Heritage enrichment using spatial object relations
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Context: manual artwork descriptions
Many consumers of the RMFAB collections perform queries on iconographic themes.
In the collection database objects are assigned iconographic metadata for a richer user experience. These annotations are added manually which is time-consuming and subjective for the annotator and leads to low data quality for the data consumer.

HENSOR goals: annotation - publication - querying
(i) AI tools for automatic annotations
• Automatic detection and annotation of saints in paintings to speed up the manual work process of the registrars.
• Not only descriptive, also the actual subject of what is depicted. This is determined by analyzing the spatial relationships to arrive at the intended meaning.
(ii) Cross-collection linking with Semantic Web technologies
• Annotations using standardized metadata standards (Iconclass, IIIF)
• Use of standards enables cross-collection linking
• Collection data in a FAIR Wikidata endpoint with global reach
(iii) Intuitive querying
• Multiple query interfaces, e.g. natural language queries
• Federated querying across FSI and beyond

Architecture: end-to-end annotation and publication

FAIR data publication and querying using Wikibase

Building blocks from computer vision
(i) Object status
• Facial expression
• Pose estimation

(ii) Spatial relations
• Scene graphs

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