Kartography
CIC

New Documentation

61st CIDOC CRM & 54th
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New Definition

Museum documentation is the activity of recording and generating **diverse knowledge** and evidence, in analogue and digital formats, in order to preserve the **history of society** and **nature** as reflected by museum collections. It is a core strategic, operational, and **transdisciplinary** activity that enables the **social role of museums** as public memory institutions. As a dynamic information resource, it is central to the fulfillment of this mission by:

- Reflecting and underpinning museum activities such as research, interpretation, audience engagement, conservation, curation, exhibition, education, administration and legal oversight, security, and collections management.
- **Interconnecting and synthesizing** information about physical, digital, and intangible collections around multidimensional aspects such as identity, materiality, preservation, aesthetics, conceptual associations, and social and historical contexts.
- Providing a **living resource** that evolves and responds to new knowledge that is supported by evidence, such as collection history and provenance.
- Acting as a conduit for promoting **meaningful, ongoing collaboration** among different communities to participate in the creation of diverse and inclusive knowledge.

Original Mellon Commission

1. Community reuse and knowledge building - Required and intellectual and semantic quality
2. Dynamic, flexible systems - rather than static determined reductive systems.
3. Wider categories of knowledge - social and historical context
4. Synthesise knowledge between different initiatives.
5. Transdisciplinary - reflecting the complexity of all sciences
6. Semantic Linked Data

Mellon Foundation

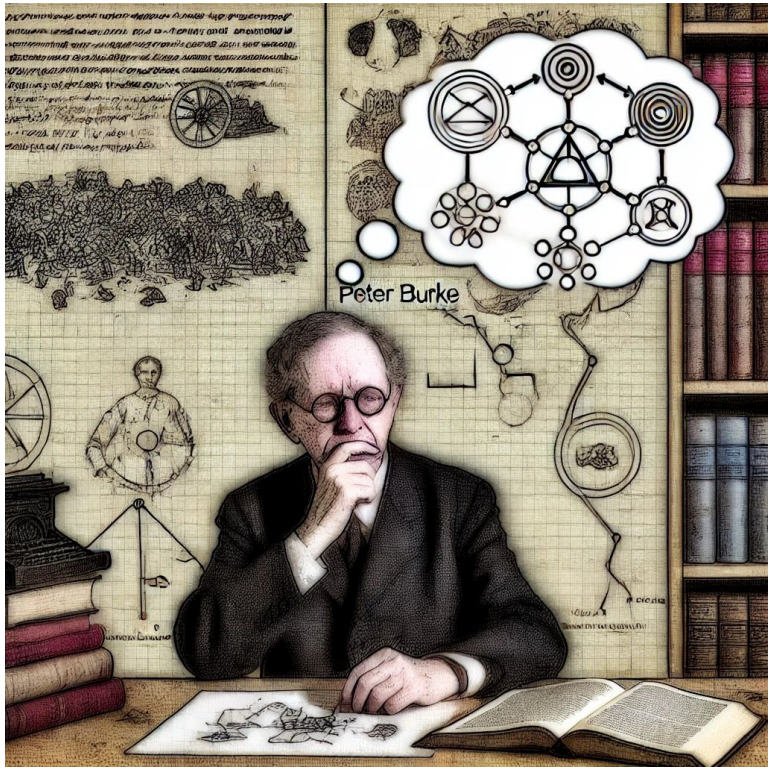
Letter to National Museums

Historical Concepts

1. Mass of information
2. Historical Contingency / Conditions
3. Transformation and Change Over Time
4. Synthesis of Knowledge
5. Required some sort of technological Help
6. But technology with some notion of historical experience.

Eric Hobsbawm

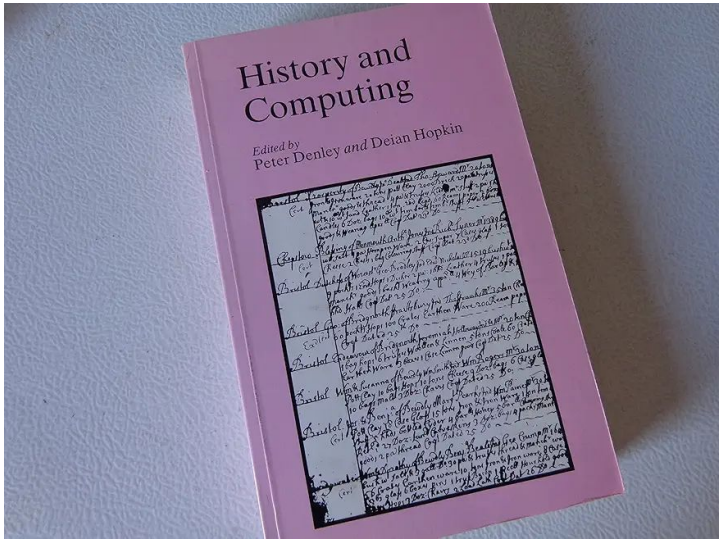
Association of History & Computers



Association of History and Computers

“the relational model in practice pushes historians with complex sources into making some harsh compromise decisions which involve sacrificing some features of the source. These are both structural and semantic. The more complex the model the more difficult it becomes to design the database and query it effectively, resulting in more compromise.”

Peter Denley 1994



‘Documentation’ - Bottom Up

“Firstly, the CIDOC CRM is developed in a “bottom-up” manner, starting from well-understood, actual, and widely used concepts of domain experts, which are disambiguated and gradually generalized as more forms of encoding are encountered. This aims to avoid the misadaptations and vagueness that can sometimes be found in introspection-driven attempts to find overarching concepts for such a wide scope, and provides stability to the generalizations found. Secondly, it is a means to identify and keep a focus on the concepts most needed by the communities working in the scope of the CIDOC CRM and to maintain a well-defined agenda for its evolution.” **CIDOC CRM Reference 7.1.3**

Clarified (made unambiguous), and

Generalized gradually, as more kinds of museum data and formats are analyzed.

“**Introspection-driven**”

Looking at real ‘historical’ situation.

Top-down approaches often lead to **vague** or **misfitting** categories.

Key Points

- **diverse knowledge**
- **history of society**
- **transdisciplinary**
- **Interconnecting and synthesizing**
- **living resource**
- **meaningful, ongoing collaboration**
- **Bottom up**

Key Objective for CIDOC CRM

Semantic Interoperability

Cross Domain (Transdisciplinary)

The Chenhall Legacy

Origins of a Paradox

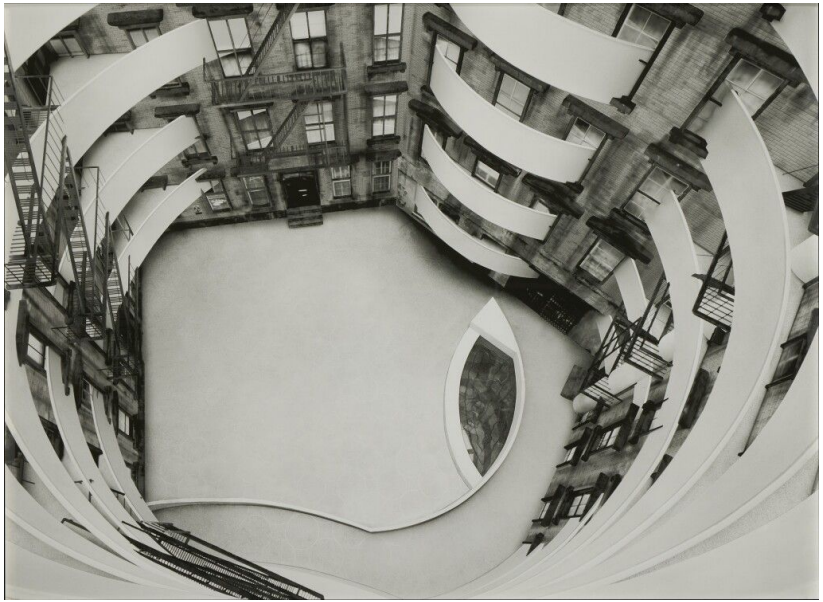
- The Metropolitan Museum's 1968 conference - Director of the Metropolitan Museum, Thomas Holving,
- Robert Chenhall - Establishment of a universalist Museum record using core fields which represent collection systems today - CDWA, SPECTRUM, etc
- Collection Online - As these systems became public-facing, their **limitations** — static anachronistic data, rigid structures, and lack of semantic richness — were publicly exposed.

Edward Fry

The benefit of a computer, in his assessment as a curator and art historian, was not to simply duplicate existing static records in a more efficient digital form, but to provide a;

“...flexible yet uniform format…capable of subsequent modification….”(Fry, 1970)

“a truly sophisticated program…would provide information and interpretation at various educational levels” (Fry, 1970)



https://www.artnet.com/artists/doris-salcedo/for-hans-haacke-and-edward-fry-NIx2E1D91ISFKe5lWHB2sQ2 (image Doris Salcedo Colombian, born 1958
For Hans Haacke and Edward Fry, 2009)

Shapolsky et al. Manhattan Real Estate Holdings, a Real-Time Social System'

- Irony - Modern Art processual and documenting
- Critique of capitalism and the conditions of people living in poorly maintained housing in New York.
- Haacke. Haacke was part of a 'processual' movement in art, known as 'art as investigation' -

"the interconnectedness of all systems regardless of size or complexity.... There was never any attempt to solve the usual formal problems of art, rather he wanted to reveal the way the world functions on its most essential levels."

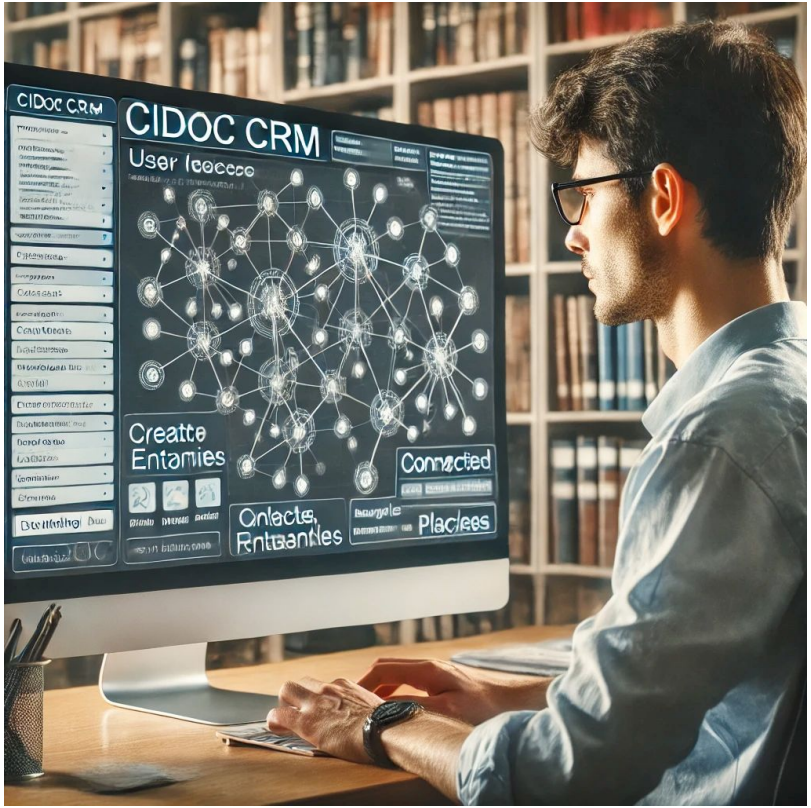
- 1971 - The Director of the Guggenheim, Thomas Messer, cancelled the exhibition.

CIDOC CRM

The CIDOC Conceptual Reference Model (CRM) is a semantic framework designed to represent **complex knowledge through relationships and processes, rather than static tables and categories**.

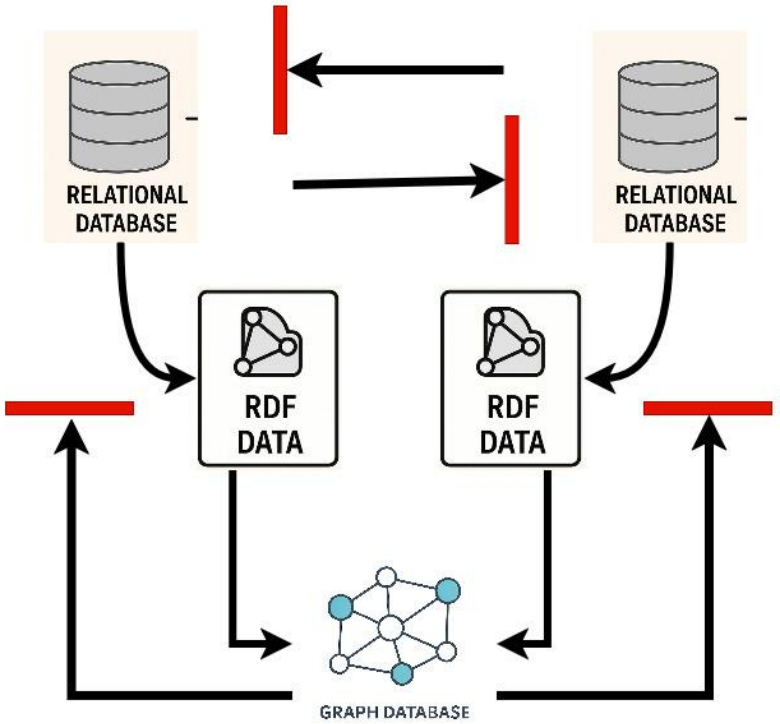
It emphasizes **processual thinking**: focus on events, activities, and relationships, not just objects.

Its ultimate goal is to support **user-oriented graph manipulation**. Knowledge Representation is about **representing thinking**.



Challenges in Current Implementation

- Many CIDOC CRM implementations are **static transfers** from relational databases, limiting its effectiveness and interoperability.
- The framework often becomes a **technical tool** rather than a practical knowledge system, alienating curators, conservators, and researchers who cannot directly manipulate or author the data.
- Vastly more complicated than simply using a fully compatible CIDOC CRM Graph System.



External Relations

“holds that there are both ‘things’… and relations, but that they are logically independent of each other” (Ollman, 2015).

- The established doctrine of external relations is embedded in analytic Western philosophies.
- Logical, Detached, removes extraneous context,
- Relational databases and other digital software are part of this positivist tradition.

Internal Relations

> “that what others take to be a ‘thing’ that may or may not undergo change and may or may not have relations with other things is itself both a ‘process’ and a ‘relation’ (though some of these may take time and special efforts or instruments to uncover). What was a thing for the philosophy of external relations becomes a relation evolving over time (or a process in constant interaction with other processes) ”(Ollman, 2015).

Much more representative of humanities - and actually all disciplines - impeded by positivist computer systems.

3. Historical and Philosophical Context

- Relational databases
  - **Cartesian organisation,**
  - Prioritizing stability, exerting administrative control over interpretive complexity.
  - Reality - many museum relation databases systems have real issues

- CIDOC CRM allows disciplines to align with **internal relations**
- Space time, Events, Argument, Uncertainty, Multi-Causality, interacting with other processes.
- Needs a Graph environment!!
- New Documentation methodology aligns with this

Abstractions in New Documentation

Bertell Ollman

- **Extension** - Relevant temporal and spatial scope

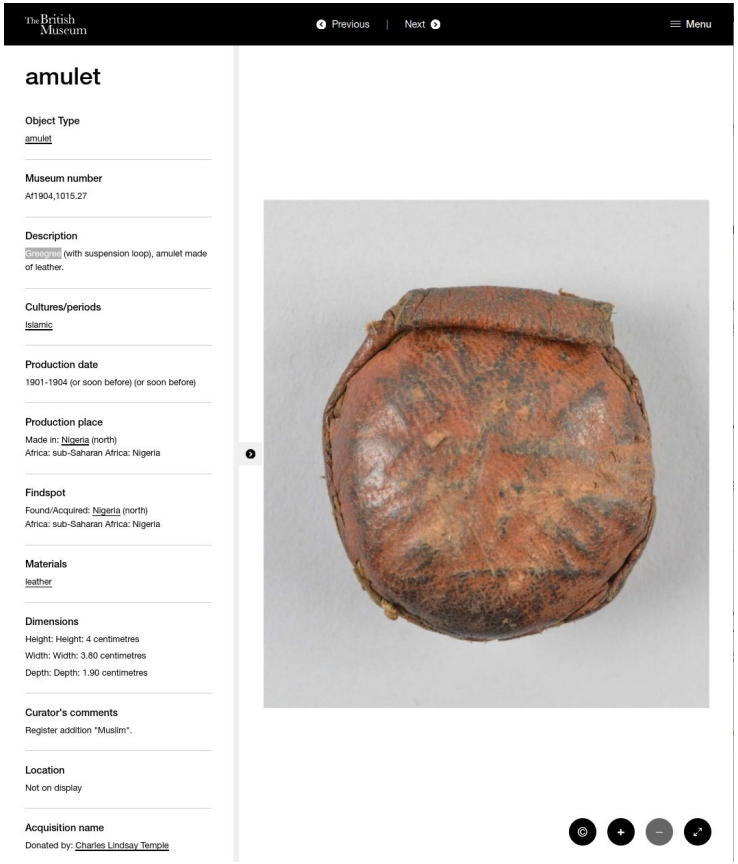
- **Generality:** Recognizes multiple levels of generalization - Not just one dimensional catagorisation

- **Vantage Point:** Multiple perspectives; anti flattening effect of traditional databases supporting historical contingency and multi-causation.

Extension

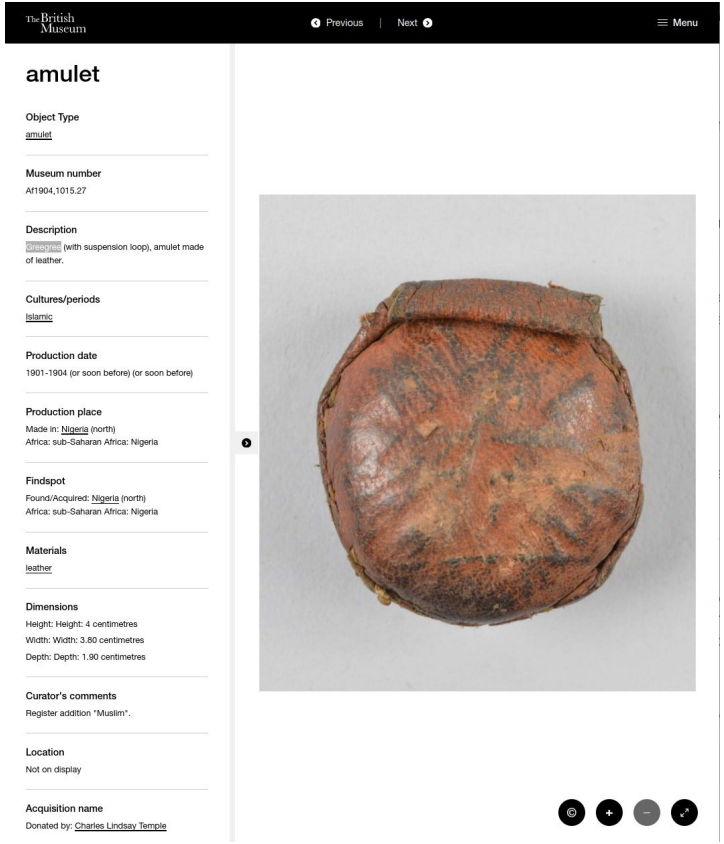
Understand the right temporal and spatial scope of the focus of the investigation.

> "...are extensive enough to allow the relevant internal relationships and dynamic processes to be grasped, yet not so extensive that irrelevant considerations enter the picture."
> Ollman



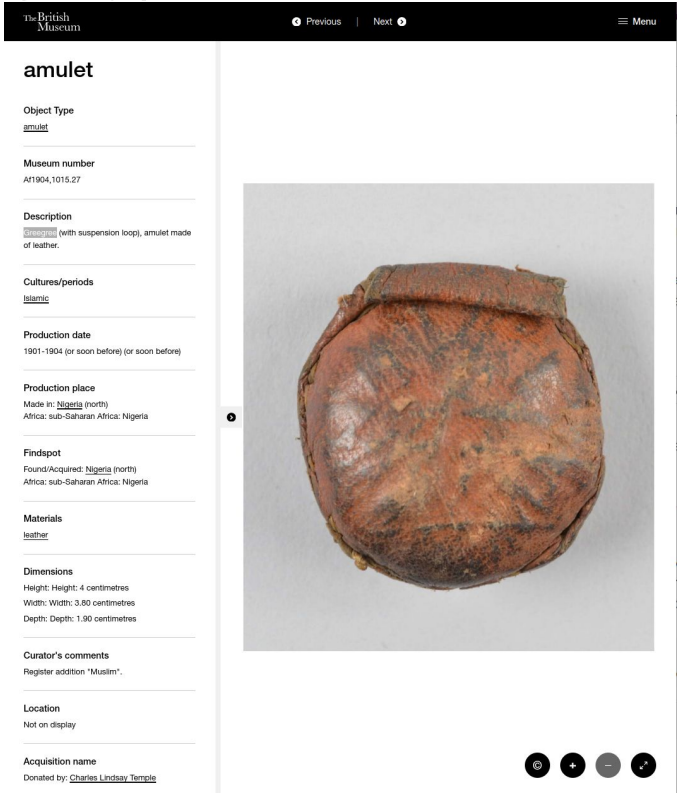
Level 1 - The Specific (Unique)

- Focuses on **what is unique** to an object, event, or person
- Examples:
  - Hans Haacke's *Shapolsky et al* installation includes **real addresses, people, and data** — a historical and social record.
  - A West African amulet may include **unique inscriptions, materials, and rituals**, but databases record only a generic "amulet."
- **Free text fields** or more likely curators' private notes.
- A**uthoring and interpretation** of these unique details. Continuous - Participatory



Level 2 — The General (Type or Category)

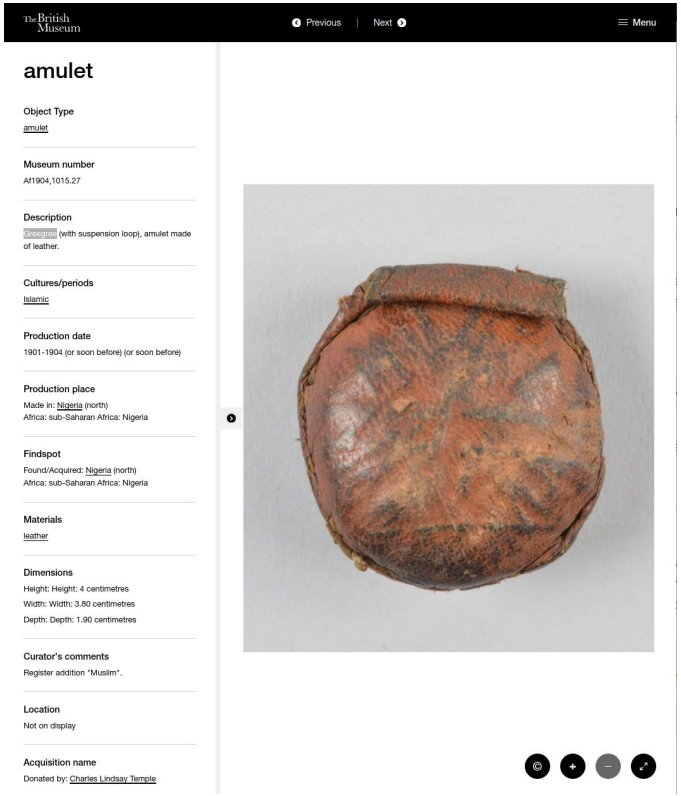
- **Traditional databases and vocabularies** — e.g. classification by type, material, or period.
- Enables **quantification and grouping** (“what is common to people, their activities, and products”). Ollman
- Useful for general organisation, but it ignores the qualitative context, and change
- Stuck here for 50 years.



Level 3 — The Socio-Economic Context

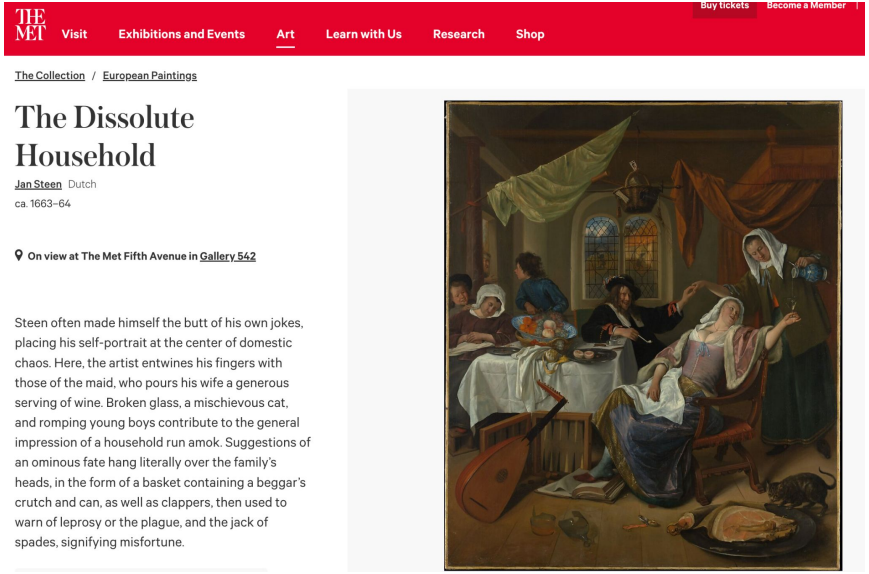
. Understand generalisations which relate to a particular socio-economic phase.— e.g., how social and productive groups compare over different economic phases.

- Connecting **processes** to the structures and dynamics of their time.
- Example:
    - 17th-century art tied to **patronage and use value**.
    - Modern art tied to **market exchange and commodification**



Level 4 — Cross-Phase Commonalities

- Patterns **that exist across different historical periods** — the *longue durée*.
- For example:
    - Social Housing issues in Haacke's work (1960/70s parallels similar issues in earlier centuries. Exist today
    - Metropolitan Museum web site in a section called, "perspective", is a blog called, 'The Opulent and the Destitute' Jan Steen, 'The Dissolute Household' (1663) and Lazarus, 'At the Rich Man's Gate', by the 16th century artist Heinrich Aldegrever, graffiti in Ancient Rome (2018).
    -
- Many museums miss this by organising collections strictly by period, losing **continuities and comparisons** across history.



https://www.metmuseum.org/art/collection/search/437747 - Public Domain

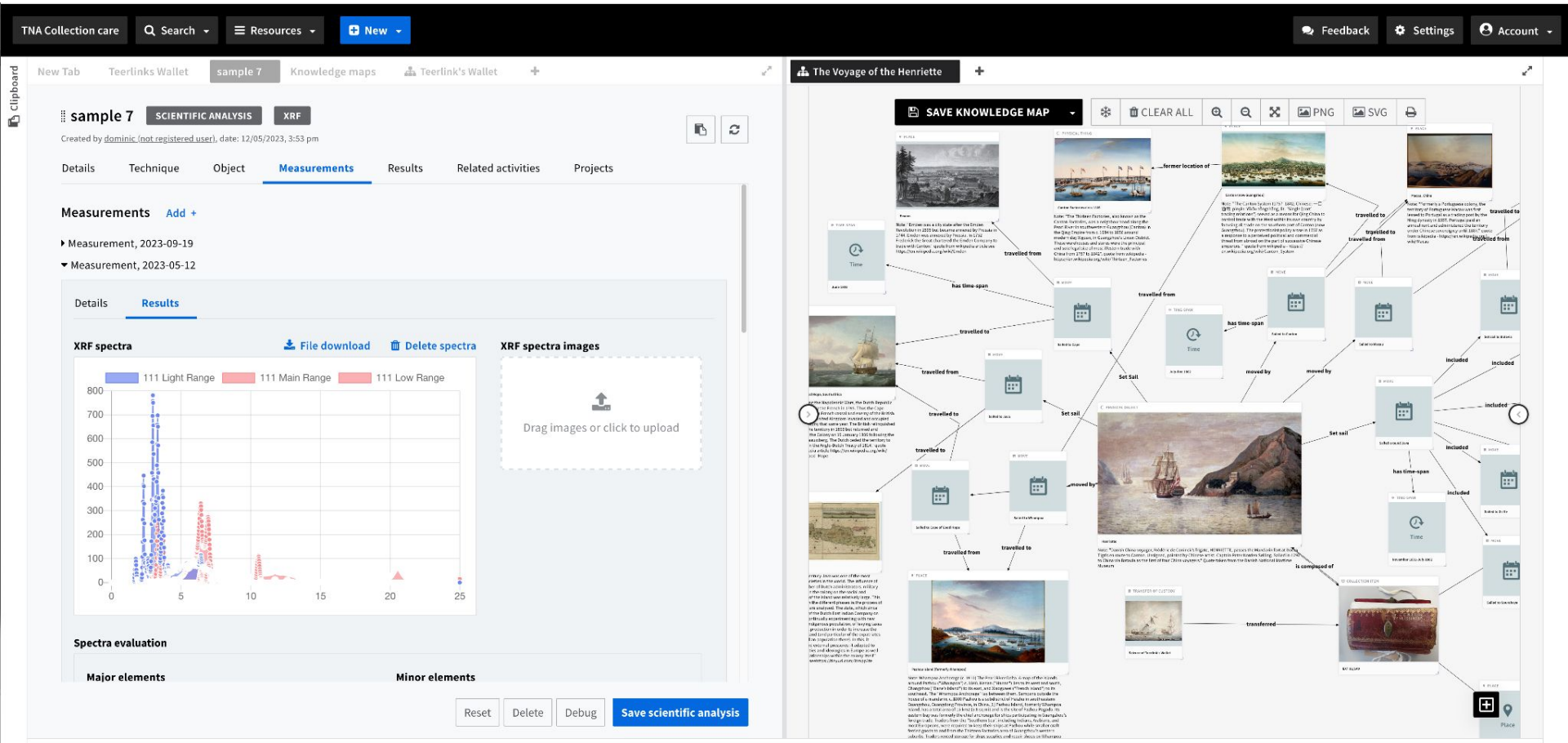
Level 5 — The Universal (Human Condition)

- The most abstract level — **common human experiences across all history**.
- Art another good example :
    - Rock Art for example expresses common human
    - Emphasises the relationships with society and the natural world.

summary

- Current documentation systems traditional stuck at **Level 2** and constrained by relational database models.
- Dynamic semantic systems can employ a wider range of abstractions with are more processual rather than about information organisations typical in traditional databases.
- Interoperability is also key to understanding perspective and resolving contradictions of perspective.

ResearchSpace Knowledge Graph System



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