Documenting the Past: Extending the CIDOC CRM family to Archaeology (CRMarcheo), Historic Buildings (CRMba) and Historic Places (CRMspace)

Franco Niccolucci & Achille Felicetti
VAST-LAB, PIN, Università degli Studi di Firenze, Italy
VAST-LAB and Cultural Heritage

• Development of technologies, tools and standard for the management of Cultural Heritage information

• Integration and interoperability of legacy archives using semantic tools and techniques (ontologies, semantic tools, linguistic resources)

• ARIADNE Project (http://www.ariadne-infrastructure.eu)
  • Creation of an integrated ecosystem of archaeological information to guarantee interoperability among data coming from different archives
  • ARIADNE Portal: to discover and access 2 million archaeological records from 15 countries in 24 languages using advanced interfaces http://portal.ariadne-infrastructure.eu

• PARTHENOS Project (http://www.parthenos-project.eu)
  • Cluster of research infrastructures to interconnect and harmonise information coming from different (but interrelated) disciplines
  • Humanities, Cultural Heritage, History, Archaeology
VAST-LAB and the CIDOC CRM

• CIDOC CRM: identification of real world items by real world names
• Observation and classification of real world items
• Part-decomposition and structural properties of Conceptual and Physical Objects, Periods, Actors, Places and Times
• Participation of persistent items in temporal entities.
  • Creates a notion of history: “world-lines” meeting in space-time.
• Location of periods in space-time and physical objects in space
• Influence of objects on activities and products and vice-versa
• Reference of information objects to any real-world item
CRMarchaeo: Supporting Excavation Process

- Semantic encoding, exchange, interoperability and access of existing archaeological documentation
- Starting from standards and models already in use by national and international cultural heritage institutions
- **Excavation Events** and involved actors (people, institutions)
- **Nature** and shape of existing stratifications and surfaces
- Analysis of the **human remains or artifacts** found within the strata
- Stratigraphic **genesis** and modifications, natural phenomena or human intervention that led to their creation
- **Chronological** order in which stratification was formed
- Maintained by **VAST-LAB, PIN**

CRMba: Built Archaeology Documentation

• Recognize the functions of a building and its evolution over the years
• Focuses on the mereological and mereo-topological relations between the constituent parts and the whole structure
• Introduces the concepts of “empty spaces” and “space functions” defined by form
• Makes explicit the relations between building components functional spaces, topological relations and construction phases through time and space
• Support the dating process through the identification of the stratigraphic relationship between various stratigraphic units
• Maintained by VAST-LAB, PIN
• More information: http://www.cidoc-crm.org/crmba
“CRMspace”: Identify Historic Places

• Investigation of historical names and their relations with geographic places

• How to deal with unknown or imaginary places?
  • Tomb of Alexander the Great
  • Eldorado, Atlantis, Entrance to Hell ...

• **Pleiades**: diachronic representation of place names over time
  • [http://pleiades.stoa.org](http://pleiades.stoa.org)
  • Modern place names resolution starting from ancient ones
  • Byzantium, Constantinople, Istanbul

• Different identities of the same place
  • Athens: polis of ancient Greece; capital of modern Republic of Greece
Thank you ... 

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