

# OA Entry to RDF

Mapping the OA Entry Italian content standard  
for cataloguing works of art to RDF  
version 1.0

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## Document Scope

The mapping of the OA Entry (i.e. Scheda OA), the Italian most general content standard for cataloguing works of art, to RDF is based upon a subset of cataloguing elements described in the version 3.00 of the aforementioned standard<sup>1</sup>, released in February 2014 by the *Istituto Centrale per il Catalogo e la Documentazione (ICCD)*. Although the OA Entry may be mainly considered a national cataloguing reference, also international stakeholders can benefit from this mapping document, which is a set of shareable descriptive elements for works of art.

The purpose of this mapping is indeed to ensure semantic interoperability among data providers wanting to publish their structured data about works of art in RDF as Linked Open Data. Therefore, this document provides a guidance to map metadata elements name to ontology terms as defined in well-known vocabularies, e.g., the CIDOC Conceptual Reference Model (CRM)<sup>2</sup>, and by means of ontologies that have been appropriately developed for describing specific aspects of the OA Entry standard. Hence, wherever needed, to avoid a lack of information, best suitable terms from other vocabularies have been adopted or created for the scope.

The result is a new ontology, the OA Entry Ontology<sup>3</sup>, which itself imports several other ontologies and vocabularies, including: DCTerms (Dublin Core Metadata Terms)<sup>4</sup>, FOAF (Friend of a Friend Vocabulary)<sup>5</sup>, PROV (Provenance Ontology)<sup>6</sup>, HiCO (Historical Context Ontology)<sup>7</sup>, supplemented by terms from FEO (F Entry Ontology)<sup>8</sup>, from an OWL2 DL version of FRBR (Functional Requirements for Bibliographic Records)<sup>9</sup>, and from the following SPAR (Semantic Publishing and Referencing) Ontologies<sup>10</sup>: CiTO (Citation Typing Ontology)<sup>11</sup>, FaBiO (FRBR-aligned Bibliographic Ontology)<sup>12</sup>, and PRO (Publishing Roles Ontology)<sup>13</sup>.

The OA Entry Ontology also provides new entities that were lacking elsewhere: two object properties defining a direct relation between OA Entry and the described work of art; twenty-nine classes and four object properties to describe relations between works of art (see Table 1). Moreover, OA Entry extends the PRO Ontology – providing several named individual for representing specific roles involved in cataloguing and in the arts domain, grouped in two subclasses (oentry:CataloguingRole and oentry:ArtisticRole) – and the HiCo Ontology with several individuals specifying types of interpretation underlying questionable information.

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1 <http://www.iccd.beniculturali.it/index.php?it/473/standard-catalografici/Standard/29>

2 <http://www.cidoc-crm.org/cidoc-crm/>

3 <http://purl.org/emmedi/oentry>

4 <http://purl.org/dc/terms/>

5 <http://xmlns.com/foaf/spec/>

6 <http://www.w3.org/TR/2012/WD-prov-o-20120724/>

7 <http://purl.org/emmedi/hico>

8 <http://www.essepuntato.it/2014/03/fentry>

9 <http://www.sparontologies.net/ontologies/frbr>

10 <http://www.sparontologies.net/ontologies/>

11 <http://www.sparontologies.net/ontologies/cito>

12 <http://www.sparontologies.net/ontologies/fabio>

13 <http://www.sparontologies.net/ontologies/pro>

## Notes for guidance

In the current release of the OA Entry to RDF mapping document, only a representative subset of elements from the OA Entry Standard has been actually mapped. The elements in such subset has been chosen by considering all the elements adopted by the *Federico Zeri Foundation* in its catalog<sup>14</sup>, which includes all mandatory elements (i.e. the inventory level of cataloguing) and other relevant ones.

The Zeri Photo Archive, which includes about 290000 photographs of works of art, provides an OA Entry compliant description of depicted works of art even if not conserved by the cataloguing institution. Such peculiarity entailed a customization and an enhancement of controlled vocabularies provided by the content standard – e.g. considering more possible relations between works of art and several heterogeneous roles an artist may have – which have been here represented taking into account both of the two necessities, i.e. a straightforward representation of the content standard requirements and specific implementation in the use case.

The mapping is here presented in tabular form in Table 3. Elements are grouped into several sibling named subtables, partially reproducing original sections of the OA Entry reference document. Each section is identified with the proper abbreviation provided by the original content standard and a translated title.

The first and the second column of each subtable contain the abbreviation, the full name and a brief description of the content of the OA Entry element; both mandatory sections and mandatory elements are distinguished by “\*” aside the title of the section or aside the abbreviation of the element name.

When an optional section is taken into account in the cataloguing process, contextual mandatory elements are characterized by “(\*)” aside the abbreviation.

The third column contains the related ontology entity (a class or an object/datatype property), a brief explanation and examples of usage (in Turtle syntax).

For the sake of brevity, annotation properties, i.e. labels (rdfs:label) or comments (rdfs:comment), or data properties recording text values of fields (e.g. dcterms:description) are omitted.

Moreover, any kind of identifiers (e.g. regional codes, general catalog numbers, cataloguing levels, etc.) are characterized by means of individuals that have to be defined by each customer, as it does not exist a shared controlled vocabulary for identifying such types uniquely yet.

A complete example of an OA Entry in RDF according to the mapped ontology terms is available online at <https://figshare.com/s/d25148877f5e46b588b1> .

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<sup>14</sup> <http://catalogo.fondazionezeri.unibo.it/>

Table 1. *OA Entry Ontology classes and object properties*

OA Entry Object Properties	
oaentry:hasConceived	oaentry:isFormerWorkOf
oaentry:hasFormerWork	oaentry:describes
oaentry:isConceivedByMeansOf	oaentry:isDescribedBy
OA Entry Classes	
oaentry:ArtisticRole	oaentry:PartialDerivation
oaentry:Cartoon	oaentry:PartialMatrix
oaentry:CataloguingRole	oaentry:PartialModel
oaentry:Copy	oaentry:PartialMold
oaentry:CopyOrDerivation	oaentry:PartialReplica
oaentry:CopyWithVariants	oaentry:PartialScaleModel
oaentry:Derivation	oaentry:PartialSinopia
oaentry:Drawing	oaentry:Prototype
oaentry:Fake	oaentry:Remake
oaentry:Matrix	oaentry:Replica
oaentry:Model	oaentry:ReplicaWithVariants
oaentry:Mold	oaentry:ScaleModel
oaentry:OAEntry	oaentry:Sketch
oaentry:PartialCartoon	oaentry:Sinopia
oaentry:PartialCopy	oaentry:SpecularCopy
oaentry:PartialCopyWithVariants	oaentry:Underdrawing
OA Entry Named Individuals	
oaentry:CataloguingRole	hico:InterpretationType
oaentry:cataloguer	oaentry:authorship-attribution
oaentry:cataloguing-institution	oaentry:date-attribution
oaentry:cataloguing-supervisor	oaentry:influence-between-works-attribution
oaentry:competent-institution	oaentry:title-attribution
oaentry:ArtisticRole	
oaentry:artist	oaentry:glassmaker
oaentry:architect	oaentry:goldsmith
oaentry:cabinetmaker	oaentry:inlayer
oaentry:cartographer	oaentry:inventor
oaentry:carver	oaentry:lutist
oaentry:carving-master	oaentry:medalist
oaentry:ceramist	oaentry:miniaturist

oaentry:cosmographer	oaentry:mosaicist
oaentry:designer	oaentry:musician
oaentry:draughtsman	oaentry:painter
oaentry:decorator	oaentry:printer
oaentry:engineer	oaentry:restorer
oaentry:engraver	oaentry:scenographer
oaentry:gem-cutter	oaentry:sculptor
	oaentry:smelter

Table 2. *Namespaces declaration*

Abbreviation	Ontology name	URI
cito	CiTO	<a href="http://purl.org/spar/cito/">http://purl.org/spar/cito/</a>
crm	CIDOC-CRM	<a href="http://www.cidoc-crm.org/cidoc-crm/">http://www.cidoc-crm.org/cidoc-crm/</a>
dcterms	DC Terms	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
fabio	FaBiO	<a href="http://purl.org/spar/fabio/">http://purl.org/spar/fabio/</a>
fentry	F Entry Ontology	<a href="http://www.essepuntato.it/2014/03/fentry/">http://www.essepuntato.it/2014/03/fentry/</a>
foaf	FOAF	<a href="http://xmlns.com/foaf/0.1/">http://xmlns.com/foaf/0.1/</a>
frbr	FRBR	<a href="http://purl.org/vocab/frbr/core#">http://purl.org/vocab/frbr/core#</a>
hico	HiCO	<a href="http://purl.org/emmedi/hico/">http://purl.org/emmedi/hico/</a>
oaentry	OA Entry Ontology	<a href="http://purl.org/emmedi/oaentry/">http://purl.org/emmedi/oaentry/</a>
owl	OWL	<a href="http://www.w3.org/2002/07/owl#">http://www.w3.org/2002/07/owl#</a>
prism	PRISM	<a href="http://prismstandard.org/namespaces/basic/2.0">http://prismstandard.org/namespaces/basic/2.0</a>
pro	Publishing Role Ontology	<a href="http://purl.org/spar/pro/">http://purl.org/spar/pro/</a>
prov	PROV Ontology	<a href="http://www.w3.org/ns/prov#">http://www.w3.org/ns/prov#</a>
rdf	RDF	<a href="http://www.w3.org/1999/02/22-rdf-syntax-ns#">http://www.w3.org/1999/02/22-rdf-syntax-ns#</a>
rdfs	RDF Schema	<a href="http://www.w3.org/2000/01/rdf-schema#">http://www.w3.org/2000/01/rdf-schema#</a>
skos	SKOS	<a href="http://www.w3.org/2004/02/skos/core#">http://www.w3.org/2004/02/skos/core#</a>
ti	Time Interval	<a href="http://www.ontologydesignpatterns.org/cp/owl/timeinterval.owl#">http://www.ontologydesignpatterns.org/cp/owl/timeinterval.owl#</a>
tvc	Time-indexed Value in Context	<a href="http://www.essepuntato.it/2012/04/tvc/">http://www.essepuntato.it/2012/04/tvc/</a>
xsd	XML Schema Definition	<a href="http://www.w3.org/2001/XMLSchema#">http://www.w3.org/2001/XMLSchema#</a>

## Introduction

The *Italian Central Institute for Cataloguing and Documentation (ICCD)* realized a set of reference documents in order to provide cultural institutions descriptive elements, rules and controlled vocabularies for cataloguing their cultural heritage objects consistently.

In particular, the OA Entry content standard is the most general model which allows the description of different relevant features related to a work of art, and highlights fundamental relations involved in the work of art lifecycle, including information about: the object and its physical features, subject, chronology, history of authorship attributions, location, provenance (acquisitions and transfers of custody), restorations and preservation conditions, documentation.

To map OA Entry to RDF two main entities are firstly required: the OA Entry, i.e. the metadata document describing a cultural object, and the artistic work, i.e. the subject of OA Entry description. Here below an overview of relevant topics related to the main two entities.

### OA Entry

(**oaentry:OAEntry**)

the metadata entry containing information about a work of art or part of it

According to Functional Requirements for Bibliographic Records (FRBR), at least two of the four entities (work and expression) have been here considered, in order to describe the entry creation, its revisions, and relations to other entries.

### Work of art

(**fabio:ArtisticWork**)

the work(s) of art described in the OA Entry

According to Functional Requirements for Bibliographic Records (FRBR), three of the four FRBR entities (work, manifestation and item) have been here considered, in order to describe (among other information):

- work of art creation and execution;
- authorship attributions;
- subjects;
- relations to other artworks;
- documentation, wherein the artistic work is reproduced or described;
- physical description;
- current owner;
- current location;
- previous owners or keepers.

Table 3. OA Entry to RDF mapping

CD – Codes *		
TSK *	<p>Type of entry</p> <p>A term from a controlled vocabulary to provide information about the type of metadata entry.</p>	<p>oaentry:OAEntry (Class)</p> <p>The class oaentry:OAEntry, subclass of fabio:EntityMetadata, is the proper class for defining metadata documents following the OA Entry content standard requirements. In FRBR terms, it is defined as a work, and in terms of CIDOC-CRM it is an individual of the class crm:E31_Document.</p> <p>e.g. TSK: 'OA', i.e. <i>opera d'arte</i> – italian translation of work of art.</p> <p>Exemplar usage:  :oaentry-43677  a oaentry:OAEntry , crm:E31_Document .</p> <p>For similar but not equivalent sort of entries, i.e. not conforming the Scheda OA content standard, the crm:P2_has_type object property may be used to specialize the individual representing a metadata entry, associating a term from a controlled vocabulary as range.</p> <p>Exemplar usage:  :entry-43677  crm:P2_has_type :oaentry .  :oaentry a crm:E55_Type .</p> <p>Any time an individual of the class oaentry:OAEntry is created, also an individual belonging to the classes fabio:ArtisticWork and crm:E28_Conceptual_Object is created, which represents the catalogued work of art (see OGT section for further explanation). Individuals representing the entry and the work are linked by using the object property oaentry:describes.</p> <p>Exemplar usage:  :oa-47172  a fabio:ArtisticWork , crm:E28_Conceptual_Object .  :oaentry-43677  oaentry:describes :oa-47172 .</p>
LIR *	<p>Cataloguing level</p> <p>A term from a controlled vocabulary providing information about cataloguing accuracy.</p>	<p>crm:E1_CRM_Entity (Class)</p> <p>An individual of the class crm:E1_CRM_Entity shall be assigned to an individual representing the current OA Entry through a relation to an intermediate individual of the class crm:E13_Attribute_Assignment.</p> <p>Exemplar usage:  :oaentry-43677-catalog-level-assignment  a crm:E13_Attribute_Assignment ;  crm:P141_assigned :inventory-level ;  crm:P140_assigned_attribute_to :oaentry-43677 .  :inventory-level a crm:E1_CRM_Entity .</p> <p>The object property crm:P2_has_type shall be used to characterize any cataloguing level under an umbrella type.</p> <p>Exemplar usage:  :inventory-level a crm:E1_CRM_Entity ;  crm:P2_has_type :cataloguing-level-id .  :cataloguing-level-id a crm:E55_Type .</p>
NCT – Unique codes *		

NCTR *	<p>Regional code</p> <p>A code identifying the region where the competent institution resides: this identifier shall be combined with other codes in order to define a unique national identifier for the current entry and the catalogued work.</p>	<p>crm:E42_Identifier (Class)</p> <p>An individual of the class <code>crm:E42_Identifier</code> shall be related to the individual representing the current OA Entry by means of an intermediate relation to an individual of the class <code>crm:E13_Attribute_Assignment</code>.</p> <p>Exemplar usage:  <code>:oentry-43677-nctr-assignment</code>  <code>  a crm:E13_Attribute_Assignment ;</code>  <code>  crm:P141_assigned :nctr-08 ;</code>  <code>  crm:P140_assigned_attribute_to :oentry-43677 .</code></p> <p>The identifier shall be further specialized with the object property <code>crm:P2_has_type</code>, associating an individual defined in a <code>crm:E55_Type</code> hierarchy.</p> <p>Exemplar usage:  <code>:nctr-08 a crm:E42_Identifier ;</code>  <code>  crm:P2_has_type :regional-code .</code></p>
NCTN *	<p>Catalog number</p> <p>A code identifying the entry, provided by the competent institution, i.e. ICCD, that can be combined with other codes to further define a unique identifier for the current entry.</p>	<p>crm:E42_Identifier (Class)</p> <p>An individual of the class <code>crm:E42_Identifier</code> shall be related to the individual representing the current OA Entry by means of an intermediate relation to an individual of the class <code>crm:E13_Attribute_Assignment</code>.</p> <p>Exemplar usage:  <code>:oentry-43677-nctn-assignment</code>  <code>  a crm:E13_Attribute_Assignment ;</code>  <code>  crm:P141_assigned :nctn-13 ;</code>  <code>  crm:P140_assigned_attribute_to :oentry-43677 .</code></p> <p>The identifier shall be further specialized with the object property <code>crm:P2_has_type</code>, associating an individual defined in a <code>crm:E55_Type</code> hierarchy.</p> <p>Exemplar usage:  <code>:nctn-13 a crm:E42_Identifier ;</code>  <code>  crm:P2_has_type :catalog-number .</code></p>
ESC *	<p>Cataloguing institution</p> <p>A code identifying the cataloguing institution of the work of art, provided by the competent institution, i.e. ICCD.</p>	<p>crm:E42_Identifier (Class)</p> <p>This individual of the class <code>crm:E42_Identifier</code> is related to the individual representing the cataloguing institution, belonging to the class <code>crm:E40_Legal_Body</code>, by means of a relation to an intermediate individual of the class <code>crm:E13_Attribute_Assignment</code>.</p> <p>Exemplar usage:  <code>:soprintendenza-bo-fe a crm:E40_Legal_Body .</code>  <code>:soprintendenza-bo-fe-id-assignment</code>  <code>  a crm:E13_Attribute_Assignment ;</code>  <code>  crm:P141_assigned :s08 ;</code>  <code>  crm:P140_assigned_attribute_to :zeri-foundation .</code>  <code>:s08 a crm:E42_Identifier .</code></p> <p>Moreover, to specify the role held by the cataloguing institution, an individual belonging to the class <code>pro:RoleInTime</code> of the PRO Ontology shall be used.</p> <p>The PRO Ontology, part of SPAR Ontologies, is developed for describing time-indexed situations in which an agent holds a role</p>



		<p>with respect to a specific context.</p> <p>The role held by the cataloguing institution with respect to the work of art, may be represented as an individual of the class <code>pro:RoleInTime</code>, which enables to express:</p> <ul style="list-style-type: none"> <li>– the agent who holds a role in a time-indexed situation, i.e. the institution, by using the object property <code>pro:isHeldBy</code>;</li> <li>– the role held by the cataloguing institution, i.e. the individual <code>oaentry:cataloguing-institution</code> belonging to the class <code>oaentry:CataloguingRole</code>, by using the object property <code>pro:withRole</code>;</li> <li>– the concrete work of art as the context of the role, by using the object property <code>pro:relatesTo</code>;</li> <li>– the time interval in which the role is held (if applicable), by using the object property <code>tv:atTime</code>.</li> </ul> <p>Exemplar usage:</p> <pre>:soprintendenza-bo-fe-cataloguing-oa-47172   a pro:RoleInTime ;   pro:relatesTo :oa-47172-item ;   pro:isHeldBy :soprintendenza-bo-fe ;   pro:withRole oaentry:cataloguing-institution . oaentry:cataloguing-institution   a oaentry:CataloguingRole .</pre>
ECP *	<p>Competent institution</p> <p>A code identifying the competent institution – in whose jurisdiction the catalogued work lies – that supervises the cataloguing process.</p>	<p><code>crm:E42_Identifier</code> (Class)</p> <p>This individual belongs to the class <code>crm:E42_Identifier</code> and is related to the individual representing the competent institution, belonging to the class <code>crm:E40_Legal_Body</code>, by means of a relation to an intermediate individual of the class <code>crm:E13_Attribute_Assignment</code>.</p> <p>Exemplar usage:</p> <pre>:ibc-er a crm:E40_Legal_Body . :ibc-er-id-assignment   a crm:E13_Attribute_Assignment ;   crm:P141_assigned :ibc-code ;   crm:P140_assigned_attribute_to     :ibc-er . :ibc-code a crm:E42_Identifier .</pre> <p>To specify the role held by the competent institution, an individual belonging to the class <code>pro:RoleInTime</code> of the PRO Ontology shall be used, which enables to express:</p> <ul style="list-style-type: none"> <li>– the agent who holds a role in a time-indexed situation, i.e. the institution, by using the object property <code>pro:isHeldBy</code>;</li> <li>– the role held by the competent institution, i.e. the individual <code>oaentry:competent-institution</code> belonging to the class <code>oaentry:CataloguingRole</code>, by using the object property <code>pro:withRole</code>;</li> <li>– the concrete work of art as the context of the role, by using the object property <code>pro:relatesTo</code>;</li> <li>– the time interval in which the role is held (if applicable), by using the object property <code>tv:atTime</code>.</li> </ul> <p>Exemplar usage:</p> <pre>:ibc-er-competent-oa-47172   a pro:RoleInTime ;   pro:relatesTo :oa-47172-item ;   pro:isHeldBy :ibc-er ;</pre>

		pro:withRole oaentry:competent-institution . oaentry:competent-institution a oaentry:CataloguingRole .
RV – Relations to other entries		
RVE – Complex structure		
RVEL (*)	<p>Hierarchical level of the entry</p> <p>A value identifying a hierarchical relation between OA Entries: e.g. a descendant entry describes a work of art (a panel of a polyptych) which is part of another work of art (the entire polyptych) described in the parent entry.</p>	<p>[frbr:complement (object property) or frbr:complementOf (object property)]</p> <p>When this field is filled, a hierarchical relation between individuals representing OA Entries (oaentry:OAEntry) is established by means of frbr:complement or frbr:complementOf object properties.</p> <p>e.g. RVEL: '0', i.e. the current entry is parent of other entries.</p> <p>Exemplar usage:</p> <pre> :oaentry-43677 a oaentry:OAEntry ;   frbr:complement :oaentry-43677-1 ;   frbr:complement :oaentry-43677-2 ;   oaentry:describes :oa-47172 . :oaentry-43677-1 a oaentry:OAEntry ;   frbr:complementOf :oaentry-43677 ;   oaentry:describes :oa-47174 . :oaentry-43677-2 a oaentry:OAEntry ;   frbr:complementOf :oaentry-43677 ;   oaentry:describes :oa-47188 . </pre> <p>The established hierarchical relation between entries shall be generally inherited by the works of art therein described. Then, an explicit relation between works may be represented through the use of frbr:part or frbr:relatedEndeavour object properties, relating individuals of the class fabio:ArtisticWork.</p> <p>Exemplar usage:</p> <pre> :oa-47172   a fabio:ArtisticWork , crm:E28_Conceptual_Object ;   frbr:part :oa-47174 ;   frbr:part :oa-47188 . :oa-47174   a fabio:ArtisticWork , crm:E28_Conceptual_Object ;   frbr:partOf :oa-47172 . :oa-47188   a fabio:ArtisticWork , crm:E28_Conceptual_Object ;   frbr:partOf :oa-47172 . </pre>
RSE – Direct relations		
RSER (*)	<p>Type of relations</p> <p>A value identifying the type of associative relations between the OA Entry and the other entries wherein works of art eventually connected to the catalogued one are described (e.g. the entry of the building in which the catalogued object is located)</p>	<p>frbr:relatedEndeavour (object property)</p> <p>Due to the heterogeneous nature of this horizontal relation, the object property frbr:relatedEndeavour is the proper property to relate individuals of the class fabio:MetadataEntry. For example, an OA Entry related to the entry describing the building (i.e. compliant to the ICCD content standard A Entry) in which the work of art is located, may be represented as follows.</p> <p>Exemplar usage:</p> <pre> :oaentry-43677-1   frbr:relatedEndeavour :aentry-40470 . </pre>
RSET (*)	Type of related entries	crm:E55_Type (Class)

	A term from a controlled vocabulary to provide information about the type of metadata entry connected to the OA Entry of the catalogued work.	<p>The class <code>fabio:MetadataEntry</code> can be used to specify the sort of entry related to the current OA Entry, and the object property <code>crm:P2_has_type</code> can be associated to a term from a controlled vocabulary defining the entry type.</p> <p>Exemplar usage:</p> <pre>:aentry-40470 a fabio:MetadataEntry ;   crm:P2_has_type :aentry .</pre>
RSEC (*)	<p>Codes of related entries</p> <p>Identifiers of entries related to the OA Entry.</p>	<p><code>crm:E42_Identifier</code> (Class)</p> <p>The individual(s) representing a related entry may be associated to an identifier (<code>crm:E42_Identifier</code>) by means of an intermediate individual of the class <code>crm:E13_Attribute_Assignment</code>.</p> <p>Exemplar usage:</p> <pre>:aentry-40470 a fabio:MetadataEntry ;   crm:P2_has_type :aentry . :aentry-40470-id-assignment   a crm:E13_Attribute_Assignment ;   crm:P141_assigned :40470 ;   crm:P140_assigned_attribute_to     :aentry-40470 . :40470 a crm:E42_Identifier .</pre>
OG – Object and Subject description *		
OGT – Object *		
OGTD *	<p>Definition</p> <p>A term identifying the main type of a described work of art. It may belong to a local open thesaurus and/or to an established one, e.g. the <i>Art and architecture Thesaurus</i>.</p>	<p><code>crm:E55_Type</code> (Class)</p> <p>According to the <i>Cataloging Cultural Objects (CCO) project</i> of the <i>Visual Resources Association Foundation</i> (<a href="http://cco.vrafoundation.org/">http://cco.vrafoundation.org/</a>), which suggests to consider only the FRBR Work level when describing type of works of art, terms belonging to the open vocabulary identified in this field are considered specializations of a work of art at the FRBR Work level of description, i.e. individuals of the classes <code>fabio:ArtisticWork</code> and <code>crm:E28_Conceptual_Object</code>.</p> <p>By means of the object property <code>crm:P2_has_type</code> a work of art may be associated to an individual defining the type of work.</p> <p>Exemplar usage:</p> <pre>:oa-47172   a crm:E28_Conceptual_Object , fabio:ArtisticWork ;   crm:P2_has_type :polyptych .</pre> <p>Terms of the <code>crm:E55_Type</code> hierarchy shall be aligned to an established controlled vocabulary or thesaurus, e.g. the AAT Getty Thesaurus (<a href="http://www.getty.edu/research/tools/vocabularies/aat/">http://www.getty.edu/research/tools/vocabularies/aat/</a>).</p> <p>Exemplar usage:</p> <pre>:polyptych a crm:E55_Type ;   skos:relatedMatch     &lt;<a href="http://vocab.getty.edu/aat/300178235">http://vocab.getty.edu/aat/300178235</a>&gt; .</pre>
OGTT	<p>Object type</p> <p>A term specializing the main type of the described work of art, excluding its functional and morphological features.</p>	<p><code>crm:E55_Type</code> (Class)</p> <p>Here, as in the OGTD field, an heterogeneous open or controlled vocabulary is used to further describe formal features of a work of art: the value of this field shall be a complementary definition of the previous one or may be considered as another specification, through the use of the property <code>crm:P2_has_type</code>. E.g. OGTD: 'fountain' ; OGTT: 'basin' .</p>

		<p>Exemplar usage:</p> <pre>:oa-75147   crm:P2_has_type :basin ;   crm:P2_has_type :fountain . :fountain a crm:E55_Type . :basin a crm:E55_Type .</pre> <p>or</p> <pre>:oa-75147   crm:P2_has_type :basin-fountain . :basin-fountain a crm:E55_Type .</pre>
OGTV	<p>Identification</p> <p>A term defining the current work of art as an entity strictly related to its context, e.g. an element as a part of a whole or a fragment of a complete work.</p>	<p>frbr:part (object property) or frbr:partOf (object property)</p> <p>When this field is filled, the current work of art is identified as a part of another one (related by using frbr:partOf) or as a whole whose parts (related by using frbr:part) are described elsewhere. Generally a part of a broader work is defined as a new work if there are enough information allowing it. E.g. when a wing of a polyptych is realized by a different artist than the one that realized the rest of polyptych, a relation frbr:partOf between works (crm:E28_Conceptual_Object, fabio:ArtisticWork) is suggested. e.g. OGTV: 'component'.</p> <p>Exemplar usage:</p> <pre>:oa-47174   a crm:E28_Conceptual_Object , fabio:ArtisticWork ;   crm:P2_has_type :polyptych-wing ;   frbr:partOf :oa-47172 .</pre>
QNT – Quantity		
QNTN	<p>Number of parts</p> <p>The number of parts composing the work of art described.</p>	<p>crm:P57_has_number_of_parts (data property)</p> <p>The number of parts composing a work of art regards physical features of the object. Therefore, an individual defined in terms of a FRBR Item, belonging to the classes fabio:AnalogItem crm:E22_Man-Made_Object (also inferred as crm:E84_Information_Carrier) is created. The data property crm:P57_has_number_of_parts can be used to specify the value here provided.</p> <p>Exemplar usage:</p> <pre>:oa-47172-item   a fabio:AnalogItem ,   crm:E22_Man-Made_Object ;   crm:P57_has_number_of_parts "5" .</pre>
SGT – Subject		
SGTI (*)	<p>Subject</p> <p>A term from an open list of terms for defining the iconographic content of the work of art.</p>	<p>fabio:hasSubjectTerm (object property)</p> <p>Instead of object properties like frbr:subject or crm:P129_is_about, which are preferred for defining relations among conceptual entities, the object property fabio:hasSubjectTerm is used for linking a work to a term from a controlled vocabulary or thesaurus, e.g. a SKOS concept.</p>

		<p>Exemplar usage:</p> <pre>:oa-47172   fabio:hasSubjectTerm :madonna-and-child . :madonna-and-child   a crm:E1_CRM_Entity , fabio:SubjectTerm .</pre>
SGTT	<p>Title of subject</p> <p>A title given by the author or a traditional title of the artwork.</p>	<p>crm:P102_has_title (object property)</p> <p>The object property <code>crm:P102_has_title</code> relates an individual representing a work of art to an attributed title of the subject (rather than relating the subject to a title). The value associated as range of this object property shall be further specialized into an individual of the class <code>crm:E55_Type</code>, by using the object property <code>crm:P2_has_type</code>.</p> <p>Exemplar usage:</p> <pre>:oa-47172   crm:P102_has_title :sacred-conversation . :sacred-conversation a crm:E35_Title ;   crm:P2_has_type :traditional-title . :traditional-title a crm:E55_Type .</pre>
LC – Geographical and administrative location *		
PVC – Current location *		
PVCS	<p>Country</p> <p>The name of the country where the artwork is currently located.</p>	<p>crm:P89_falls_within (object property)</p> <p>If one or more of the following elements in this section – the region (PVCR), the district (PVCP), the town (PVCC), the village (PVCL), the building (LDCN) and the precise location (LDCS) – are described, a chain of nested places shall be represented by means of the object property <code>crm:P89_falls_within</code>, until the last nested place.</p> <p>Each nested place, i.e. individuals of the class <code>crm:E53_Place</code>, may be characterized by a type, using the object property <code>crm:P2_has_type</code>.</p> <p>Here below an example of a complete filled section, representing the chain of relations between nested place and the declaration of the current location of the object.</p> <p>Exemplar usage:</p> <pre>:oa-47172-item a crm:E22_Man-Made_Object ;   crm:P55_has_current_location :gallery-palace-room-3 . :gallery-palace-room-3 a crm:E53_Place ;   crm:P89_falls_within :gallery-palace . :gallery-palace a crm:E53_Place ;   crm:P89_falls_within :malborghetto . :malborghetto a crm:E53_Place ;   crm:P89_falls_within :ferrara . :ferrara a crm:E53_Place ;   crm:P89_falls_within :ferrara-district . :ferrara-district a crm:E53_Place ;   crm:P89_falls_within :emilia-romagna . :emilia-romagna a crm:E53_Place ;   crm:P89_falls_within :italy . :italy a crm:E53_Place ;   crm:P2_has_type :country . :country a crm:E55_Type .</pre>
PVCR *	<p>Region</p> <p>The name of the current location where the artwork is currently located.</p>	<p>crm:P89_falls_within (object property)</p> <p>If one or more of the following elements in this section – the district (PVCP), the town (PVCC), the village (PVCL), the building (LDCN) and the precise location (LDCS) – are described, a chain</p>

		<p>of nested places shall be represented by means of the object property <code>crm:P89_falls_within</code>, until the last nested place filled.</p> <p>Each nested place, i.e. individuals of the class <code>crm:E53_Place</code>, may be characterized with a type, using the object property <code>crm:P2_has_type</code>.</p> <p>Exemplar usage:</p> <pre>:emilia-romagna a crm:E53_Place ;   crm:P2_has_type :region ;   crm:P89_falls_within :italy . :region a crm:E55_Type .</pre>
PVCP *	<p>District</p> <p>The name of the district where the artwork is currently located.</p>	<p><code>crm:P89_falls_within</code> (object property)</p> <p>If one or more of the following elements in this section – the town (PVCC), the village (PVCL), the building (LDCN) and the precise location (LDCS) – are described, a chain of nested places shall be represented by means of the object property <code>crm:P89_falls_within</code>, until the last nested place filled.</p> <p>Each nested place, i.e. individuals of the class <code>crm:E53_Place</code>, may be characterized with a type, using the object property <code>crm:P2_has_type</code>.</p> <p>Exemplar usage:</p> <pre>:ferrara-district a crm:E53_Place ;   crm:P2_has_type :district ;   crm:P89_falls_within :emilia-romagna ;   crm:P89_falls_within :italy . :district a crm:E55_Type .</pre>
PVCC *	<p>Town</p> <p>The name of the town or municipality where the artwork is currently located.</p>	<p><code>crm:P89_falls_within</code> (object property) or <code>crm:P55_has_current_location</code> (object property)</p> <p>The object property should be appropriately chosen according to the presence of next elements of this section. If one or more of the following elements in this section – the village (PVCL), the building (LDCN) and the precise location (LDCS) – are described, a chain of nested places shall be represented by means of the object property <code>crm:P89_falls_within</code>, until the last nested place filled.</p> <p>Each nested place, i.e. individuals of the class <code>crm:E53_Place</code>, may be characterized with a type, using the object property <code>crm:P2_has_type</code>.</p> <p>Exemplar usage:</p> <pre>:ferrara a crm:E53_Place ;   crm:P2_has_type :town ;   crm:P89_falls_within :ferrara-district .   crm:P89_falls_within :emilia-romagna .   crm:P89_falls_within :italy . :town a crm:E55_Type .</pre>
PVCL	<p>Village</p> <p>The name of the village of the current location of the artwork.</p>	<p><code>crm:P89_falls_within</code> (object property)</p> <p>The chain of nested places shall be represented by means of the object property <code>crm:P89_falls_within</code>, until the last nested place filled.</p> <p>Each nested place, i.e. individuals of the class <code>crm:E53_Place</code>, may be characterized with a type, using the object property <code>crm:P2_has_type</code>.</p> <p>Exemplar usage:</p> <pre>:malborghetto a crm:E53_Place ;</pre>

		<pre> crm:P2_has_type :village ; crm:P89_falls_within :ferrara ; crm:P89_falls_within :ferrara-district . crm:P89_falls_within :emilia-romagna . crm:P89_falls_within :italy . :village a crm:E55_Type . </pre>
LDC – Precise location *		
LDCN	Repository  The value of this field refers both to the current keeper of the work of art and the building wherein the keeper resides.	<p>crm:E53_Place (Class)</p> <p>In this field a cataloguer provides a collation of geographical and administrative information about the current location of a work of art, i.e. the building, may be here associated to the related residing corporate body. For example, “Gallery of Malborghetto” is the corporate body which resides in the building here described, represented by means of an individual of the class <code>crm:E53_Place</code> . The individual representing the institution (<code>crm:E39_Actor</code>) shall be related to the place in which resides by using the object property <code>crm:P74_has_current_or_former_residence</code>, and to the concrete object (<code>crm:E22_Man-Made_Object</code>, <code>fabio:AnalogItem</code>) by using the object property <code>crm:P50i_is_current_keeper_of</code>. The individual representing the place is further related through the property <code>crm:P89_falls_within</code> to the previous places specified in this section.</p> <p>Exemplar usage:  <pre> :gallery-palace a crm:E53_Place ;   crm:P89_falls_within :malborghetto . :gallery a crm:E39_Actor ;   crm:P74_has_current_or_former_residence     :gallery-palace ;   crm:P50i_is_current_keeper_of :oa-47172-item . </pre> </p> <p>If the field LDCS is not specified, the current individual representing the place becomes the current place of conservation of the work of art; thus the object property <code>crm:P55_has_current_location</code> is used for directly relating the individual representing the item of the work of art and an individual representing a country (<code>crm:E53_Place</code>).</p> <p>Exemplar usage:  <pre> :oa-47172-item a crm:E22_Man-Made_Object ;   crm:P55_has_current_location :gallery-palace . </pre> </p>
LDCU *	Address  The address or contact point of the current keeper of the work of art.	<p>crm:P76_has_contact_point (object property)</p> <p>An address can be associated to both an individual of the class <code>crm:E39_Actor</code>, i.e. the current keeper of the item, and to an individual of the class <code>crm:E53_Place</code>, i.e. the current location of the item, using the property <code>crm:P76_has_contact_point</code>.</p> <p>Exemplar usage:  <pre> :gallery a crm:E39_Actor ;   crm:P76_has_contact_point :gallery-address . :gallery-address a crm:E45_Address . </pre> </p>
LDCS	Precise location  The precise location, inside the building where the work of art is conserved.	<p>crm:P55_has_current_location (object property)</p> <p>When this field is filled it becomes the last nested place of the chain of object properties <code>crm:P89_falls_within</code> and the item is linked to it with the object property <code>crm:P55_has_current_location</code>.</p>

		<p>Exemplar usage:</p> <pre>:oa-47172-item   crm:P55_has_current_location :gallery-palace-room-3 . :gallery-palace-room-3 a crm:E53_Place .</pre>
UBO – Collocation		
INV – Inventory number		
INVN (*)	<p>Inventory number</p> <p>One or more inventory numbers attributed to the work of art.</p>	<p>crm:E42_Identifier (Class)</p> <p>An individual of the class <code>crm:E42_Identifier</code> should related by means of a relation with an individual of the class <code>crm:E13_Attribute_Assignment</code> to an individual representing the physical item of the work of art (<code>crm:E22_Man-Made_Object</code>, <code>fabio:AnalogItem</code>).</p> <p>Exemplar usage:</p> <pre>:oa-47172-item-invsn-assignment   a crm:E13_Attribute_Assignment ;   crm:P141_assigned :inv-97854 ;   crm:P140_assigned_attribute_to :oa-47172-item .</pre> <p>As more than one type of identifier can be attributed to a work of art, the object property <code>crm:P2_has_type</code> should be used to characterize the identifier.</p> <p>Exemplar usage:</p> <pre>:inv-97854 a crm:E42_Identifier ;   crm:P2_has_type :inventory-number .</pre>
LA – Other geographical and administrative locations		
TCL (*)	<p>Type of localization</p> <p>A term explaining the relation between a work of art and the described localization (e.g. previous or next collocation, deposit, place of execution)</p>	<p>crm:E9_Move or crm:E10_Transfer_of_Custody (Class) or crm:E12_Production (Class)</p> <p>The nature of the relation between a location and the physical object may vary according to the term from a controlled vocabulary here provided. Values here permitted and related possible ontological entities are:</p> <ul style="list-style-type: none"> <li>- <i>deposit</i>, <code>crm:E9_Move</code></li> <li>- <i>execution</i>, <code>crm:E12_Production</code></li> <li>- <i>next collocation</i>, <code>crm:E9_Move</code> or <code>crm:E10_Transfer_of_Custody</code></li> <li>- <i>provenance</i>, <code>crm:E9_Move</code> or <code>crm:E10_Transfer_of_Custody</code></li> </ul> <p><i>Chains of properties: transfers or movings</i> Being this section is repeatable, several transfers or movings can be described in a time-line. To represent them properly, intermediate entities should be used, e.g. <code>crm:E9_Move</code> or <code>crm:E10_Transfer_of_Custody</code>, and chains of relations between these entities can be defined. An example of a chain of transfers of custody can be represented as follows.</p> <p>Exemplar usage:</p> <pre>:gallery a crm:E39_Actor ;   crm:P50i_is_current_keeper_of :oa-47172-item .   crm:P29i_received_custody_through     :oa-47172-item-provenance-1 .</pre>



		<pre> :oa-47172-item-provenance-1   a crm:E10_Transfer_of_Custody ;   crm:P28_custody_surrendered_by :church-s-jacob ;   crm:P29_custody_received_by :gallery ;   crm:P30_transferred_custody_of :oa-47172-item ;   crm:P4_has_time_span :1958 . :church-s-jacob a crm:E39_Actor ;   crm:P74_has_current_or_former_residence     :church-s-jacob-building ;   crm:P29i_received_custody_through     :oa-47172-item-provenance-2 . :oa-47172-item-provenance-2   a crm:E10_Transfer_of_Custody ;   crm:P28_custody_surrendered_by :museum ;   crm:P29_custody_received_by :church-s-jacob ;   crm:P30_transferred_custody_of :oa-47172-item ;   crm:P4_has_time_span :1954 . </pre> <p><i>Transfers or movings</i></p> <p>Transfers of custody require two individuals representing keepers (crm:E39_Actor); movings regard a change of location from one place to another one (crm:E53_Place).</p> <p>The best representation should be chosen according to the nature of the terms provided in the PRCD field, if filled, and LDCN (previous section).</p> <p>If a name of a corporate body is recognized in both the PRCD field and in the LDCN field (<i>Geographical and Administrative location</i> section) we can express a relation between the work and a previous keeper by means of the intermediate individual of the class crm:E10_Transfer_of_Custody. The current keeper is linked by using the property crm:P29_custody_received_by and the previous keeper is linked by using the property crm:P28_custody_surrendered_by.</p> <p>Exemplar usage:</p> <pre> :oa-47172-item-provenance-1   a crm:E10_Transfer_of_Custody ;   crm:P28_custody_surrendered_by :church-s-jacob ;   crm:P29_custody_received_by :gallery ;   crm:P30_transferred_custody_of :oa-47172-item ; :church-s-jacob a crm:E39_Actor . </pre> <p>When the value of TCL is '<i>deposit</i>', or both the fields PRCD and LDCN are not filled, or either they provide a name of a place without a related recognizable corporate body, then the change of location of the object is represented by means of an individual of the class crm:E9_Move. The current place is linked through the property crm:P26_moved_to and the previous location is linked through the property crm:P27_moved_from.</p> <p>Exemplar usage:</p> <pre> :oa-47172-item-move-1 a crm:E9_Move ;   crm:P25_moved :oa-47172-item ;   crm:P26_moved_to :current-keeper-location ;   crm:P27_moved_from :church-s-jacob-building ;   crm:P4_has_time_span :1958 . :church-s-jacob-building a crm:E53_Place . </pre> <p><i>Execution</i></p> <p>If the value of TCL field identifies the location where the work of art was executed, an individual of the class crm:E12_Production should be used to represent the event of the work of art production: then a relation to a place where the execution happened can be reached through the use of the object property</p>
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		<p>crm:P7_took_place_at.</p> <p>Exemplar usage:</p> <pre>:oa-47172-item-production a crm:E12_Production ;   crm:P7_took_place_at :church-s-jacob-building . :church-s-jacob-building a crm:E53_Place .</pre>
<p>PRV – Geographical and administrative location (*)</p> <p>The filling of this section or part of it may entail a change of custody of the work of art (and/or a change of ownership), the execution of the work of art, or simpler a move of the object without a change of custody. The choice of a suitable representation here should be reached according to considerations explained for the TCL field.</p>		
PRVS	<p>Country</p> <p>The name of the country where the work of art was previously conserved and/or where a previous keeper resides.</p>	<p>crm:P89_falls_within (object property)</p> <p>If three or more of the following elements – the region (PRVR), the district (PRVP), the town (PRVC), the village (PRVL) and the building (PRCD) – are described, a list of nested places (crm:E53_Place) can be represented by means of a chain of object properties crm:P89_falls_within, until the last nested place is recognized as the former location of the work of art.</p> <p>When all fields of this section are filled (included PRCD field) can be expressed in Turtle syntax as follows. The country is the broader element of the chain of properties.</p> <p>Exemplar usage:</p> <pre>:church-s-jacob-building a crm:E53_Place ;   crm:P89_falls_within :greenacres . :greenacres a crm:E53_Place ;   crm:P89_falls_within :beverly-hills . :beverly-hills a crm:E53_Place ;   crm:P89_falls_within :california-district . :california-district a crm:E53_Place ;   crm:P89_falls_within :california . :california a crm:E53_Place ;   crm:P89_falls_within :usa . :usa a crm:E53_Place ;   crm:P2_has_type :country .</pre>
PRVR (*)	<p>Region</p> <p>The name of the region where the work of art was previously conserved and/or where a previous keeper resides.</p>	<p>crm:P89_falls_within (object property)</p> <p>If two or more of the following elements – the district (PRVP), the town (PRVC), the village (PRVL) and the building (PRCD) – are described, a list of nested places (crm:E53_Place) can be represented by means of a chain of object properties crm:P89_falls_within, until the last nested place is recognized as the former location or place of execution of the work of art.</p> <p>Exemplar usage:</p> <pre>:california a crm:E53_Place ;   crm:P89_falls_within :usa   crm:P2_has_type :region .</pre>
PRVP (*)	<p>District</p> <p>The name of the district where the work of art was previously conserved and/or where a previous keeper resides.</p>	<p>crm:P89_falls_within (object property)</p> <p>If one or more of the following elements – the town (PRVC), the village (PRVL) and the building (PRCD) – are described, a list of nested places (crm:E53_Place) can be represented by means of a chain of object properties crm:P89_falls_within, until the last nested place is recognized as the former location or place of execution of the work of art.</p>

		<p>Exemplar usage:</p> <pre>:california-district a crm:E53_Place ;   crm:P89_falls_within :california   crm:P2_has_type :district .</pre>
PRVC (*)	<p>Town</p> <p>The name of the town or municipality where the work of art was previously conserved and/or where a previous keeper resides.</p>	<p>crm:P89_falls_within (object property) or crm:P53_has_former_or_current_location (object property) or crm:P7_took_place_at (object property)</p> <p>If one or more of the following elements – the village (PRVL) and the building (PRCD) – are described, a list of nested places (crm:E53_Place) can be represented by means of a chain of object properties crm:P89_falls_within, until the last nested place is recognized as the former location or the place of execution of the work of art.</p> <p>If none of the next places possible in this section is specified, the current individual becomes the former place of conservation of the work of art or its place of execution. Thus the individual representing the move (crm:E9_Move) or the execution (crm:E12_Production) is linked to the individual representing the town (crm:E53_Place) by using the appropriate object property.</p> <p>Exemplar usage:</p> <pre>:beverly-hills a crm:E53_Place ;   crm:P89_falls_within :california-district   crm:P2_has_type :town . :oa-47172-item-move-1 a crm:E9_Move ;   crm:P25_moved :oa-47172-item ;   crm:P26_moved_to :current-location ;   crm:P27_moved_from :beverly-hills .</pre> <p>or</p> <pre>:oa-47172-item-production a crm:E12_Production ;   crm:P7_took_place_at :beverly-hills .</pre>
PRVL	<p>Village</p> <p>The name of the village where the work of art was previously conserved and/or where a previous keeper resides.</p>	<p>crm:P89_falls_within (object property) or crm:P53_has_former_or_current_location (object property) or crm:P7_took_place_at (object property)</p> <p>If the next field of this section (PRCD) is described, it is linked to the individual representing the village (crm:E53_Place) through object property crm:P89_falls_within.</p> <p>Otherwise the village becomes the former place of conservation of the work of art or its place of execution. Thus the individual representing the move (crm:E9_Move) or the execution (crm:E12_Production) is linked to the individual representing the village (crm:E53_Place) by using the appropriate object property.</p> <p>Exemplar usage:</p> <pre>:greenacres a crm:Place ;   crm:P89_falls_within :beverly-hills</pre>

		<pre> crm:P2_has_type :village . :oa-47172-item-move-1 a crm:E9_Move ; crm:P25_moved :oa-47172-item ; crm:P26_moved_to :current-location ; crm:P27_moved_from :greenacres . </pre> <p>or</p> <pre> :oa-47172-item-production a crm:E12_Production ; crm:P7_took_place_at :greenacres . </pre>
PRC – Precise location		
PRCD	<p>Repository</p> <p>The value of this field refers both to the previous keeper of the work of art and the building wherein the keeper resides.</p>	<pre> crm:E53_Place (Class) or [crm:E53_Place (Class) and crm:E39_Actor (Class)] </pre> <p>The physical container, i.e. the building, may be here described also as the individual representing the corporate body preserving the object. When this ambiguity is clearly recognized, e.g. “Church of S. Jacob” stands for both the institution and its building, both the individuals should be represented, i.e. an individual of the class crm:E53_Place and an individual of the class crm:E39_Actor. The individual representing the institution is related to place where it resides by means of the object property crm:P74_has_current_or_former_residence.</p> <p>Exemplar usage:</p> <pre> :church-s-jacob-building a crm:E53_Place . :church-s-jacob a crm:E39_Actor ;   crm:P74_has_current_or_former_residence     :church-s-jacob-building . </pre> <p>Representing the container of the object as an actor (further specified as a legal body, crm:E40_Legal_Body), enables the representation of a transfer of custody (crm:E10_Transfer_of_Custody) instead of a moving (crm:E9_Move).</p> <p>Therefore the individual representing a transfer of custody is linked to the former keeper through the property crm:P28_custody_surrendered_by, and to the individual representing the current keeper (provided in LDCN) through the property crm:P29_custody_received_by.</p> <p>Exemplar usage:</p> <pre> :oa-47172-item-provenance-1   a crm:E10_Transfer_of_Custody ;   crm:P28_custody_surrendered_by :church-s-jacob ;   crm:P29_custody_received_by :gallery ;   crm:P30_transferred_custody_of :oa-47172-item ; :church-s-jacob a crm:E39_Actor . </pre> <p>If the value of TCL is '<i>deposit</i>', or a corporate body can not be recognized in PRCD, a relation between places can be expressed by using an individual of the class crm:E9_Move and the proper object properties.</p> <p>Exemplar usage:</p> <pre> :oa-47172-item-move-1 a crm:E9_Move ;   crm:P25_moved :oa-47172-item ;   crm:P26_moved_to :current-location ;   crm:P27_moved_from :church-s-jacob-building . </pre>

		<p>If the value of TCL is '<i>execution</i>', the individual recognized here is a place, related to the individual representing the production of the work of art (crm:E12_Production).</p> <p>Exemplar usage:  :oa-47172-item-production a crm:E12_Production ;  crm:P7_took_place_at :church-s-jacob-building .</p>
PRCS	<p>Precise location</p> <p>The precise location where the work of art was previously conserved.</p>	<p>crm:P53_has_former_or_current_location (object property)</p> <p>The individual representing the concrete object can be related to an individual of the class crm:E53_Place, i.e. the former location of the item, using the property crm:P53_has_former_or_current_location.  The precise location is related to its physical container by means of the object property crm:P89_falls_within.</p> <p>Exemplar usage:  :oa-47172-item  crm:P53_has_former_or_current_location  :church-s-jacob-chapel-right .  :church-s-jacob-chapel-right a crm:E53_Place ;  crm:P89_falls_within :church-s-jacob-building .</p>
PRDI	<p>Date in</p> <p>The date the work of art entered a physical or juridical repository.</p>	<p>ti:hasIntervalStartDate (data property)</p> <p>According to CIDOC-CRM references, when the beginning and the end of custody of a work of art has to be described, the use of an individual of the class crm:E10_Transfer_of_Custody for recording the start and the end of the custody is suggested. A characterization of this individual can be expressed by using the object property crm:P2_has_type.  To formalize the interval of dates of custody, the value of PRDI and PRDU should be combined in an individual of the class crm:E52_Time-Span and then related to the individual representing the custody by using the object property crm:P4_has_time_span.  The date of the beginning of custody is represented by means of the data property ti:hasIntervalStartDate associated to a value conforming to the XML Schema datatype xsd:dateTime.</p> <p>Exemplar usage:  :church-s-jacob a crm:E39_Actor ;  crm:P29i_received_custody_through  :church-s-jacob-oa-47172-item-custody .  :church-s-jacob-oa-47172-item-custody  a crm:E10_Transfer_of_Custody ;  crm:P2_has_type :custody ;  crm:P30_transferred_custody_of :oa-47172-item ;  crm:P4_has_time_span :1954-1958 .  :1954-1958 a crm:E52_Time-Span ;  ti:hasIntervalStartDate  "1954-01-01T00:00:00"^^xsd:dateTime .</p>
PRDU	<p>Date out</p> <p>The date the work of art was moved from a physical or juridical repository.</p>	<p>ti:hasIntervalEndDate (data property)</p> <p>According to CIDOC-CRM references, when the beginning and the end of custody of a work of art has to be described, the use of an individual of the class crm:E10_Transfer_of_Custody for recording the start and the end of the custody is suggested. A characterization of this individual can be expressed by using the object property crm:P2_has_type.</p>

		<p>To formalize the interval of dates of custody, the value of PRDI and PRDU should be combined in an individual of the class <code>crm:E52_Time-Span</code> and then related to the individual representing the custody by using the object property <code>crm:P4_has_time_span</code>.</p> <p>The date of the end of custody is represented by means of the data property <code>ti:hasIntervalEndDate</code> associated to a value conforming to the XML Schema datatype <code>xsd:dateTime</code>.</p> <p>Exemplar usage:</p> <pre> :church-s-jacob-oa-47172-item-custody   a crm:E10_Transfer_of_Custody ;   crm:P2_has_type :custody ;   crm:P30_transferred_custody_of :oa-47172-item ;   crm:P4_has_time_span :1954-1958 . :1954-1958 a crm:E52_Time-Span ;   ti:hasIntervalStartDate     "1954-01-01T00:00:00"^^xsd:dateTime ;   ti:hasIntervalEndDate     "1958-01-01T00:00:00"^^xsd:dateTime . </pre>
RO – Relations to other works of art		
ROF – Relation to final / initial work		
Any time this repeatable section is filled a relation between two works of art is defined; an individual of the class <code>prov:Influence</code> (or of its subclasses in OAEEntry Ontology) may be used to define this relation.		
ROFF (*)	<p>Status of the work</p> <p>A term defining a relation between the current work of art and another one.</p>	<p><code>prov:Influence</code> (Class)</p> <p>When a generic relation of influence between two works of art is noticed, an individual of the class <code>prov:Influence</code> may be used to define features of the relation.</p> <p>The OAEEntry Ontology provides twenty-nine classes (subclasses of the class <code>prov:Influence</code>) for defining such relation of dependency between two works of art.</p> <ul style="list-style-type: none"> <li>- <code>oentry:Cartoon</code></li> <li>- <code>oentry:Copy</code></li> <li>- <code>oentry:CopyOrDerivation</code></li> <li>- <code>oentry:CopyWithVariants</code></li> <li>- <code>oentry:Derivation</code></li> <li>- <code>oentry:Drawing</code></li> <li>- <code>oentry:Fake</code></li> <li>- <code>oentry:Matrix</code></li> <li>- <code>oentry:Model</code></li> <li>- <code>oentry:Mold</code></li> <li>- <code>oentry:PartialCartoon</code></li> <li>- <code>oentry:PartialCopy</code></li> <li>- <code>oentry:PartialCopyWithVariants</code></li> <li>- <code>oentry:PartialDerivation</code></li> <li>- <code>oentry:PartialMatrix</code></li> <li>- <code>oentry:PartialModel</code></li> <li>- <code>oentry:PartialMold</code></li> <li>- <code>oentry:PartialReplica</code></li> <li>- <code>oentry:PartialScaleModel</code></li> <li>- <code>oentry:PartialSinopia</code></li> <li>- <code>oentry:Prototype</code></li> <li>- <code>oentry:Remake</code></li> <li>- <code>oentry:Replica</code></li> <li>- <code>oentry:ReplicaWithVariants</code></li> </ul>

		<ul style="list-style-type: none"> <li>- oaentry:ScaleModel</li> <li>- oaentry:Sinopia</li> <li>- oaentry:Sketch</li> <li>- oaentry:SpecularCopy</li> <li>- oaentry:Underdrawing</li> </ul> <p>e.g. ROFF: 'copy'</p> <p>Exemplar usage:</p> <pre> :oa-47172   oaentry:isConceivedByMeansOf :oa-45765-copy . :oa-45765-copy a oaentry:Copy ;   oaentry:hasFormerWork :oa-45765 ;   oaentry:hasConceived :oa-47172 . </pre> <p>Although not covered by the OA Entry content standard in this section, the relation between two works should be considered a questionable information, chosen by the cataloguer. By means of a relation to an individual of the class <code>hico:InterpretationAct</code> from the HiCo Ontology, the relation between works (<code>oaentry:Copy</code>) can be characterized with a type, with adopted criteria and sources consulted. An individual of the class <code>hico:InterpretationAct</code> should be created to define:</p> <ul style="list-style-type: none"> <li>– a generic type of interpretation underlying described data, i.e. a relation between works (<code>oaentry:influence-between-works-attribution</code>), by using the object property <code>hico:hasInterpretationType</code>;</li> <li>– who adopted this attribution as the preferred one, i.e. the cataloguing institution (e.g. <i>Zeri Foundation</i>), by using the object property <code>hico:hasInterpretationType</code>;</li> <li>– the responsibility of the cataloguer and its motivations (if provided), by using the object property <code>hico:hasInterpretationCriterion</code>;</li> <li>– the responsibility of the RDF creator (<code>foaf:Agent</code>), who further interprets cataloguer's choices when creating data, by using the object property <code>prov:wasAssociatedWith</code>;</li> <li>– the relation between the individual representing the interpretation process (<code>hico:InterpretationAct</code>) and the individual representing the source content in which the interpretation is stated in natural language, i.e. the OA Entry content (<code>fabio:Expression</code>), by using the object property <code>hico:isExtractedFrom</code>.</li> </ul> <p>Exemplar usage:</p> <pre> :oa-45765-copy   prov:wasGeneratedBy :oa-45765-copy-attribution . :oa-45765-copy-attribution a hico:InterpretationAct ;   hico:hasInterpretationType     oaentry:influence-between-works-attribution ;   hico:hasInterpretationType     :zeri-preferred-attribution ;   hico:hasInterpretationCriterion     :cataloguer-choice ;   prov:wasAssociatedWith :crr-mm ;   hico:isExtractedFrom     :oaentry-43677-expression-2016-04-01 . </pre>
ROFO	<p>Initial / Final work</p> <p>A term specializing the main type of a related work of art, regarding</p>	<p>crm:E55_Type (Class)</p> <p>According to the <i>Cataloging Cultural Objects (CCO) project</i> of the <i>Visual Resources Association Foundation</i></p>

	its formal, functional and morphological features.	<p>(<a href="http://cco.vrafoundation.org/">http://cco.vrafoundation.org/</a>), which suggests to consider only the FRBR Work level when describing type of works of art, terms of the open vocabulary identified in this field are considered specializations of a work of art at the FRBR Work level of description, i.e. individuals of the classes <code>fabio:ArtisticWork</code> and <code>crm:E28_Conceptual_Object</code>.</p> <p>By means of the object property <code>crm:P2_has_type</code> a work of art may be associated to an individual defining the type of work.</p> <p>Exemplar usage:  <code>:oa-45765</code>  <code>a crm:E28_Conceptual_Object , fabio:ArtisticWork ;</code>  <code>crm:P2_has_type :polyptych .</code></p> <p>Terms of the <code>crm:E55_Type</code> hierarchy shall be aligned to an established controlled vocabulary or thesaurus, e.g. the AAT Getty Thesaurus (<a href="http://www.getty.edu/research/tools/vocabularies/aat/">http://www.getty.edu/research/tools/vocabularies/aat/</a>).</p> <p>Exemplar usage:  <code>:polyptych a crm:E55_Type ;</code>  <code>skos:relatedMatch</code>  <code>&lt;<a href="http://vocab.getty.edu/aat/300178235">http://vocab.getty.edu/aat/300178235</a>&gt; .</code></p>
ROFS	<p>Subject of initial / final work</p> <p>A term from an open list of terms for defining iconographic content of the related work of art.</p>	<p><code>fabio:hasSubjectTerm</code> (object property)</p> <p>Instead of object properties like <code>frbr:subject</code> or <code>crm:P129_is_about</code>, which are preferred for defining relations among conceptual entities, the object property <code>fabio:hasSubjectTerm</code> is used for linking a work to a term from a controlled vocabulary or thesaurus, e.g. a SKOS concept.</p> <p>Exemplar usage:  <code>:oa-45765</code>  <code>fabio:hasSubjectTerm :assunzione-della-madonna .</code>  <code>:assunzione-della-madonna</code>  <code>a crm:E1_CRM_Entity , fabio:SubjectTerm .</code></p>
ROFA	<p>Author of initial / final work</p> <p>A term identifying the name of the artist who created the related work of art.</p>	<p><code>crm:E39_Actor</code> (Class)</p> <p>When this field or the next one (i.e. <i>Date of initial / final work</i>) is filled, the creation of the work of art, i.e. an individual of the class <code>crm:E65_Creation</code>, should be described in order to express any relevant relation involved in this event.</p> <p>The relation to the artist can be expressed by using the object property <code>crm:P14_carried_out_by</code>.</p> <p>An artist, or a group of artist, may be represented as individuals of the class <code>crm:E39_Actor</code>.</p> <p>Exemplar usage:  <code>:oa-45765-creation a crm:E65_Creation ;</code>  <code>crm:P14_carried_out_by :artist .</code>  <code>:artist a crm:E39_Actor .</code></p>
ROFD	<p>Date of initial / final work</p> <p>Dates of creation of the related work of art.</p>	<p><code>crm:P4_has_time_span</code> (object property)</p> <p>When this field or the previous one (i.e. <i>Author of initial / final work</i>) is filled, the creation of the work of art, i.e. an individual of the class <code>crm:E65_Creation</code>, should be described in order to express any relevant relation involved in this event.</p> <p>The relation to the date of creation can be expressed by using the object property <code>crm:P4_has_time_span</code>.</p>



		<p>Exemplar usage:</p> <pre>:oa-45765-creation a crm:E65_Creation ;   crm:P4_has_time_span :1540-1560 . :1540-1560 a crm:E52_Time-Span .</pre>
ROFC	<p>Place of conservation</p> <p>Multiple values identifying country, region, district, town, village and the repository wherein the related work of art is conserved.</p>	<p>crm:E53_Place (Class) or [crm:E53_Place (Class) and crm:E39_Actor (Class)]</p> <p>This field contains all the information regarding both the current location of the related work of art and the institution which conserves it. Relations may be expressed by using same classes, object properties and chains of object properties described in <i>Geographical and Administrative location</i> section.</p> <p>Exemplar usage:</p> <pre>:oa-45765-item a crm:E22_Man-Made_Object ;   crm:P50_has_current_keeper :oa-45765-keeper . :oa-45765-keeper a crm:E39_Actor ;   crm:P74_has_current_or_former_residence     :oa-45765-keeper-palace . :oa-45765-keeper-palace a crm:E53_Place .</pre>
DT – Dating *		
<p>DTZ – General dating *</p> <p>Any time this repeatable section is filled, an individual representing a possible creation of the work of art, belonging to the class <code>crm:E65_Creation</code>, should be created in order to express any relevant feature involved in this event and related attributions (i.e. dates and authorship).</p>		
DTZG *	<p>Century</p> <p>A value identifying the century in which the current work of art was created.</p>	<p>crm:P4_has_time_span (object property) or crm:P86_falls_within (object property)</p> <p>If the value in this field is the only one provided for the period of creation of the work of art (<code>crm:E65_Creation</code>), the relation can be directly expressed by using the object property <code>crm:P4_has_time_span</code>.</p> <p>Exemplar usage:</p> <pre>:oa-47172-creation a crm:E65_Creation ;   crm:P4_has_time_span :xvi-century . :xvi-century a crm:E52_Time-Span .</pre> <p>Otherwise, a chain of object properties <code>crm:P86_falls_within</code> should relate all the nested time spans. An example of a complete section filled can be represented in Turtle syntax as follows.</p> <p>Exemplar usage:</p> <pre>:oa-47172-creation a crm:E65_Creation ;   crm:P4_has_time_span :1540ca-1560ca . :1540ca-1560ca a crm:E52_Time-Span ;   crm:P86_falls_within :second-half-xvi-century . :second-half-xvi-century   a crm:E52_Time-Span ;   crm:P86_falls_within :xvi-century . :xvi-century a crm:E52_Time-Span .</pre>
DTZS	Part of century	crm:P86_falls_within (object property)

	A value identifying the part of the century in which the current work of art was created.	<p>The value provided in this field characterizes the time span provided in the previous field DTZG. Therefore another individual representing the part of the century is created (crm:E52_Time-Span), and related to the broader one by means of the property crm:P86_falls_within.</p> <p>Exemplar usage: :second-half-xvi-century a crm:E52_Time-Span ;     crm:P86_falls_within :xvi-century .</p>
<p>DTS – Precise dating *</p> <p>Any time a different dating attribution is provided, an individual representing a different creation, belonging to the class crm:E65_Creation should be created. According to the conceptual model FRBR, both creators and dates identify a work as a distinct intellectual or artistic creation; a different dating (or a different artist, see next section <i>Authorship Attribution</i>) may then entail a different creation of the same work.</p>		
DTSI *	<p>From</p> <p>A value identifying the starting year in a range of years in which the current work of art was created.</p>	<p>ti:hasIntervalStartDate (data property)</p> <p>The value of this field should be combined with the value of the field DTSF to define a new individual expressing the narrower range of years (crm:E52_Time-Span) in which the work of art may have been created.</p> <p>Furthermore, as time spans are modelled in the CIDOC-CRM as 'approximations' of time spans, if provided, also DTSV and DTSL values may be considered as parts of the individual (in order to create consistent entities further characterized).</p> <p>This time span is related to broader ones provided in previous fields by using the property crm:P86_falls_within.</p> <p>Exemplar usage: :1540ca-1560ca a crm:E52_Time-Span ;     crm:P86_falls_within :second-half-xvi-century .</p> <p>This individual can be characterized with the data property ti:hasIntervalStartDate and an associated value conforming to the XML Schema datatype xsd:dateTime.</p> <p>Exemplar usage: :1540ca-1560ca a crm:E52_Time-Span ;     ti:hasIntervalStartDate         "1540-01-01T00:00:00"^^xsd:dateTime .</p>
DTSV	<p>Degree of approximation</p> <p>A term describing the degree of approximation of the proposed starting year.</p>	<p>crm:P79_beginning_is_qualified_by (data property)</p> <p>The individual described in DTSI may be further characterized with the data property crm:P79_beginning_is_qualified_by to specify if the starting year in the range of years is precise or not.</p> <p>Exemplar usage: :1540ca-1560ca a crm:E52_Time-Span ;     ti:hasIntervalStartDate         "1540-01-01T00:00:00"^^xsd:dateTime ;     crm:P79_beginning_is_qualified_by "ca" .</p>
DTSF *	<p>To</p> <p>A value identifying the ending year in a range of years in which the current work of art was created.</p>	<p>ti:hasIntervalEndDate (data property)</p> <p>The individual described in DTSI may be further characterized with the data property ti:hasIntervalEndDate and an associated value conforming to the XML Schema datatype xsd:dateTime.</p>

		<p>Exemplar usage:</p> <pre>:1540ca-1560ca a crm:E52_Time-Span ;   ti:hasIntervalStartDate     "1540-01-01T00:00:00"^^xsd:dateTime ;   crm:P79_beginning_is_qualified_by "ca" ;   ti:hasIntervalEndDate     "1560-01-01T00:00:00"^^xsd:dateTime .</pre>
DTSL	<p>Degree of approximation</p> <p>A term describing the degree of approximation of the proposed ending year.</p>	<p>crm:P80_end_is_qualified_by (data property)</p> <p>The individual described in DTSL, in this section, may be further characterized with the data property <code>crm:P80_end_is_qualified_by</code> to specify if the ending year in the range of years is precise or not.</p> <p>Exemplar usage:</p> <pre>:1540ca-1560ca a crm:E52_Time-Span ;   ti:hasIntervalStartDate     "1540-01-01T00:00:00"^^xsd:dateTime ;   ti:hasIntervalEndDate     "1560-01-01T00:00:00"^^xsd:dateTime ;   crm:P79_beginning_is_qualified_by "ca" ;   crm:P80_end_is_qualified_by "ca" .</pre>
DTM *	<p>Motivation</p> <p>The value of this field describes how the proposed dating have been chosen, by explaining a motivation or a type of source.</p>	<p>hico:InterpretationCriterion (Class)</p> <p>Values of this field should be reconciled into a controlled vocabulary, in order to define a ranking of adopted criteria and facilitate integration of data among different stakeholders, who may adopt a different dating and provide different motivations.</p> <p>The use of HiCo Ontology is here suggested for describing all necessary issues related to an interpretative process and ensure data reuse. Any time a questionable information is noticed, an individual of the class <code>hico:InterpretationAct</code> should be created to define:</p> <ul style="list-style-type: none"> <li>– the type of interpretation underlying described data, i.e. a dating attribution (<code>oaentry:date-attribution</code>), by using the object property <code>hico:hasInterpretationType</code>;</li> <li>– who adopted this dating as the preferred one, i.e. the cataloguing institution (e.g. <i>Zeri Foundation</i>), by using the object property <code>hico:hasInterpretationType</code>;</li> <li>– the responsibility of the cataloguer, by using the object property <code>hico:hasInterpretationCriterion</code>;</li> <li>– motivation(s) provided in this field, by using the object property <code>hico:hasInterpretationCriterion</code>;</li> <li>– the responsibility of the RDF creator, who further interprets cataloguer choices when creating data, by using the object property <code>prov:wasAssociatedWith</code>;</li> <li>– the relation between the individual representing the interpretation process (<code>hico:InterpretationAct</code>) and the source content, i.e. the OA Entry content, in which the interpretation is stated in natural language (<code>fabio:Expression</code>), by using the object property <code>hico:isExtractedFrom</code>.</li> </ul> <p>Exemplar usage:</p> <pre>:oa-47172-creation   prov:wasGeneratedBy     :oa-47172-creation-date-attribution . :oa-47172-creation-date-attribution   a hico:InterpretationAct ;</pre>

		<pre> hico:hasInterpretationType   oaentry:date-attribution ; hico:hasInterpretationType   :zeri-preferred-dating ; hico:hasInterpretationCriterion   :cataloguer-choice ; hico:hasInterpretationCriterion :bibliography ; hico:isExtracted-from   :oaentry-43677-expression-2016-04-01 . oaentry:date-attribution a hico:InterpretationType . :zeri-preferred-dating a hico:InterpretationType . :cataloguer-choice a hico:InterpretationCriterion . :bibliography a hico:InterpretationCriterion . :oaentry-43677-expression-2016-04-01   a fabio:Expression . </pre> <p>The accuracy of information provided in this field is limited, while further descriptions may be enabled. For example, if DTM contained a citation of an art critic as a source of the attribution, the use of CiTO Ontology object properties would be encouraged to represent such information. Indeed, CiTO provides several object properties to relate citing and cited entities. E.g. DTM: '<i>bibliography (R. Longhi 1970)</i>', could enable the cataloguer to cite the art critic Roberto Longhi for supporting chosen dating of creation of the work of art.</p> <p>Exemplar usage:</p> <pre> :oa-47172-creation-date-attribution   cito:agreesWith :r-longhi . </pre>
ADT	<p>Different dating</p> <p>A value identifying the century, and/or a range of years, in which the current work of art may also have been created.</p>	<p>crm:P4_has_time_span (object property)</p> <p>Any time this repeatable field is filled, an individual representing another possible creation of the work of art, belonging to the class <code>crm:E65_Creation</code>, should be created to avoid inconsistencies and to enable a deeper description of the event.</p> <p>Exemplar usage:</p> <pre> :1510-1580 a crm:E52_Time-Span . :oa-47172-creation-2   crm:P4_has_time_span :1510-1580 . </pre> <p>Even if not covered by the OA Entry content standard in this section, reporting a different dating attribution should entail that this information is questionable.</p> <p>An individual of the class <code>hico:InterpretationAct</code> from the HiCo Ontology, allows to characterize this possibility (see DTM, in this section, for further explanation).</p> <p>Exemplar usage:</p> <pre> :oa-47172-creation-2   prov:wasGeneratedBy     :oa-47172-creation-2-date-attribution . :oa-47172-creation-2-date-attribution   a hico:InterpretationAct ; hico:hasInterpretationType   oaentry:date-attribution ; hico:hasInterpretationType   :zeri-discarded-dating ; hico:isExtractedFrom   :oaentry-43677-expression-2016-04-01 . </pre>
AU – Authorship attribution *		
AUT – Author (*)		

Any time this repeatable subsection is filled an individual representing a different coauthor or a group of coauthors is related to the individual representing the preferred work of art creation (crm:E65\_Creation).

AUTS	<p>Connection with the artist</p> <p>When the exact author of the artwork is unknown or uncertain, a term describing a type of connection between an artist and the author of the catalogued work of art is provided.</p>	<p>crm:E74_Group (Class)</p> <p>When this field is filled, the artist responsible for the creation of the work of art is unknown (e.g. when one or more artists part of a studio of another artist created the work). A possible responsible group is identified by means of a combination of this field and the field AUTN, where the main artist of a studio or a workshop is identified.</p> <p>The object property crm:P14_carried_out_by should be used to relate the individual representing a responsible entity (crm:E74_Group) and the individual representing the creation of the work of art (crm:E65_Creation).</p> <p>Exemplar usage: :oa-47172-creation     crm:P14_carried_out_by :leonardo-studio . :leonardo-studio a crm:E74_Group .</p>
AUTR	<p>Role</p> <p>A term describing the role an artist or the related group had during the creation or execution of the work of art.</p>	<p>oaentry:ArtisticRole (Class)</p> <p>To specify the role held by an artist, an individual belonging to the class pro:RoleInTime of the PRO Ontology shall be used, which enables to express:</p> <ul style="list-style-type: none"> <li>– the agent who holds a role in a time-indexed situation, i.e. the artist or group, by using the object property pro:isHeldBy;</li> <li>– the role held by the artist, i.e. one of the individuals belonging to the class oaentry:ArtisticRole, by using the object property pro:withRole;</li> <li>– the work of art as the context of the role, by using the object property pro:relatesTo;</li> <li>– the time interval in which the role is held (if applicable), by using the object property tv:atTime.</li> </ul> <p>Exemplar usage: :leonardo-painter-oa-47172   a pro:RoleInTime ;   pro:relatesTo :oa-47172 ;   pro:isHeldBy :leonardo ;   pro:withRole oaentry:painter . oaentry:painter a oaentry:ArtisticRole .</p>
AUTM (*)	<p>Motivation</p> <p>The value of this field describes how the proposed authorship attribution have been reached, by explaining a motivation or providing a type of source.</p>	<p>hico:InterpretationCriterion (Class)</p> <p>Possible values of this field should be reconciled in a controlled vocabulary of adoptable criteria, in order to define a ranking of attributions. This will enable data reuse by other stakeholders, who may want to compare them.</p> <p>An individual belonging to the class hico:InterpretationAct should be used to describe all relevant features related to the interpretative process underlying the chosen authorship attribution. The use of HiCo Ontology is here suggested for describing all necessary issues related to an interpretative process and ensure data reuse. Any time a questionable information is noticed, an individual of the class hico:InterpretationAct should be created to define:</p>

		<ul style="list-style-type: none"> <li>– the type of interpretation underlying described data, i.e. an authorship attribution (oaentry:authorship-attribution), by using the object property hico:hasInterpretationType;</li> <li>– who adopted this dating as the preferred one, i.e. the cataloguing institution (e.g. <i>Zeri Foundation</i>), by using the object property hico:hasInterpretationType;</li> <li>– the responsibility of the cataloguer, by using the object property hico:hasInterpretationCriterion;</li> <li>– motivation(s) provided in this field, by using the object property hico:hasInterpretationCriterion;</li> <li>– the responsibility of the RDF creator (foaf:Agent), who further interprets cataloguer choices when creating data, by using the object property prov:wasAssociatedWith;</li> <li>– the relation between the individual representing the interpretation process (hico:InterpretationAct) and the source content, i.e. the OA Entry content, in which the interpretation is stated in natural language (fabio:Expression), by using the object property hico:isExtractedFrom.</li> </ul> <p>Exemplar usage:</p> <pre> :oa-47172-creation a crm:E65_Creation   prov:wasGeneratedBy     :oa-47172-leonardo-studio-attribution . :oa-47172-leonardo-studio-attribution   a hico:InterpretationAct ;   hico:hasInterpretationType     oaentry:authorship-attribution ;   hico:hasInterpretationType     :zeri-preferred-attribution ;   hico:hasInterpretationCriterion     :cataloguer-choice ;   hico:hasInterpretationCriterion :signature ;   prov:wasAssociatedWith :crr-mm ;   hico:isExtractedFrom     :oaentry-43677-expression-2016-04-01 . :signature a hico:InterpretationCriterion . </pre>
AUTN (*)	<p>Artist</p> <p>The name of the artist recognized as main responsible entity for the work of art creation.</p>	<p>crm:E21_Person (Class)</p> <p>The main artist, creator or involved in the creation of the work of art, is generally identified as a person, then can be expressed as an individual of the class crm:E21_Person.</p> <p>Exemplar usage:</p> <pre> :oa-47172-creation   crm:P14_carried_out_by :leonardo . :leonardo a crm:E21_Person . </pre> <p>If the field AUTS is filled, the value of AUTS have to be combined with the value of AUTN field in order to define a broader entity representing a group (crm:E74_Group) responsible of the work of art creation (see AUTS, in this section, for explanation).</p>
AUTA (*)	<p>Life dates</p> <p>A range of dates in which the artist lived or a value describing the period of activity of the artist.</p>	<p>crm:E67_Birth (Class) and crm:E69_Death (Class)</p> <p>Whenever possible, both the individuals representing the birth, i.e. an individual of the class crm:E67_Birth, and the death of an artist, i.e. an individual of the class crm:E69_Death, should be</p>

		<p>created. The object properties <code>crm:P92i_was_brought_into_existence_by</code> and <code>crm:P93i_was_taken_out_of_existence_by</code> link the artist to the proper event.</p> <p>Date of birth and death are linked to related events by the proper object property <code>crm:P4_has_time_span</code>.</p> <p>Exemplar usage:</p> <pre>:leonardo a crm:E21_Person ;   crm:P92i_was_brought_into_existence_by     :leonardo-birth ;   crm:P93i_was_taken_out_of_existence_by     :leonardo-death . :leonardo-birth a crm:E67_Birth ;   crm:P4_has_time_span :1452 . :leonardo-death a crm:E69_Death ;   crm:P4_has_time_span :1519 . :1452 a crm:E52_Time-Span . :1519 a crm:E52_Time-Span .</pre> <p>Although not required in this section, individuals representing birth and death should be further described by means of HiCo Ontology properties and classes, e.g. to state: the degree of approximation of the dates, information about motivations and criteria adopted, citations and sources used.</p> <p>(see DTM, in <i>Dating</i> section, for explanation)</p>
AUTH (*)	<p>Code for citation</p> <p>The unique code used to identify the entity in the local authority file of artists.</p>	<p><code>crm:E42_Identifier</code> (Class)</p> <p>The value associated to the object property <code>crm:P48_has_preferred_identifier</code> associates the current artist to a reference code in a local authority.</p> <p>Exemplar usage:</p> <pre>:leonardo   crm:P48_has_preferred_identifier :artist-253 . :artist-253 a crm:E42_Identifier .</pre> <p>Authority records may be aligned to established ones (e.g. <i>VIAF</i>, <i>Getty ULAN</i>, or the italian <i>ICCU Authority file</i>); a proper object property, <code>skos:relatedMatch</code> or <code>owl:sameAs</code>, should be used.</p> <p>Exemplar usage:</p> <pre>:leonardo   crm:P48_has_preferred_identifier :artist-253 ;   owl:sameAs &lt;http://viaf.org/viaf/24604287&gt; .</pre>
ATB – Cultural context *		
ATBD (*)	<p>Cultural context</p> <p>A description in natural language of the cultural context in which the (unknown) artist worked.</p>	<p><code>crm:P107i_is_current_or_former_member_of</code> (object property)</p> <p>The relation between the artist and schools, workshops or other recognizable cultural contexts, is expressed by using the object property <code>crm:P107i_is_current_or_former_member_of</code> which associates the artist and an individual belonging to the class <code>crm:E39_Actor</code>.</p> <p>Exemplar usage:</p> <pre>:anonimo   crm:P107i_is_current_or_former_member_of     :scuola-toscana . :scuola-toscana a crm:E39_Actor .</pre>
ATBM (*)	Motivation	<code>hico:InterpretationCriterion</code> (Class)

	<p>The value of this field describes how the proposed authorship attribution have been reached, by explaining a motivation or providing a type of source.</p>	<p>Possible values of this field should be reconciled in a controlled vocabulary of adoptable criteria, in order to define a ranking of attributions. This will enable data reuse by other stakeholders, who may want to compare them.</p> <p>An individual belonging to the class <code>hico:InterpretationAct</code> should be used to describe all relevant features related to the interpretative process underlying the chosen authorship attribution. The use of HiCo Ontology is here suggested for describing all necessary issues related to an interpretative process and ensure data reuse. Any time a questionable information is noticed, an individual of the class <code>hico:InterpretationAct</code> should be created to define:</p> <ul style="list-style-type: none"> <li>– the type of interpretation underlying described data, i.e. an authorship attribution (<code>oaentry:authorship-attribution</code>), by using the object property <code>hico:hasInterpretationType</code>;</li> <li>– who adopted this dating as the preferred one, i.e. the cataloguing institution (e.g. <i>Zeri Foundation</i>), by using the object property <code>hico:hasInterpretationType</code>;</li> <li>– the responsibility of the cataloguer, by using the object property <code>hico:hasInterpretationCriterion</code>;</li> <li>– motivation(s) provided in this field, by using the object property <code>hico:hasInterpretationCriterion</code>;</li> <li>– the responsibility of the RDF creator (<code>foaf:Agent</code>), who further interprets cataloguer choices when creating data, by using the object property <code>prov:wasAssociatedWith</code>;</li> <li>– the relation between the individual representing the interpretation process (<code>hico:InterpretationAct</code>) and the source content, i.e. the OA Entry content, in which the interpretation is stated in natural language (<code>fabio:Expression</code>), by using the object property <code>hico:isExtractedFrom</code>.</li> </ul> <p>Exemplar usage:</p> <pre> :oa-47172-creation a crm:E65_Creation   prov:wasGeneratedBy     :oa-47172-scuola-toscana-attribution . :oa-47172-scuola-toscana-attribution   a hico:InterpretationAct ;   hico:hasInterpretationType     oaentry:authorship-attribution ;   hico:hasInterpretationType     :zeri-preferred-attribution ;   hico:hasInterpretationCriterion     :cataloguer-choice ;   hico:hasInterpretationCriterion :signature ;   prov:wasAssociatedWith :crr-mm ;   hico:isExtractedFrom     :oaentry-43677-expression-2016-04-01 . :signature a hico:InterpretationCriterion . </pre>
AAT – Different attributions		
<p>Any time a different authorship attribution is provided, an individual representing a different creation (<code>crm:E65_Creation</code>) should be created. According to the conceptual model FRBR, both creators and dates identify a work as a distinct intellectual or artistic creation; a different author (or a different date, see previous section <i>Dating</i>) may then entail a different creation of the same work.</p>		
AAT	Different attributions	crm:E39_Actor (Class)



	The name of the artist recognized as alternate responsible entity for the work of art creation.	<p>Any time this field is filled, another individual of the class <code>crm:E65_Creation</code> should be created to state a possible different authorship attributions.</p> <p>Exemplar usage:</p> <pre> :oa-47172-creation-3 a crm:E65_Creation ;   crm:P14_carried_out_by :raphael . :raphael a crm:E21_Person . </pre> <p>Even if not covered by the OA Entry content standard in this section, reporting a different authorship attribution should entail that this entity, as the discarded attribution, is a questionable information which may instead be adopted by another cataloguing institution. An individual of the class <code>hico:InterpretationAct</code> from the HiCo Ontology, will enable to characterize this possibility (see AUTM, in this section, for further explanation).</p> <p>Exemplar usage:</p> <pre> :oa-47172-creation-3 a crm:E65_Creation ;   prov:wasGeneratedBy     :oa-47172-artist-3-attribution . :oa-47172-artist-3-attribution   a hico:InterpretationAct ;   hico:hasInterpretationType     oaentry:authorship-attribution ;   hico:hasInterpretationType     :zeri-discarded-attribution ;   prov:wasAssociatedWith :crr-mm ;   hico:isExtractedFrom     :oaentry-43677-expression-2016-04-01 . </pre>
MT – Technical information *		
MTC *	<p>Medium or material</p> <p>A term identifying the support of the work of art and/ora materials employed for its production.</p>	<p><code>crm:E57_Material</code> (Class)</p> <p>An individual representing the manifestation of the work of art is represented both as an individual of class <code>crm:E22_Man-Made_Object</code> and the class <code>fabio:AnalogManifestation</code>, for describing its support.</p> <p>The object property <code>crm:P45_consists_of</code> should be associated to a value (belonging to the class <code>crm:E57_Material</code>) aligned to an established controlled vocabulary.</p> <p>Exemplar usage:</p> <pre> :oa-47172-manifestation   a crm:E22_Man-Made_Object ,     fabio:AnalogManifestation ;   crm:P45_consists_of :canvas . :canvas a crm:E57_Material ;   skos:relatedMatch     &lt;http://vocab.getty.edu/aat/300014078&gt; . </pre>
MIS – Measurements *		
MISU *	<p>Unit of measurement</p> <p>The unit of measurements adopted by a cataloguer.</p>	<p><code>crm:E58_Measurement_Unit</code> (Class)</p> <p>An individual representing the manifestation of the work of art is represented both as an individual of class <code>crm:E22_Man-Made_Object</code> and the class <code>fabio:AnalogManifestation</code>, for describing its dimensions.</p> <p>The object property <code>crm:P91_has_unit</code> should be associated to any individual representing a measurement of the object (<code>crm:E54_Dimension</code>) provided in this section, so as to specify the adopted standard unit for each measurement.</p>

		<p>Exemplar usage:</p> <pre>:oa-47172-manifestation   crm:P43_has_dimension :height-1m . :height-1m a crm:E54_Dimension ;   crm:P91_has_unit :meter . :meter a crm:E58_Measurement_Unit .</pre>
MISA (*)	<p>Height</p> <p>The work of art height value, measured by a cataloguer.</p>	<p>crm:E54_Dimension (Class)</p> <p>For any measurement an individual belonging to the class crm:E54_Dimension should be created and characterized by using:</p> <ul style="list-style-type: none"> <li>– crm:P2_has_type to define the type of measurement;</li> <li>– crm:P90_has_value to associate a string value for the measurement;</li> <li>– crm:P91_has_unit to associate the adopted unit of measurement.</li> </ul> <p>The object property crm:P43_has_dimension links the object and the measured dimension.</p> <p>Exemplar usage:</p> <pre>:oa-47172-manifestation   crm:P43_has_dimension :height-1m . :height-1m a crm:E54_Dimension ;   crm:P2_has_type :height ;   crm:P90_has_value "1" ;   crm:P91_has_unit :meter .</pre>
MISL (*)	<p>Width</p> <p>The work of art width value, measured by a cataloguer.</p>	<p>crm:E54_Dimension (Class)</p> <p>For any measurement an individual belonging to the class crm:E54_Dimension should be created and characterized by using:</p> <ul style="list-style-type: none"> <li>– crm:P2_has_type to define the type of measurement;</li> <li>– crm:P90_has_value to associate a string value for the measurement;</li> <li>– crm:P91_has_unit to associate the adopted unit of measurement.</li> </ul> <p>The object property crm:P43_has_dimension links the object and the measured dimension.</p> <p>Exemplar usage:</p> <pre>:oa-47172-manifestation   crm:P43_has_dimension :width-3m . :width-3m a crm:E54_Dimension ;   crm:P2_has_type :width ;   crm:P90_has_value "3" ;   crm:P91_has_unit :meter .</pre>
MISP (*)	<p>Depth</p> <p>The work of art depth value, measured by a cataloguer.</p>	<p>crm:E54_Dimension (Class)</p> <p>For any measurement an individual belonging to the class crm:E54_Dimension should be created and characterized by using:</p> <ul style="list-style-type: none"> <li>– crm:P2_has_type to define the type of measurement;</li> <li>– crm:P90_has_value to associate a string value for the measurement;</li> <li>– crm:P91_has_unit to associate the adopted unit of measurement.</li> </ul> <p>The object property crm:P43_has_dimension links the object and the measured dimension.</p>

		<p>Exemplar usage:</p> <pre> :oa-47172-manifestation   crm:P43_has_dimension :depth-0-03m . :depth-0-03cm a crm:E54_Dimension ; crm:P2_has_type :depth ; crm:P90_has_value "0.03" ; crm:P91_has_unit :meter . </pre>
MISD (*)	<p>Diameter</p> <p>The work of art diameter value, measured by a cataloguer.</p>	<p>crm:E54_Dimension (Class)</p> <p>For any measurement an individual belonging to the class crm:E54_Dimension should be created and characterized by using:</p> <ul style="list-style-type: none"> <li>– crm:P2_has_type to define the type of measurement;</li> <li>– crm:P90_has_value to associate a string value for the measurement;</li> <li>– crm:P91_has_unit to associate the adopted unit of measurement.</li> </ul> <p>The object property crm:P43_has_dimension links the object and the measured dimension.</p> <p>Exemplar usage:</p> <pre> :oa-47172-manifestation   crm:P43_has_dimension :diameter-4m . :diameter-4m a crm:E54_Dimension ; crm:P2_has_type :diameter ; crm:P90_has_value "4" ; crm:P91_has_unit :meter . </pre>
MISN (*)	<p>Length</p> <p>The work of art length value, measured by a cataloguer.</p>	<p>crm:E54_Dimension (Class)</p> <p>For any measurement an individual belonging to the class crm:E54_Dimension should be created and characterized by using:</p> <ul style="list-style-type: none"> <li>– crm:P2_has_type to define the type of measurement;</li> <li>– crm:P90_has_value to associate a string value for the measurement;</li> <li>– crm:P91_has_unit to associate the adopted unit of measurement.</li> </ul> <p>The object property crm:P43_has_dimension links the object and the measured dimension.</p> <p>Exemplar usage:</p> <pre> :oa-47172-manifestation   crm:P43_has_dimension :length-1m . :length-0-001m a crm:E54_Dimension ; crm:P2_has_type :length ; crm:P90_has_value "1" ; crm:P91_has_unit :meter . </pre>
MISS (*)	<p>Thickness</p> <p>The work of art thickness value, measured by a cataloguer.</p>	<p>crm:E54_Dimension (Class)</p> <p>For any measurement an individual belonging to the class crm:E54_Dimension should be created and characterized by using:</p> <ul style="list-style-type: none"> <li>– crm:P2_has_type to define the type of measurement;</li> <li>– crm:P90_has_value to associate a string value for the measurement;</li> <li>– crm:P91_has_unit to associate the adopted unit of measurement.</li> </ul> <p>The object property crm:P43_has_dimension links the object and the measured dimension.</p>

		<p>Exemplar usage:</p> <pre> :oa-47172-manifestation   crm:P43_has_dimension :thickness-4m . :thickness-4cm a crm:E54_Dimension ;   crm:P2_has_type :thickness ;   crm:P90_has_value "4" ;   crm:P91_has_unit :centimeter . </pre>
MISG (*)	<p>Weight</p> <p>The work of art weight value, measured by a cataloguer.</p>	<p>crm:E54_Dimension (Class)</p> <p>For any measurement an individual belonging to the class crm:E54_Dimension should be created and characterized by using:</p> <ul style="list-style-type: none"> <li>– crm:P2_has_type to define the type of measurement;</li> <li>– crm:P90_has_value to associate a string value for the measurement;</li> <li>– crm:P91_has_unit to associate the adopted unit of measurement.</li> </ul> <p>The object property crm:P43_has_dimension links the object and the measured dimension.</p> <p>Exemplar usage:</p> <pre> :oa-47172-manifestation   crm:P43_has_dimension :weight-2kg . :weight-2kg a crm:E54_Dimension ;   crm:P2_has_type :weight ;   crm:P90_has_value "2" ;   crm:P91_has_unit :kilogram . </pre>
MISV (*)	<p>Other dimensions</p> <p>Another not specified measurement or a note about a measurement.</p>	<p>crm:P3_has_note (data property)</p> <p>For any measurement an individual belonging to the class crm:E54_Dimension should be created.</p> <p>Content of this field may be very heterogeneous: it can contain both units of measurement and values, may refer to a specific part of the work of art, and/or may contain notes.</p> <p>If granularity of representation of such information is not strictly required, the data property crm:P3_has_note may be a simple solution to achieve the scope of preserving the information.</p> <p>The object property crm:P43_has_dimension links the object and the measured dimension.</p> <p>Exemplar usage:</p> <pre> :oa-47172-manifestation   crm:P43_has_dimension :other-dimension-47172 . :other-dimension-47172 a crm:E54_Dimension ;   crm:P2_has_type :other-dimension ;   crm:P3_has_note "18 threads" . </pre>
CO – Conservation *		
STC – Condition *		
STCC *	<p>Condition of conservation</p> <p>A term provided by the cataloguer for describing the status of conservation of the work of art (e.g. good, discrete, bad).</p>	<p>crm:E3_Condition_State (Class)</p> <p>When this section is filled, an individual representing the physical object, i.e. an individual belonging to the classes E22_Man-Made_Object and fabio:AnalogItem, should be created to associate it an individual representing the assessment of its conditions, i.e. an individual of the class crm:E14_Condition_Assessment, by means of the object</p>

		<p>property <code>crm:P34i_was_assessed_by</code>.</p> <p>Exemplar usage:  <code>:oa-47172-item a crm:E22_Man-Made_Object ,  fabio:AnalogItem ;  crm:P34i_was_assessed_by  :oa-47172-item-condition .</code></p> <p>This individual should be associated with an individual representing the condition state, i.e. an individual of the class <code>crm:E3_Condition_State</code>, which have to be characterized by means of the object property <code>crm:P2_has_type</code>. The value associated to this object property should be a term of a closed controlled vocabulary.</p> <p>Exemplar usage:  <code>:oa-47172-item-condition  a crm:E14_Condition_Assessment ;  crm:P35_has_identified  :oa-47172-item-condition-state .  :oa-47172-item-condition-state  a crm:E3_Condition_State ;  crm:P2_has_type :good .</code></p>
STCS	<p>Notes</p> <p>A description in natural language of any relevant feature about conservation state noticed during the assessment.</p>	<p><code>crm:P3_has_note</code> (data property)</p> <p>A discursive explanation of the item conditions may be provided by means of the value associated to the data property <code>crm:P3_has_note</code>.</p> <p>Exemplar usage:  <code>:oa-47172-item-condition-state  a crm:E3_Condition_State ;  crm:P2_has_type :good ;  crm:P3_has_note "humidity stains" .</code></p>
DA – Analytical data *		
DES – Description *		
DESS *	<p>Subject term</p> <p>A term from an open list of terms for defining iconographic details.</p>	<p><code>fabio:hasSubjectTerm</code> (object property)</p> <p>Instead of object properties like <code>frbr:subject</code> or <code>crm:P129_is_about</code>, which are preferred for defining relations among conceptual entities, the object property <code>fabio:hasSubjectTerm</code> is used for linking a work to a term from a controlled vocabulary or thesaurus, e.g. a SKOS concept.</p> <p>Exemplar usage:  <code>:oa-47172  fabio:hasSubjectTerm :coronation .  :coronation a crm:E1_CRM_Entity , fabio:SubjectTerm .</code></p>
TU – Legal status and boundaries *		
CDG – Legal status *		
CDGG *	<p>Ownership</p> <p>A term defining a general type of ownership or jurisdiction.</p>	<p><code>crm:E8_Acquisition</code> (Class)</p> <p>The current owner of the work of art is related to the physical object (i.e. the work of art represented as an individual of the classes <code>crm:E22_Man-Made_Object</code> and <code>fabio:AnalogItem</code>) by means of an intermediate individual of the class <code>crm:E8_Acquisition</code>.</p> <p>To specify the type of ownership, the object property</p>

		<p>crm:P2_has_type can be used with an associated value from a controlled vocabulary.</p> <p>Exemplar usage:</p> <pre>:university-of-bologna a crm:E40_Legal_Body ;   crm:P22i_acquired_title_through     :oa-47172-acquisition . :oa-47172-acquisition a crm:E8_Acquisition ;   crm:P24_transferred_title_of :oa-47172-item ;   crm:P2_has_type :public-ownership.</pre>
CDGS *	<p>Owner</p> <p>The name or title of the current owner of the work of art.</p>	<p>crm:E39_Actor (Class)</p> <p>The current owner of the work of art may be described as an individual of the class <code>crm:E39_Actor</code> or its subclasses, e.g. <code>crm:E40_Legal_Body</code>, and may be directly related to the individual representing the physical object by using the object property <code>crm:P52i_is_current_owner_of</code> (or, as in the example below, the inverse <code>crm:P52_has_current_owner</code>).</p> <p>Exemplar usage:</p> <pre>:oa-47172-item   crm:P52_has_current_owner :university-of-bologna . :university-of-bologna a crm:E40_Legal_Body .</pre>
DO – Sources and related documentation *		
<p>FTA – Photographic documentation *</p> <p>Photographic documentation is described by means of classes and properties from both CIDOC-CRM and SPAR Ontologies to accomplish the best suitable description, according the <i>F Entry to RDF</i> mapping document. Furthermore, also terms from the F Entry Ontology, an ontology developed exactly to describe information regarding photograph description whose representation is lacking in other models, are here suggested (see F Entry to RDF mapping document for references).</p>		
FTAX *	<p>Genre of photograph</p> <p>A term specifying if the considered photograph is an attachment or not.</p>	<p>cito:citesAsEvidence (object property) or oaentry:describes (object property)</p> <p>A term of a controlled vocabulary is here provided:</p> <ul style="list-style-type: none"> <li>- '<i>existent photograph</i>';</li> <li>- '<i>attached photograph</i>'.</li> </ul> <p>If an existent photograph is described as a source the object property <code>cito:citesAsEvidence</code> is suggested to describe a relation between the OA Entry and the cited photograph.</p> <p>Exemplar usage: e.g. FTAX: '<i>existing photograph</i>'</p> <pre>:oaentry-43677 a oaentry:OAEntry ;   oaentry:describes :oa-47172 ;   cito:citesAsEvidence :photo-89674 . :photo-89674 a fentry:Photograph .</pre> <p>If a photograph is an attached source, the object property <code>oaentry:describes</code> is suggested for describing all the entities that are strictly related to the current OA Entry.</p> <p>The individual representing the photograph is expressed in FRBR terms both as a FRBR Work (<code>fentry:Photograph</code>) and a FRBR Item (<code>fabio:AnalogItem</code>).</p> <p>Exemplar usage:</p>

		<p>e.g. FTAX: '<i>attached photograph</i>'  :oaentry-43677 a oaentry:OEntry ;  oaentry:describes  :oa-47172 , :photo-89674 , :photo-89674-item .  :photo-89674 a fentry:Photograph .  :photo-89674-item a fabio:AnalogItem .</p> <p>In both cases, the individual representing the photograph has to be defined as an individual belonging to a specific class of the F Entry Ontology, fentry:Photograph and a relation between the photograph and the work of art should be stated by means of the object property frbr:subject.</p> <p>Exemplar usage:  :photo-89674 a fentry:Photograph ;  frbr:subject :oa-47172 .</p> <p>See <i>Fentry to RDF</i> mapping document, describing how to deal with features regarding the photograph, for a suitable representation of the heterogeneous information provided in this field.</p>
FTAP *	<p>Object Type</p> <p>A description of features characterizing the photograph (e.g. slide, back and white positive...).</p>	<p>crm:E22_Man-Made_Object (Class)</p> <p>Data contained in this field generally refers to physical features of a photograph (existent or attached, see FTAX in this section), so as to characterize the documentation consulted for compiling the entry.</p> <p>An individual representing a particular FRBR manifestation of the photograph should be created (crm:E22_Man-Made_Object , fabio:AnalogManifestation) for defining its type.  e.g. FTAP: 'slide'</p> <p>Exemplar usage:  :photo-89674  fabio:hasManifestation :photo-89674-slide .  :photo-89674-slide  a crm:E22_Man-Made_Object ,  fabio:AnalogManifestation .</p> <p>See <i>Fentry to RDF</i> mapping document, describing how to deal with features regarding the photograph, for a suitable representation of the heterogeneous information provided in this field.</p> <p>Once defined the individual representing the specific manifestation of the photograph, if the photograph is not attached to the entry, the relation between the current OA Entry and the individuals defined as FRBR Work and as FRBR Manifestation representing the photograph can be expressed through the object property cito:citesAsEvidence.</p> <p>Exemplar usage:  :oaentry-43677  cito:citesAsEvidence  :photo-89674 , :photo-89674-slide .</p> <p>If the photograph is attached to the entry, the relation between the OA Entry and the individuals defined as FRBR Work, FRBR Manifestation and FRBR Item representing the photograph can be expressed by using the object property oaentry:describes.</p> <p>Exemplar usage:  :oaentry-43677</p>

		<code>oaentry:describes :photo-89674 , :photo-89674-slide , :photo-89674-item .</code>
FTAN *	<p>Identifier</p> <p>Generally, the inventory number provided for the negative of the photograph.</p>	<p>crm:E42_Identifier (Class)</p> <p>The negative of the photograph should be considered as an individual defined in terms of a FRBR Manifestation (fabio:AnalogManifestation), whose related exemplar, defined in terms of a FRBR Item, is identified by an inventory number. Therefore we can relate the individual representing the concrete object, i.e. the negative (fabio:AnalogItem), to an intermediate individual (crm:E13_Attribute_Assignment) and then to the inventory number defined in terms of crm:E42_Identifier. The individual representing the inventory number can be further characterized by means of the property crm:P2_has_type which associates a type to the identifier.</p> <p>Exemplar usage:</p> <pre> :photo-89674   fabio:hasManifestation :photo-89674-negative ;   fabio:hasPortrayal :photo-89674-negative-item . :photo-89674-negative-item a fabio:AnalogItem ;   crm:P140i_was_attributed_by     :photo-89674-negative-item-invn-assignment . :photo-89674-negative-item-invn-assignment   a crm:E13_Attribute_Assignment ;   crm:P141_assigned :inv-12874 ;   crm:P140_assigned_attribute_to     :photo-89674-negative-item . :inv-12874 a crm:E42_Identifier ;   crm:P2_has_type :inventory-number . </pre>
FTAT	<p>Notes</p> <p>A description in natural language of details regarding the shot or the content of the photograph.</p>	<p>crm:P3_has_note (data property)</p> <p>An individual representing the expression of the photograph, belonging to classes crm:E73_Information_Object and fentry:Shot, should be created and further described by means of the data property crm:P3_has_note, used to annotate the individual representing the photograph expression. e.g. FTAT: 'work before restoration'</p> <p>Exemplar usage:</p> <pre> :photo-89674-expression   a crm:E73_Information_Object , fentry:Shot ;   crm:P3_has_note "work before restoration" . </pre>
<p>FNT – Sources and documents</p> <p>Sources and documents are here described by means of classes and properties from DCTerms and SPAR Ontologies, to accomplish the best suitable description. The aim is to provide a simpler representation of entities that are not in scope in the work of art description.</p>		
FNTP (*)	<p>Object type</p> <p>A term defining the type of archival documentation where the work of art is mentioned or described.</p>	<p>cito:citesForInformation (object property)</p> <p>Archival documents should be considered as individuals of the class fabio:Work used as sources of information about the work of art described in the OA Entry. A proper relation between the individual representing the OA Entry (oaentry:OAEntry) and the cited source can be expressed by using the object property cito:citesForInformation.</p> <p>To specify the type of document here considered, the document considered shall be defined in terms of both a FRBR Work</p>



		<p>(<code>fabio:Work</code>) and a FRBR Expression (<code>fabio:Expression</code>). FaBiO Ontology provides about sixty entities for defining different expression of a bibliographic entity, that can be used to classify the documentation here described. e.g. FNTF: 'article'.</p> <p>Exemplar usage:  <code>:oentry-43677 a oentry:OEntry ;</code>  <code>    cito:citesForInformation</code>  <code>        :document-f2336 , :document-f2336-article .</code>  <code>:document-f2336 a fabio:Work ;</code>  <code>    frbr:realization :document-f2336-article .</code>  <code>:document-f2336-article a fabio:Article .</code></p> <p>Once defined relations between the entry and the document, also a relation between the document and the work of art (mentioned or described) can be stated by using the object property <code>frbr:subject</code>.</p> <p>Exemplar usage:  <code>:document-f2336</code>  <code>    frbr:subject :oa-47172 .</code></p>
FNTA	<p>Author</p> <p>The document author's name.</p>	<p><code>pro:RoleInTime</code> (Class)</p> <p>To specify the role held by an author, an individual belonging to the class <code>pro:RoleInTime</code> of the PRO Ontology shall be used, which enables to express:</p> <ul style="list-style-type: none"> <li>– the agent who holds a role, by using the object property <code>pro:isHeldBy</code>;</li> <li>– the role held by the author, i.e. one the individual <code>pro:author</code>, by using the object property <code>pro:withRole</code>;</li> <li>– the document as the context of the role, by using the object property <code>pro:relatesToDocument</code>;</li> <li>– the time interval in which the role is held (if applicable), by using the object property <code>tv:atTime</code>.</li> </ul> <p>Exemplar usage:  <code>:federico-zeri</code>  <code>    pro:holdsRoleInTime :federico-zeri-author-f2336 .</code>  <code>:federico-zeri-author-f2336 a pro:RoleInTime ;</code>  <code>    pro:isHeldBy :federico-zeri ;</code>  <code>    pro:withRole pro:author ;</code>  <code>    pro:relatesToDocument :document-f2336 .</code></p>
FNTT	<p>Title</p> <p>The document title.</p>	<p><code>dcterms:title</code> (data property)</p> <p>The individual representing the document can be associated to its title, by using the data property <code>dcterms:title</code>.</p> <p>Exemplar usage:  <code>:document-f2336</code>  <code>    dcterms:title "Manuscript letter G. Procaccini" .</code></p>
FNTD (*)	<p>Date</p> <p>The year in which the document was created or publisher.</p>	<p><code>dcterms:date</code> (data property)  or  <code>fabio:hasPublicationYear</code> (data property)</p> <p>The individual representing an archival document can be associated to a value conforming to the XML Schema datatype <code>xsd:gYear</code>, by using the data property <code>dcterms:date</code>.</p>

		<p>Exemplar usage:</p> <pre>:document-f2336   dcterms:date "1968"^^xsd:gYear .</pre> <p>If the considered document is a published text, the use of the data property <code>fabio:hasPublicationYear</code> is suggested.</p> <p>Exemplar usage:</p> <pre>:document-f2336   fabio:hasPublicationYear "1968"^^xsd:gYear .</pre>
FNTS (*)	<p>Collocation</p> <p>A term identifying the collocation of the document in the archive or institution.</p>	<p>dcterms:identifier (data property)</p> <p>A relation between a document and its physical collocation may be defined by using the data property <code>frbr:partOf</code> associated to the individual representing the document container, whose identifier is specified by using the data property <code>dcterms:identifier</code>. The collocation is an identifier of the concrete object position, than the individual is defined in terms of a FRBR Item (<code>fabio:AnalogItem</code>).</p> <p>Exemplar usage:</p> <pre>:document-f2336   fabio:hasPortrayal :document-f2336-item . :document-f2336-item a fabio:AnalogItem ;   frbr:partOf :folder-0471_1_11-24 . :folder-0471_1_11-24   dcterms:identifier "pi_0471_1_11-24" .</pre>
FNTI (*)	<p>Unique code</p> <p>A unique code provided for the document.</p>	<p>dcterms:identifier (data property)</p> <p>A relation between a document and its unique code may be defined by using the data property <code>dcterms:identifier</code>.</p> <p>Exemplar usage:</p> <pre>:document-f2336-item   dcterms:identifier "f2336" .</pre>
<p><b>BIB – Bibliography</b></p> <p>To describe of bibliographic entities, here classes and properties from DCTerms and the SPAR ontologies are mainly suggested, in order to facilitate data integration among different data providers using above mentioned models instead of CIDOC-CRM model. For completeness of mapping aims, only classes of CIDOC-CRM model are here reported. The aim is to provide the simpler representation of entities that are not in scope in the work of art description.</p>		
BIBX (*)	<p>Bibliographic work type</p> <p>A value to indicate whether the bibliographic sources are specific (i.e. describe the catalogued object) or just a reference.</p>	<p>fabio:hasDiscipline (object property)</p> <p>A general description of the adopted bibliography may be expressed by using the object property <code>fabio:hasDiscipline</code> with an associated value from a controlled vocabulary. e.g. BIBX: '<i>specific bibliography</i>'.</p> <p>Exemplar usage:</p> <pre>:work-143-45-62343-15-3 a fabio:Work ;   fabio:hasDiscipline :specific-bibliography .</pre> <p>Bibliographic entities are related to the current OA Entry by means of the CiTO object property <code>cito:obtainsSupportFrom</code>.</p> <p>Exemplar usage:</p> <pre>:oentry-43677 a oentry:OAEntry ;   cito:obtainsSupportFrom :work-143-45-62343-15-3 .</pre>
BIBA (*)	Author	pro:RoleInTime (Class)

	The document author's name.	<p>To specify the role held by an author, an individual belonging to the class <code>pro:RoleInTime</code> of the PRO Ontology shall be used, which enables to express:</p> <ul style="list-style-type: none"> <li>– the agent who holds a role, by using the object property <code>pro:isHeldBy</code>;</li> <li>– the role held by the author, i.e. one the individual <code>pro:author</code>, by using the object property <code>pro:withRole</code>;</li> <li>– the document as the context of the role, by using the object property <code>pro:relatesToDocument</code>;</li> <li>– the time interval in which the role is held (if applicable), by using the object property <code>tv:atTime</code>.</li> </ul> <p>Exemplar usage:</p> <pre> :federico-zeri   pro:holdsRoleInTime     :federico-zeri-author-work-143 . :federico-zeri-author-work-143 a pro:RoleInTime ;   pro:isHeldBy :federico-zeri ;   pro:withRole pro:author ;   pro:relatesToDocument :work-143-45-62343-15-3 . </pre>
BIBD (*)	<p>Publication date</p> <p>The date of publication.</p>	<p><code>fabio:hasPublicationYear</code> (data property)</p> <p>Information about the date of publication may be expressed by using the data property <code>fabio:hasPublicationYear</code> associated to a value which conforms to the XML Schema datatype <code>xsd:gYear</code> or another type provided for dates.</p> <p>Exemplar usage:</p> <pre> :work-143-45-62343-15-3   fabio:hasPublicationYear "1980"^^xsd:gYear . </pre>
BIBH (*)	<p>Code for citation</p> <p>The unique code used to identify the entity in the local authority file of bibliography.</p>	<p><code>dcterms:identifier</code> (data property)</p> <p>A relation between a document and its unique code may be defined by using the data property <code>dcterms:identifier</code>.</p> <p>Exemplar usage:</p> <pre> :work-143-45-62343-15-3-item   dcterms:identifier "143.45.62343.15.3" . </pre>
BIBN	<p>Pages</p> <p>A range of pages of the document, in which the work of art is mentioned or described.</p>	<p><code>prism:pageRange</code> (data property)</p> <p>A representation of the considered concrete object, defined in terms of FRBR Item (<code>fabio:AnalogItem</code>) should be created in order to define its extent by using the data property <code>prism:pageRange</code>.</p> <p>Exemplar usage:</p> <pre> :work-143-45-62343-15-3   fabio:hasPortrayal :item-143-45-62343-15-3 . :item-143-45-62343-15-3 a fabio:AnalogItem ;   prism:pageRange "pp. 37-146" . </pre>
<p>MST – Exhibitions</p> <p>This subsection refers directly to the work of art described in OA Entry, therefore a CIDOC-CRM compliant representation is here provided.</p>		
MSTT (*)	<p>Title of exhibition</p> <p>The title of an exhibition where the</p>	<p><code>crm:E41_Appellation</code> (Class)</p> <p>When this subsection is filled, an individual representing an event,</p>

	work of art was showed.	<p>belonging to the class <code>crm:E5_Event</code>, should be created and characterized by means of the object property <code>crm:P2_has_type</code>. The work, i.e. the exemplar of the work represented as an individual of the class <code>crm:E22_Man-Made_Object</code>, is related to the event by using the object property <code>crm:P12i_was_present_at</code>.</p> <p>Exemplar usage:  <code>:oa-47172-item</code>  <code>    crm:P12i_was_present_at :exhibition-london-1987 .</code>  <code>:exhibition-london-1987 a crm:E5_Event ;</code>  <code>    crm:P2_has_type :exhibition .</code></p> <p>To characterize the event with a title, the object property <code>crm:P1_is_identified_by</code> can be used to specify the appellation. The data property <code>dcterms:title</code> associates the value of this field to the individual representing the event.</p> <p>Exemplar usage:  <code>:exhibition-london-1987 a crm:E5_Event ;</code>  <code>    crm:P2_has_type :exhibition .</code>  <code>    crm:P1_is_identified_by :exhibition-title .</code>  <code>:exhibition-title a crm:E41_Appellation ;</code>  <code>    dcterms:title "Masters of Renaissance".</code></p>
MSTL (*)	Place of exhibition  The name of the place of the exhibition.	<code>crm:P7_took_place_at</code> (object property)  The individual representing the exhibition can be related to the one representing the place where it took place by using the object property <code>crm:P7_took_place_at</code> .  Exemplar usage: <code>:exhibition-london-1987</code> <code>    crm:P7_took_place_at :london .</code> <code>:london a crm:E53_Place .</code>
MSTD (*)	Date of exhibition  The year or the range of years of the exhibition.	<code>crm:P4_has_time_span</code> (object property)  The individual representing the exhibition can be related to the one representing the year or the range of years during which the exhibition took place, by using the object property <code>crm:P4_has_time_span</code> .  Exemplar usage: <code>:exhibition-london-1987</code> <code>    crm:P4_has_time_span :1987 .</code> <code>:1987 a crm:E52_Time-Span .</code>
CM – Cataloguing information *		
CMP – Cataloguing *		
CMPD *	Cataloguing date  The year or the day when the current entry was created.	<code>crm:P4_has_time_span</code> (object property)  To specify the cataloguing date with respect to the compiled OA Entry, an individual belonging to the class <code>crm:E65_Creation</code> should be created to represent the event in which the cataloguer creates the entry. By using the object property <code>crm:P4_has_time_span</code> the day in which the entry is created may be specified.  Exemplar usage: <code>:oaentry-43677-creation a crm:E65_Creation ;</code> <code>    crm:P4_has_time_span :2012-11-04 .</code>

CMPN *	<p>Cataloguer</p> <p>The name of the cataloguer responsible for creating the current OA Entry.</p>	<p>crm:P14_carried_out_by and pro:RoleInTime (Class)</p> <p>To specify the cataloguer with respect to the compiled OA Entry, an individual of the class <code>crm:E21_Person</code> should be created and related to the event representing the OA Entry creation by means of the object property <code>crm:P14i_performed</code>.</p> <p>Moreover, an individual belonging to the class <code>pro:RoleInTime</code> of the PRO Ontology shall be used, which enables to express:</p> <ul style="list-style-type: none"> <li>– the agent who holds a role, i.e. the cataloguer, by using the object property <code>pro:isHeldBy</code>;</li> <li>– the role held by the cataloguer, i.e. the individual provided by OA Entry Ontology <code>oaentry:cataloguer</code> belonging to the class <code>oaentry:CataloguingRole</code>, and related to the individual belonging to <code>pro:RoleInTime</code> by using the object property <code>pro:withRole</code>;</li> <li>– the OA Entry as the context of the role, by using the object property <code>pro:relatesTo</code>.</li> </ul> <p>Exemplar usage:</p> <pre> :md a crm:E21_Person ;   crm:P14i_performed :oaentry-43677-creation ;   pro:holdsRoleInTime :md-cataloguer-oaentry-43677 .  :oaentry-43677-creation a crm:E65_Creation ;   crm:P4_has_time_span :2012-11-04 ;   crm:P14_carried_out_by :md .  :md-cataloguer-oaentry-43677 a pro:RoleInTime ;   pro:relatesTo :oaentry-43677 ;   pro:isHeldBy :md ;   pro:withRole oaentry:cataloguer . oaentry:cataloguer a oaentry:CataloguingRole . </pre>
FUR *	<p>Supervisor</p> <p>The name of the supervisor responsible for the cataloguing.</p>	<p>pro:RoleInTime (Class)</p> <p>The supervisor, generally a person, is represented as an individual of the class <code>crm:E21_Person</code>.</p> <p>To specify the role of the supervisor with respect to the OA Entry, an individual belonging to the class <code>pro:RoleInTime</code> of the PRO Ontology shall be used, which enables to express:</p> <ul style="list-style-type: none"> <li>– the agent who holds a role in a time-indexed situation, i.e. the supervisor, by using the object property <code>pro:isHeldBy</code>;</li> <li>– the role held by the supervisor, i.e. the individual <code>oaentry:cataloguing-supervisor</code> belonging to the class <code>oaentry:CataloguingRole</code>, by using the object property <code>pro:withRole</code>;</li> <li>– the OA Entry as the context of the role, by using the object property <code>pro:relatesTo</code>.</li> </ul> <p>Exemplar usage:</p> <pre> :fm a crm:E21_Person ;   pro:holdsRoleInTime :fm-supervisor-oaentry-43677 . :fm-supervisor-oaentry-43677   a pro:RoleInTime ;   pro:relatesTo :oaentry-43677 ;   pro:isHeldBy :fm ; </pre>

		pro:withRole oaentry:cataloguing-supervisor . oaentry:cataloguing-supervisor a oaentry:CataloguingRole .
AGG – Updating or revision		
AGGD (*)	Updating date  The date of a revision of OA Entry contents.	tv:atTime (object property)  Any time this section (AGG) is filled, a new version of the OA Entry is created, defined in terms of a FRBR Expression of the work (fabio:Expression), and related to the previous version by means of the property frbr:revision.  Exemplar usage: <pre> :oaentry-43677-expression-2016-04-01   a fabio:Expression ;   frbr:realizationOf :oaentry-43677 ;   frbr:revisionOf     :oaentry-43677-expression-2016-02-27 . </pre> An individual representing the role held by a cataloguer updating the current OA Entry may be represented as an instance of the class pro:RoleInTime, which enables to express: <ul style="list-style-type: none"> <li>– the person holding a role in a time-indexed situation, i.e. the cataloguer, by using the object property pro:isHeldBy;</li> <li>– the role held by the cataloguer, i.e. the individual oaentry:cataloguer belonging to the class oaentry:CataloguingRole, by using the object property pro:withRole;</li> <li>– the content of the OA Entry as the context of a role, by using the object property pro:relatesTo;</li> <li>– the time interval in which the role is held, by using the object property tv:atTime.</li> </ul> Exemplar usage: <pre> :oaentry-43677-expression-2016-02-27   a fabio:Expression ;   frbr:revision     :oaentry-43677-expression-2016-04-01 ;   pro:isRelatedToRoleInTime     :oaentry-43677-expression-2016-02-27-update . :oaentry-43677-expression-2016-02-27-update   a pro:RoleInTime ;   pro:isHeldBy :revisor ;   pro:withRole oaentry:cataloguer ;   pro:relatesTo     :oaentry-43677-expression-2016-02-27 ;   tv:atTime :since-2016-02-27 . </pre>
AGGN (*)	Cataloguer  The name of the revisor of OA Entry contents.	pro:RoleInTime (Class)  Any time this section (AGG) is filled, a new version of the OA Entry is created, defined in terms of a FRBR Expression of the work (fabio:Expression), and related to the previous version by means of the property frbr:revision.  Exemplar usage: <pre> :oaentry-43677-expression-2016-04-01   a fabio:Expression ;   frbr:realizationOf :oaentry-43677 ;   frbr:revisionOf     :oaentry-43677-expression-2016-02-27 . </pre>

		<p>An individual representing the role held by a cataloguer updating the current OA Entry may be represented as an instance of the class <code>pro:RoleInTime</code>, which enables to express:</p> <ul style="list-style-type: none"> <li>– the person holding a role in a time-indexed situation, i.e. the cataloguer, by using the object property <code>pro:isHeldBy</code>;</li> <li>– the role held by the cataloguer, i.e. the individual <code>oaentry:cataloguer</code> belonging to the class <code>oaentry:CataloguingRole</code>, by using the object property <code>pro:withRole</code>;</li> <li>– the content of the OA Entry as the context of a role, by using the object property <code>pro:relatesTo</code>;</li> <li>– the time interval in which the role is held, by using the object property <code>tvc:atTime</code>.</li> </ul> <p>Exemplar usage:</p> <pre> :oaentry-43677-expression-2016-02-27   a fabio:Expression ;   frbr:revision     :oaentry-43677-expression-2016-04-01 .   pro:isRelatedToRoleInTime     :oaentry-43677-expression-2016-02-27-update . :oaentry-43677-expression-2016-02-27-update   a pro:RoleInTime ;   pro:isHeldBy :revisor ;   pro:withRole oaentry:cataloguer ;   pro:relatesTo     :oaentry-43677-expression-2016-02-27 ;   tvc:atTime :since-2016-02-27 . </pre>
AN – Notes		
OSS	<p>Note</p> <p>Notes regarding issues not described elsewhere.</p>	<p><code>crm:P3_has_note</code> (data property)</p> <p>Further heterogeneous information regarding the work of art or other issues not covered by OA Entry fields can be specified by using the data property <code>crm:P3_has_note</code>.</p> <p>Exemplar usage:</p> <pre> :oaentry-43677   crm:P3_has_note "unknown signature on the verso of photograph conserved at XXX Musem" . </pre>