Towards the unchaining of symbolism from knowledge graphs: how symbolic relationships can link cultures.

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INTRODUCTION

This work addresses the lack of information concerning symbolic meaning in linked open data of the Cultural Heritage domain as it is currently chained to unstructured natural language descriptions. It also aims to show the potential of including symbolic information in semantic triples.

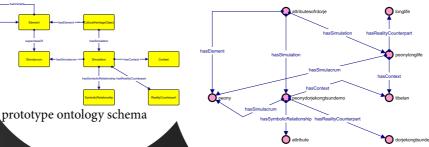
1st EXPERIMENT

15 Elements and their symbolism were unchained from a textual description of the tibetan painting *Attributes of rDo-rje Kon-btsun De-mo*.

UNCHAINING PROCESS

Unchaining Steps:

- 1) Manual selection of symbolic element from textual description
- 2) Enrichment of the selected symbolism using with information taken from a dictionary of Symbols
- 3) Encoding of the information in turtle using a **prototype ontology**



visual representation of an example of the encoding

2nd EXPERIMENT



A knowledge base was built by extracting all the symbolic meanings of those same 15 elements from Olderr's Dictionary of Symbols (2012). It was used to automatically infer the symbolic meaning of a dataset of 3197 paintings (and their depicted elements) extracted from Wikidata.

Access our algorithms and the generated data by scanning the QR code below

RESULTS



More than 7.5k triples generated using 15 elements. Considering all the depicted elements a potential of more than a million of triples could be generated.



The Magdalene Reading by Rogier van der Weyden and Saint George Slaying the Dragon by Carlo Crivelli linked because they both symbolize the concept of lust

References

Olderr, S. Symbolism a Comprehensive Dictionary. McFarland, 2012.