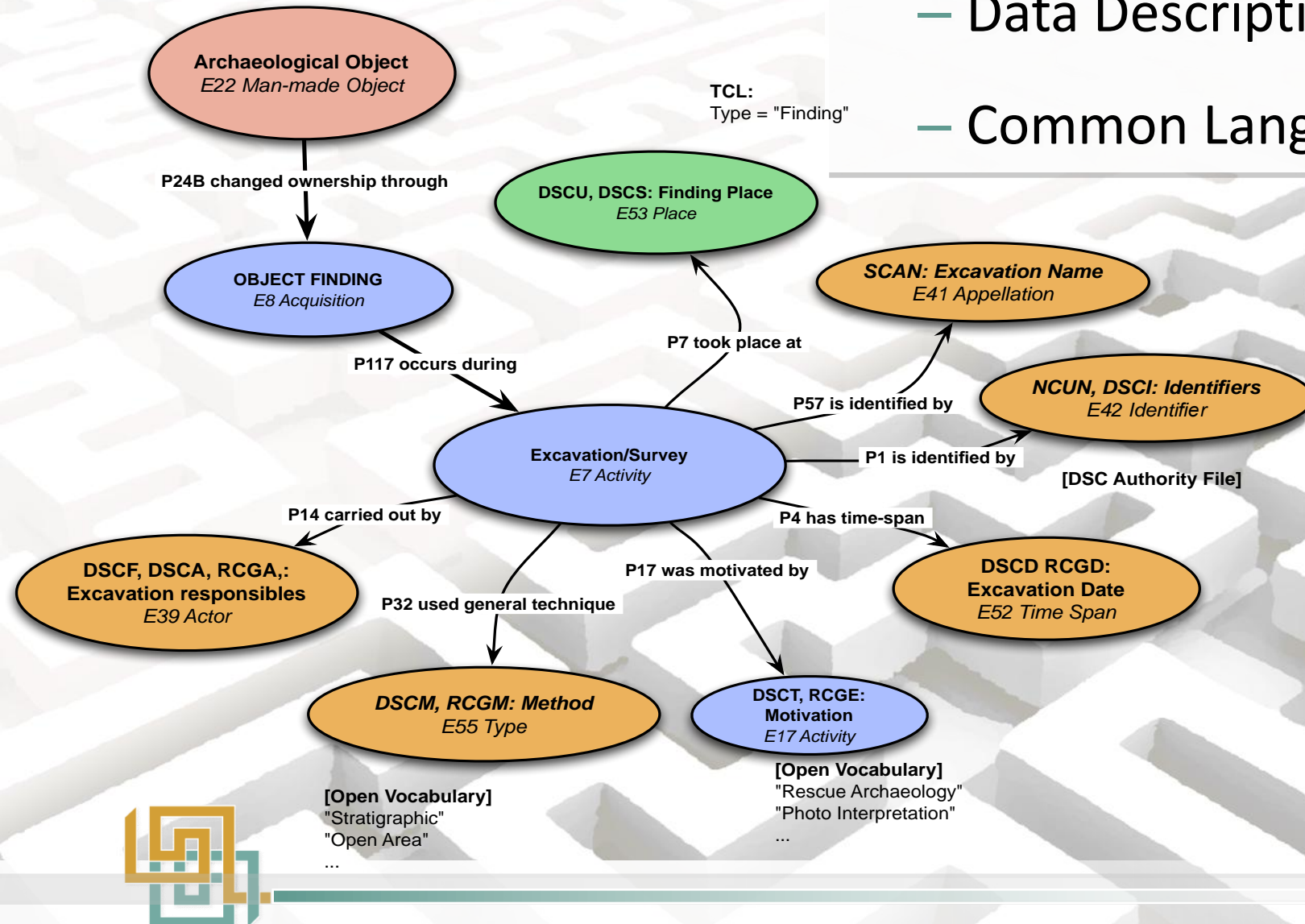# Muhammad and the Mountain

Muhammad and the Mountain(s)

Preparing Legacy Archives

- Digitisation of information on paper

- Online availability

  - Microsoft Word, Excel, Access, PDF, GIS …

- Online accessibility improvement

  - ADS, ARACHNE, ZENON, FastiOnline, …

- Consistency checking for mapping and information extraction
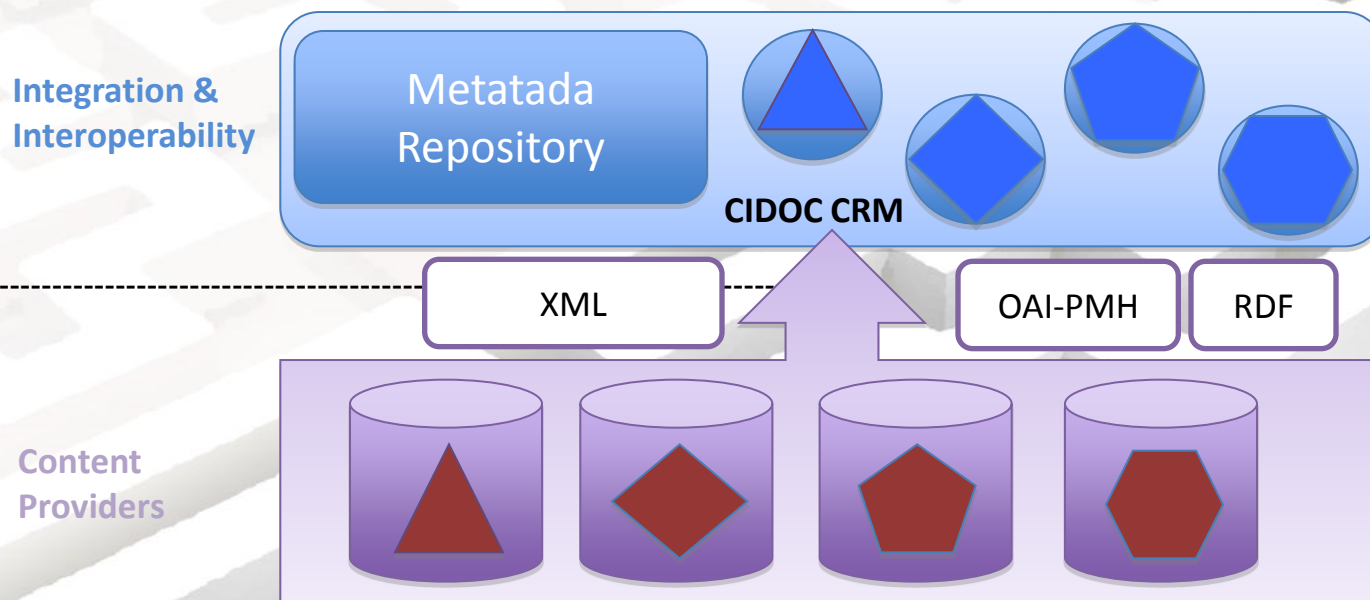
  - Legacy data to CIDOC CRM

  - Legacy thesauri to SKOS

Mapping to CIDOC CRM

— Data Description

— Common Language

Archaeological Object
E22 Man-made Object

P24B changed ownership through

OBJECT FINDING
E8 Acquisition

P117 occurs during

TCL:
Type = "Finding"

DSCU, DSCS: Finding Place
E53 Place

P7 took place at

SCAN: Excavation Name
E41 Appellation

NCUN, DSCI: Identifiers
E42 Identifier

P57 is identified by

Excavation/Survey
E7 Activity

P1 is identified by

[DSC Authority File]

P14 carried out by

P4 has time-span

P17 was motivated by

DSCF, DSCA, RCGA,:
Excavation responsibles
E39 Actor

P32 used general technique

DSCD RCGD:
Excavation Date
E52 Time Span

DSCM, RCGM: Method
E55 Type

DSCT, RCGE:
Motivation
E17 Activity

[Open Vocabulary]
"Stratigraphic"
"Open Area"
...

[Open Vocabulary]
"Rescue Archaeology"
"Photo Interpretation"
...

ARIADNE

- – Common semantic representation (mapping)
- – Data transparency
- – Data peculiarity preserved by the system

Integration & Interoperability

Metatada Repository

CIDOC CRM

XML | OAI-PMH | RDF

Content Providers

Querying the integrated archives

- User interfaces and the ARIADNE Portal

  - Main access point to system and services

- Archaeological objects, places, events, actors and types

  - Browse and refine with facet views

- Interaction with the Registry

  - Drives the queries towards the most relevant archives

- Interaction with terminological data and services

  - Vocabularies to provide support at query and retrieval time

Query on Map and Timeline
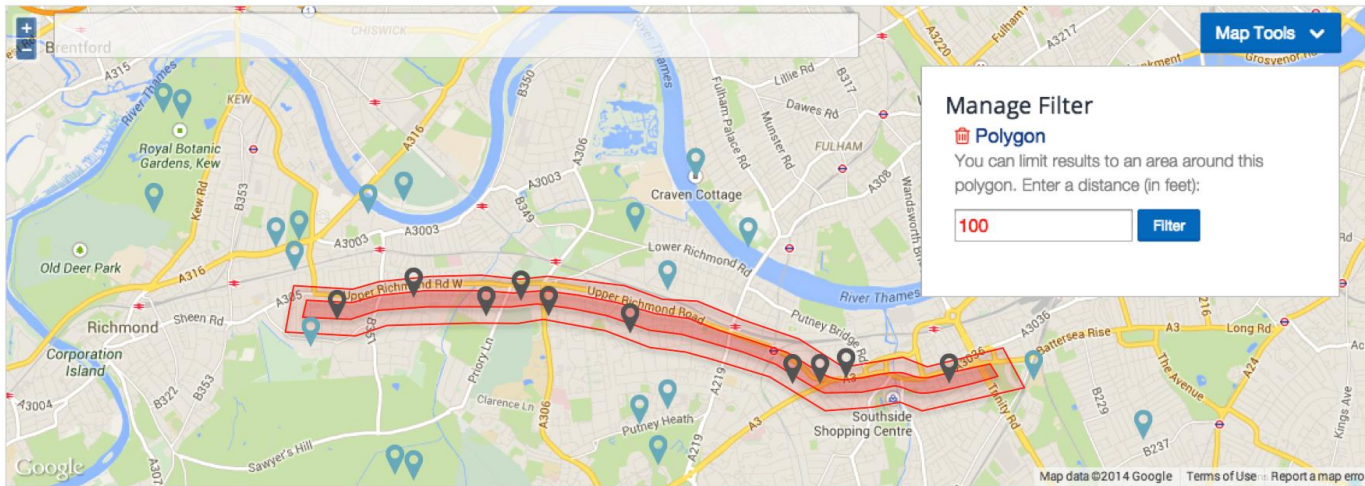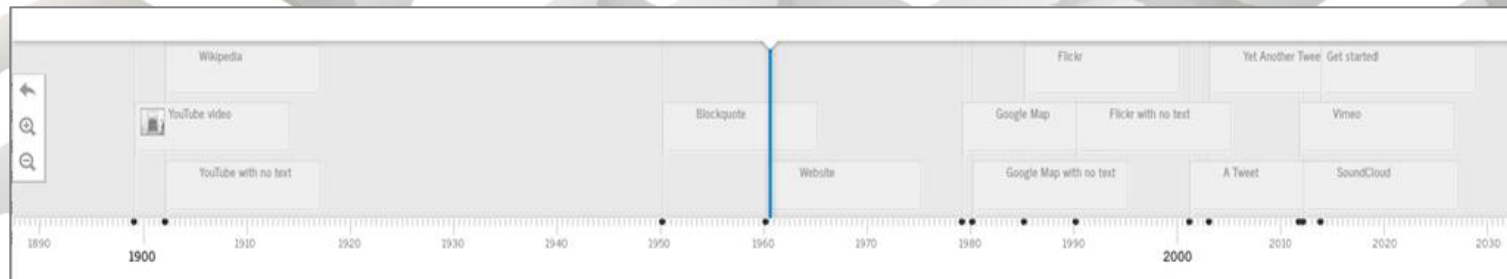
Preserving legacy archives

- Legacy database syncronization

  – ARIADNE system constantly updated according to modifications of legacy archives

- References to legacy archives always provided

  – Data provenance

  – URLs to information on original portals/web applications

- User to navigate original information

  – To perform custom searches tailored on specific needs

Repository and Services Architecture

ARIADNE Portal
- Configuration & Management
- Browse/Query Interfaces

Integration Services
- Preview
- Preservation
- Vocabularies Management
- Digital Asset Management
- Resource Discovery
- Archive Discovery
- Data Access (SPARQL, REST)
- Dataset Discovery

Integration & Interoperability
- Vocabularies
- Metadata Enhancement
- Metatada Repository — CIDOC CRM
- Registry — ACDM
- LOD

WEB

Content Providers
- Deposit Services
- OAI-PMH
- XML
- Data + Metadata
- Data + Metadata
- Data + Metadata
- Data + Metadata

ARIADNE is funded by the European Commission's Seventh Framework Programme

Final considerations

- Very advanced stage of development

  - End of the project

- ARIADNE main goal

  - "Integration of existing archaeological research data infrastructure through new and powerful technologies" (ARIADNE DoW)

- "From differences results the most beautiful harmony"*(Heraclitus of Ephesus)*

European Commission

SEVENTH FRAMEWORK PROGRAMME