



Definition of the
CIDOC
object-oriented
Conceptual Reference Model

Produced by the ICOM/CIDOC
Documentation Standards Group,
continued by CRM Special Interest Group

Editors: Nick Crofts, Ifigenia Dionissiadou, Martin Doerr, Matthew Stiff.

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Version 3.2.1

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Definition of the CIDOC object-oriented Conceptual Reference Model

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The extensions from version 2 to version 3 are based on a collaboration of members of the CIDOC CRM Special Interest Group:

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Introduction to version 3.0

Version 2 has been submitted and accepted by ISO TC46 SC4 in September 2000 as Committee Draft of a new work item. The CIDOC CRM Special Interest Group, founded by CIDOC in August 2000 to support the standardization process, is now elaborating version 3 as proposal for the final contents of the standard to become. This version 3.0 is a draft to demonstrate the effect of the extensions proposed in the Agios Pavlos meeting in June 2000 by members of the later officially founded Special Interest Group.

In the meeting of Agios Pavlos on 25/7/00 the following has been decided: 14, new entities and 23 new properties have been declared, domain or range of 8 properties was widened, 3 properties have been redefined, 2 properties deleted, 2 entities and 1 property renamed. These extensions were the outcome of comparing the Model with several relevant data formats and standards, and have been published in a separate document. This is the first version showing the integration of those extensions with the version 2.3 and the full set of inherited links. Naturally, this representation has revealed some short-comings of the Extensions, which should be addressed in the next versions. Those are inheritance problems caused by using "E1 CRM Entity" as range of the properties

E63 Begin of Existence brought into existence (was brought into existence by): CRM Entity

E64 End of Existence. took out of existence (was taken out of existence by): CRM Entity

E28 Conceptual Object. refers to (is referred to by): CRM Entity

And the classification of "Type" under "CRM Entity".

Further, the identification scheme of properties has been changed. In version 2.3 properties were identified relative to the entity (class) they are defined in. The experience from the Agios Pavlos Extensions taught us, that properties are likely to change the class they are defined in without changing meaning. This renders a class-relative identifier invalid, even though instances using such a property may not otherwise have been affected by the change (typically a property is recognized to be more generally applicable).

In addition to the Agios Pavlos Extensions, this text contains changes that became necessary to maintain consistency with other constructs, which have been overseen in the Agios Pavlos meeting. Those are:

1) The entity "E1 CIDOC Entity" was renamed to "E1 CRM Entity"

2) The property

E7 Activity. was intended use of (was made for): Man-Made Object
(mode of use : String)

has been redirected to

E7 Activity. was intended use of (was made for): Man-Made Stuff
(mode of use : String)

in order to be consistent with: "E24 Man-Made Stuff. was intended for (was intention of): Type".

I.e., all properties concerning intention of an object should refer to or originate in "Man-Made Stuff", rather than "Man-Made Object".

3) The property:

E19 Physical Object. is composed of (forms part of): Physical Object

has been redirected to:

E18 Physical Stuff. is composed of (forms part of): Physical Stuff

In order to include "E26 Physical Feature".

4) The property

E14 Condition Assessment. concerns (assessed by): Physical Object

has been redirected to:

E14 Condition Assessment. concerns (assessed by): Physical Stuff

in order to be consistent with: "E18 Physical Stuff. has condition (condition of): Condition State".

The property

E16 Measurement. measured (was measured): Physical Object
has been redirected to:

E16 Measurement. measured (was measured): Physical Stuff

in order to be consistent with: "E18 Physical Stuff. has dimension (is dimension of): Condition State".

5) The following change has been made in the Agios Pavlos Extensions, but not been described as change. The property

E72 Legal Object. right held by (has right on): Actor,
taken over from "Physical Object", has also be renamed from "right held by (owns rights to)" into "right held by (has right on)".

6) Finally we observe a violation of property naming rules. The properties

P34 concerns (assessed by)
P36 registers (registered by):
P39 measured (was measured)

should all use past simple and "by".

7) The property

E11 Modification. has produced (was produced by) : Physical Man-Made Stuff
was renamed to:

E11 Modification. has modified (was modified by) : Physical Man-Made Stuff.

8) The property

E12 Production. has produced (was produced by) : Physical Man-Made Stuff
has been declared.

Martin Doerr,

February 15, 2001

Introduction to version 3.1

The properties:

P34 concerns (assessed by)
P36 registers (registered by):
P39 measured (was measured)

Have been renamed to past tense.

Some spelling errors were eliminated.

For all properties, the so-far intuitive IsA hierarchies are now formally defined (we adopt the semantics of "subproperty" of RDFS). They appear as summary in the form of indented lists under the title: "Index of the subclasses of the properties" after the respective index of entities. They are also individually declared for each property definition in its domain entity. These IsA hierarchies brought up the problem, that P31 "has modified" could not be declared as subproperty of P92 "brought into existence", when used for Production. Therefore the new property P108 "has produced" was introduced.

The complete document was controlled against an SIS-based implementation of CRM version 3.1 for consistency. This version implements precisely the Agios Pavlos Extensions in a consistent way.

Martin Doerr,

June 29, 2001

Introduction to version 3.2

The Agios Pavlos Extensions declared two new abstract entities: "Beginning of Existence" and "End of Existence" as fundamental building blocks for temporal and spatiotemporal reasoning. In particular they support the analysis of the concepts "terminus postquem" and "terminus antequem", fundamental to historical studies. The range of the respective links "brought into existence", "took out of existence" has been declared in lack of a more precise notion as "E1 CRM Entity". This causes a recursion on the concept itself, and on all events and activities below. E.g. a Destruction was brought into existence etc. Therefore the abstract entity Existence has been declared in agreement with the scope note of "Beginning of Existence", which seems to perfectly capture the notion, and avoids the recursion by unwanted inheritance, and the underspecification problem of the range entity. Even though the introduction of a high-level entity may seem to be a big step, it is conservative: No current instances are invalidated. It is further an abstract entity, not intended for instantiation. It's effects are local, i.e. restricted to the immediate subclasses and superclasses of "Existence".

Martin Doerr
July 12, 2001

Introduction

This document is a formal definition of the **oo CIDOC Conceptual Reference Model** (referred to in the following as the “CRM”). It is the result of work done by the CIDOC Documentation Standards Group, from 1994 1999, as the result of an initiative to define the underlying semantics of database schemata and document structures needed in museum documentation for the support of good practice, document structure generation, and the mediation of heterogeneous sources.

The CRM is a domain ontology in the sense used in computer science. As such, the model is designed to be explanatory and extensible rather than prescriptive and restrictive. Currently, no specific formalism for semantic models has been widely accepted as standard, nevertheless the semantic deviations between the various available models are minimal. Consequently, the model has been formulated as an object-oriented semantic model¹, which can easily be converted into other object-oriented models. It is our intention that this presentation format should be both natural and expressive for domain experts, and easily converted to other machine readable formats such as RDF and XML. Considerable effort has gone into achieving these goals, all cross-references and inheritance of properties, for example, are explicitly resolved. This has led to a high degree of redundancy, but makes the document more comprehensible to naïve readers and useable as a reference document, which does not require the use of electronic tools.²

The CRM is intended to cover all concepts relevant to museum documentation, but most particularly those needed for wide area data exchange. Due to the diversity of museum subjects, this goal can ultimately be achieved only by extensions to the model. In its current form, the scope of the CRM is limited to the concepts referred to in the *CIDOC Information Groups and Categories*, a widely accepted reference for the administration of material cultural heritage and other objects in museums. However, due to its object-oriented nature, the model comprises a backbone of powerful general concepts, which have a much wider area of application.

Of necessity, some concepts are less thoroughly elaborated than others: “Actor”, “Right” and “Conceptual Object”, for example. This is a natural consequence of focussing on specific functionality in an intrinsically unlimited field. These ‘undeveloped’ concepts can be considered as hook-in points for extensions compatible with the model. However, even without these extensions, the CRM is nevertheless ‘complete’ in that, through the use of free text fields, it allows information to be captured which is not modelled explicitly. Indeed, some information has deliberately *not* been developed into formal properties or links. This approach is preferable when detailed, targeted queries are not expected: a good text description, a drawing or diagram provides a better source of information. In general, only those concepts on which formal querying is required need to be made explicit - rather than all the information which needs to be stored and retrieved.

Applied form

From the various terminologies in use for object-oriented models, we have selected the following for ease of understanding by non-computer experts:

“**Entity**” for anything that may be called “class”, “entity” or “node”.

“**links**” for anything that may be called “attribute”, “reference”, “link”, or “property”.

“**Superclass - Subclass**” relations refer to “isA” relations, “subclass – superclass”, “parent class - derived class”, “generalization - specialization”, etc.

Cardinality constraints are deliberately omitted as they are considered to be implementation details with only minimal explanatory value. By default, all links (or properties) are regarded as **optional**, and potentially **multiple**. For example, several persons together may transfer ownership of a set of objects in one legal act to another group of persons. Alternatively, ownership may be acquired from nobody, but by collection. (See entity E8).

Links are strictly **inherited** to subclasses (entities again). This applies symmetrically to both entities to the

¹ Using the TELOS system.

² Additional explanatory documents are available which present the CRM in the form of object-oriented entity-relationship diagrams.

connecting link. Any instance of a subclass can instantiate inherited links, and any instance link can reference a subclass of an entity to which it points.

Links may themselves have links, which point to other entities. Typically, these links are used for dynamically modified links such as roles.

The CRM is formulated in reference to a **metamodel**, such as that supported by TELOS. “**Metaclasses**” form sets of entities, typically used to handle lists of entities that form one subclass hierarchy. “**Metacategories**”, which are like links between metaclasses, group links by related meaning. For the current purposes of the **model**, references to the metamodel can simply be regarded as comments to assist reading.

We have applied the following naming rules:

- Entities are named using initial capitals.
- Entities are named using noun phrases (nominal groups)
- Links are named using lower case letters and are labelled in both directions.
- The direction of links, and hence their names, are in accordance with the following priority list:
 - Events
 - Objects
 - Actors
 - Other
- link names are to be read from left to right and, in brackets, from right to left. Implementers can choose the appropriate name according to the orientation of their link attachment.
- Links are named using verbal phrases. References to states are named in present tense, whereas actions are named in past tense.

Examples

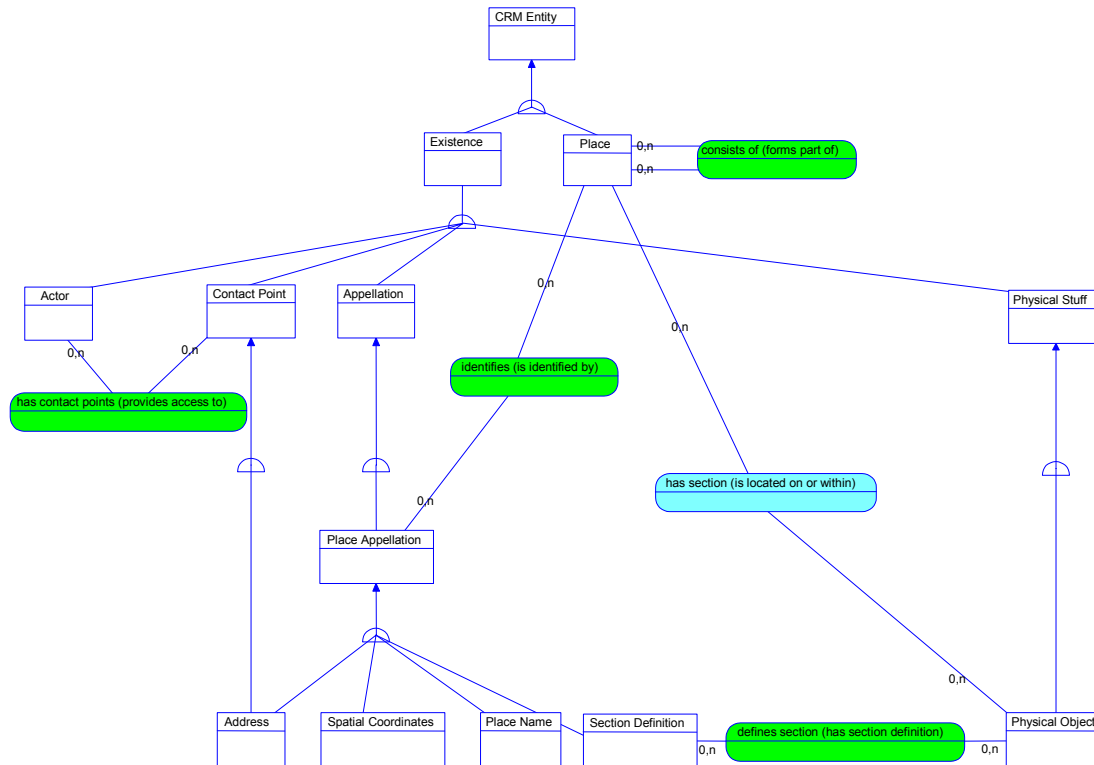


fig. 1 reasoning about spatial information

The diagram above shows a partial view of the CRM representing spatial information. Five of the main hierarchy branches are included in this view: Actor, Contact Point, Appellation, Place, and Physical Stuff. The relationships between these main classes and their subclasses are shown as branching lines. Links between classes are shown as green ovals. A ‘shortcut’ link is included in this view: has section (is located on or within) between Place and Physical Object. In some cases the order of priority for link names has been modified in order to facilitate reading the model from left to right.

As can be seen, a Place is identified by a Place Appellation, which may be an Address, Spatial Coordinates, a Place Name, or a Section Definition such as ‘basement’, ‘prow’, or ‘lower left-hand corner’. A Place may consist of or form part of another place, thereby allowing a hierarchy of physical ‘containers’ to be constructed.

An Address can be considered both as a Place Appellation – a way of referring to a place – and as a Contact Point for an Actor. An Actor may have any number of Contact Points.

An interesting aspect of the model is the *defines section* link between section definition and physical object, (and the corresponding shortcut from place to physical object). This effectively means that a section of a *physical object* may be the reference for a *place*. We may know, for example that Nelson died on a particular spot on the Victory, without being able to locate the exact position of the vessel in geospatial terms. Similarly, a signature or inscription can be located 'on the lower right hand corner' of a painting, regardless of where the painting is hanging.

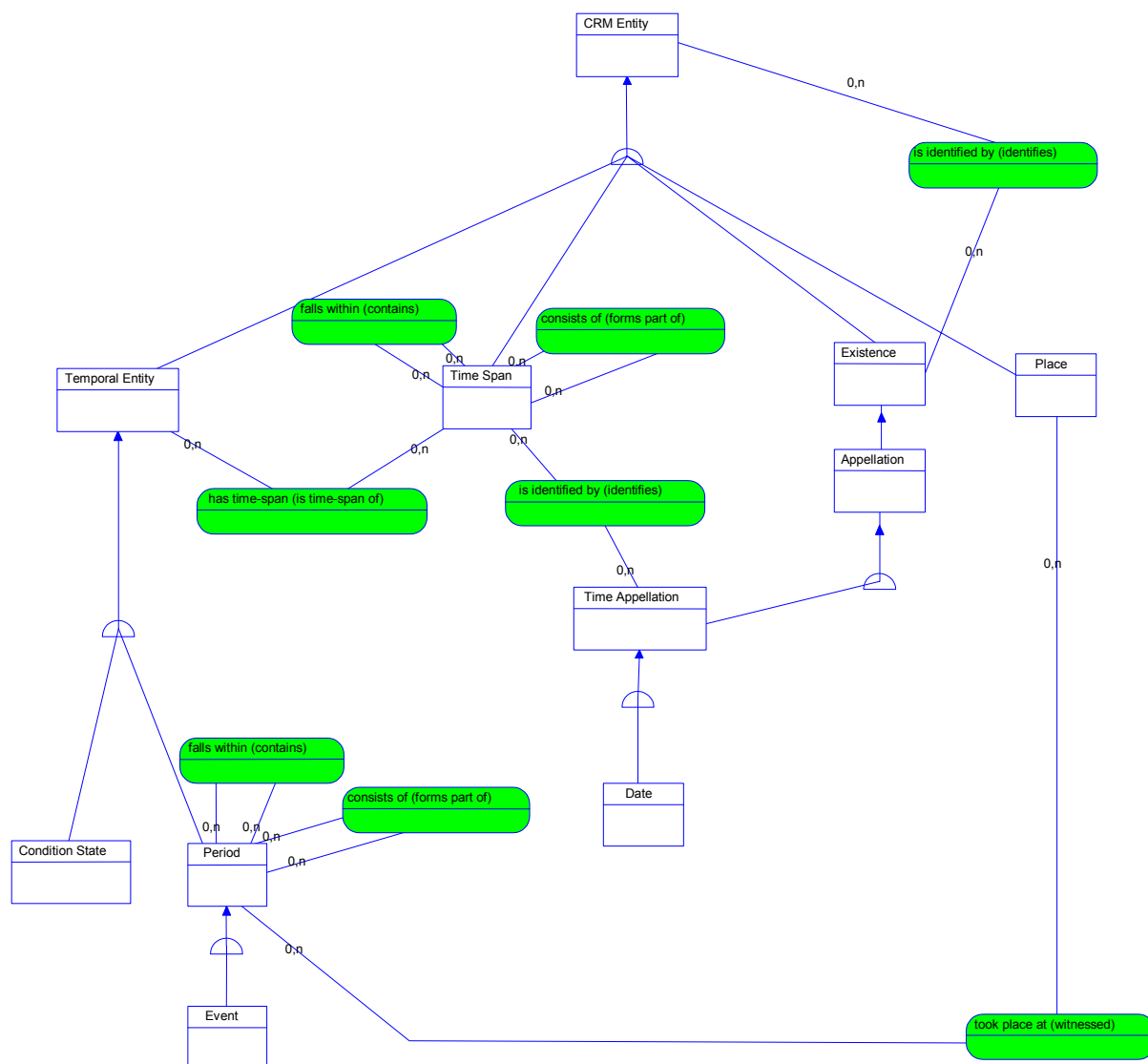


fig. 2 reasoning about temporal information

This second example shows how the model handles temporal information. Four of the main hierarchy branches are included in this view: Temporal Entity, Time-Span, Appellation and Place. The Temporal Entity class serves to group together all classes which have a temporal component, such as historical Periods, Events and Condition States. Typically, Periods and Events are identified by a name or Period Appellation. A Time-Span is simply a temporal interval which does not make any reference to cultural or geographical contexts, unlike Periods, which *take place at* a particular Place. Time-Spans are sometimes named, generally by reference to Dates. Time Appellations differ from Period Appellations in that one refers to a Period within a geo-cultural context while the other is purely temporal - a distinction which is often hard to recognise in natural language. Both Time-Span and Period have *consists of* and *falls within* reflexive links. Both of these allow part-whole hierarchies to be constructed. The distinction between the two types of link is that in first case the whole is thought to be *composed of* or defined by its parts whereas in the second the relationship is merely contingent. An example might be a period of national celebration, which could be said to be composed of the individual events, whereas the construction of a building might simply fall within the period of a particular government.

The Entity List

The following is the list of all entities and links contained in the **model**. It consists of an index and the entity declarations themselves. The list is ordered by herarichic level, in a “depth first” manner, from the smaller to the larger subhierarchies, and alphabetically between equal siblings. From this sequence, a unique identifier for each entity emerges, which facilitates cross-referencing.

Entity declarations use the following format:

- Entity names (terms) are presented as headings in bold face, preceded by the unique identifier.
- The line “Belongs to:” refers to the metaclass the entity is a member of.
- The line “Subclass of:” declares the superclass of the entity, from which it inherits links.
- The line “Superclass of:” is a cross-reference to the following subclasses of this entity.
- The line “Scope note” contains the textual definition of the concept the entity represents.
- The title “Properties” announces the list of links.
- Links are grouped by related meaning under metacategories, i.e. a series of titles. e.g. “classifications” etc., in normal face.
- Each link is represented by its forward and backward name, and the entity it links to, separated by colon.
- Links declared directly for the entity are given in bold face.
- Inherited links are given in italics as cross-references to the respective superclasses, for better comprehension.
- Inherited links with a redefined (restricted) target entity are given in bold face italics.
- Each link may be followed by a scope note for the link in an indented text in smaller characters.
- **Links of links** are given in an indented position in parenthesis under the respective link.
- The title “The entity is referenced by:” indicates the cross-reference list of links pointing to this entity (in the sequence called “incoming links”). In cases where there is no such link, the phrase “The entity is not referenced” is used.
 - Each incoming link is represented by the entity it originates from, and its forward and backward name, separated by a colon, in normal face.
 - The title “The entity inherits references:” indicates the cross-reference list of links pointing to any of the superclasses of this entity (“inherited incoming links”).
 - Each inherited incoming link is represented by the entity it originates from, and its forward and backward name, separated by a colon, in italics.

Index of the entities of the CIDOC CRM presented as a monohierarchy :

E1	CRM Entity
E2	- Temporal Entity
E3	- - Condition State
E4	- - Period
E5	- - - Event
E7	- - - - Activity
E8	- - - - - Acquisition
E9	- - - - - Move
E10	- - - - - Transfer of Custody
E11	- - - - - Modification
E12	- - - - - - Production
E13	- - - - - - Attribute Assignment
E14	- - - - - - - Condition Assessment
E15	- - - - - - - Identifier Assignment
E16	- - - - - - - Measurement
E17	- - - - - - - Type Assignment
E65	- - - - - - - Conceptual Creation
E66	- - - - - - - Formation
E63	- - - - - - - Beginning of Existence
E67	- - - - - - - Birth
<i>E12</i>	- - - - - - - <i>Production</i>
<i>E65</i>	- - - - - - - <i>Conceptual Creation</i>
<i>E66</i>	- - - - - - - <i>Formation</i>
E64	- - - - - - - End of Existence
E6	- - - - - - - Destruction
E68	- - - - - - - Dissolution
E69	- - - - - - - Death
E77	- Existence
E70	- - Stuff
E18	- - - Physical Stuff
E19	- - - - Physical Object
E20	- - - - - Biological Object
E21	- - - - - - Person
E22	- - - - - - Man-Made Object
E23	- - - - - - - Iconographic Object
E24	- - - - - - - Physical Man-Made Stuff
<i>E22</i>	- - - - - - - <i>Man-Made Object</i>
<i>E23</i>	- - - - - - - <i>Iconographic Object</i>
E25	- - - - - - - Man-Made Feature
E26	- - - - - - - Physical Feature
E27	- - - - - - - Site
<i>E25</i>	- - - - - - - <i>Man-Made Feature</i>
E71	- - - Man-Made Stuff
<i>E24</i>	- - - - <i>Physical Man-Made Stuff</i>
<i>E22</i>	- - - - - <i>Man-Made Object</i>
<i>E23</i>	- - - - - - <i>Iconographic Object</i>
<i>E25</i>	- - - - - - <i>Man-Made Feature</i>
E28	- - - - - Conceptual Object
E73	- - - - - Information Object
<i>E23</i>	- - - - - - <i>Iconographic Object</i>
E29	- - - - - - Design or Procedure
E31	- - - - - - Document
E32	- - - - - - - Authority Document
E33	- - - - - - - Linguistic Object
<i>E34</i>	- - - - - - - <i>Inscription</i>
E35	- - - - - - - Title
E36	- - - - - - - Visual Item

E37 - - - - - Mark
 E34 - - - - - Inscription
 E38 - - - - - Image
 E30 - - - - - Right
 E72 - - Legal Object
 E18 - - - *Physical Stuff*
 E19 - - - - *Physical Object*
 E20 - - - - - *Biological Object*
 E21 - - - - - *Person*
 E22 - - - - - *Man-Made Object*
 E23 - - - - - *Iconographic Object*
 E24 - - - - *Physical Man-Made Stuff*
 E22 - - - - - *Man-Made Object*
 E23 - - - - - *Iconographic Object*
 E25 - - - - - *Man-Made Feature*
 E26 - - - - *Physical Feature*
 E27 - - - - - *Site*
 E25 - - - - - *Man-Made Feature*
 E73 - - - *Information Object*
 E23 - - - - *Iconographic Object*
 E29 - - - - *Design or Procedure*
 E31 - - - - *Document*
 E32 - - - - - *Authority Document*
 E33 - - - - *Linguistic Object*
 E34 - - - - - *Inscription*
 E35 - - - - - *Title*
 E36 - - - - *Visual Item*
 E37 - - - - - *Mark*
 E34 - - - - - *Inscription*
 E38 - - - - - *Image*
 E39 - - Actor
 E74 - - - Group
 E40 - - - - Legal Body
 E21 - - - *Person*
 E41 - - Appellation
 E42 - - - Object Identifier
 E44 - - - Place Appellation
 E45 - - - - Address
 E46 - - - - Section Definition
 E47 - - - - Spatial Coordinates
 E48 - - - - Place Name
 E49 - - - Time Appellation
 E50 - - - - Date
 E75 - - - Conceptual Object Appellation
 E35 - - - *Title*
 E51 - - Contact Point
 E45 - - - *Address*
 E55 - - Type
 E56 - - - Language
 E57 - - - Material
 E58 - - - Measurement Unit
 E76 - - - Gender
 E52 - Time-Span
 E53 - Place
 E54 - Dimension
 E59 Primitive Value
 E60 - Number
 E61 - Time Primitive
 E62 - String

Index of the properties of the CIDOC CRM presented as a monohierarchy:

Property id	Property Name	Entity – Domain	Entity - Range
P1	is identified by (identifies)	E1 CRM Entity	E41 Appellation
P47	- is identified by (identifies)	E19 Physical Object	E42 Object Identifier
P48	- - preferred identifier is (is preferred identifier of)	E19 Physical Object	E42 Object Identifier
P78	- is identified by (identifies)	E52 Time-Span	E49 Time Appellation
P87	- is identified by (identifies)	E53 Place	E44 Place Appellation
P102	- has title (is title of)	E71 Man-Made Stuff	E35 Title
P2	has type (is type of)	E1 CRM Entity	E55 Type
P3	has note	E1 CRM Entity	E62 String
P4	has time-span (is time-span of)	E2 Temporal Entity	E52 Time-Span
P5	consists of (forms part of)	E3 Condition State	E3 Condition State
P6	falls within (contains)	E3 Condition State	E3 Condition State
P7	took place at (witnessed)	E4 Period	E53 Place
P26	- moved to (occupied)	E9 Move	E53 Place
P27	- moved from (vacated)	E9 Move	E53 Place
P8	took place on or within (witnessed)	E4 Period	E19 Physical Object
P9	consists of (forms part of)	E4 Period	E4 Period
P10	falls within (contains)	E4 Period	E4 Period
P11	had participants (participated in)	E5 Event	E39 Actor
P14	- carried out by (performed)	E7 Activity	E39 Actor
P22	- - transferred title to (acquired title of)	E8 Acquisition	E39 Actor
P23	- - transferred title from (surrendered title of)	E8 Acquisition	E39 Actor
P28	- - custody surrendered by (surrendered custody)	E10 Transfer of Custody	E39 Actor
P29	- - custody received by (received custody)	E10 Transfer of Custody	E39 Actor
P95	- has formed (was formed by)	E66 Formation	E74 Group
P96	- by mother (gave birth)	E67 Birth	E21 Person
P98	- brought into life (was born)	E67 Birth	E21 Person
P99	- dissolved (was dissolved by)	E68 Dissolution	E74 Group
P100	- was death of (died in)	E69 Death	E21 Person
P12	occurred in the presence of (was present at)	E5 Event	E70 Stuff
P13	- destroyed (was destroyed by)	E6 Destruction	E19 Physical Object
P16	- used object (was used for)	E7 Activity	E19 Physical Object
P24	- transferred title of (changed ownership by)	E8 Acquisition	E19 Physical Object
P25	- moved (moved by)	E9 Move	E19 Physical Object
P30	- transferred custody of (custody changed by)	E10 Transfer of Custody	E19 Physical Object
P31	- has modified (was modified by)	E11 Modification	E24 Physical Man-Made Stuff
P108	- - has produced (was produced by)	E12 Production	E24 Physical Man-Made Stuff
P34	- concerned (was assessed by)	E14 Condition Assessment	E18 Physical Stuff
P36	- registered (was registered by)	E15 Identifier Assignment	E19 Physical Object
P39	- measured (was measured by)	E16 Measurement	E18 Physical Stuff
P94	- has created (was created by)	E65 Conceptual Creation	E28 Conceptual Object
P15	took into account (was taken into account by)	E7 Activity	E28 Conceptual Object
P17	was motivation for (motivated)	E7 Activity	E28 Conceptual Object
P18	motivated the creation of (was created for)	E7 Activity	E28 Conceptual Object
P19	was intended use of (was made for)	E7 Activity	E71 Man-Made Stuff
P20	had specific purpose (was purpose of)	E7 Activity	E7 Activity
P21	had as general purpose (was purpose of)	E7 Activity	E55 Type
P32	used general technique (was technique of)	E11 Modification	E55 Type
P33	used specific technique (was used by)	E11 Modification	E29 Design or Procedure
P35	has identified (identified by)	E14 Condition Assessment	E3 Condition State
P37	assigns (is assigned by)	E15 Identifier Assignment	E42 Object Identifier
P38	deassigns (is deassigned by)	E15 Identifier Assignment	E42 Object Identifier
P40	observed dimension (was observed)	E16 Measurement	E54 Dimension
P41	classified (was classified by)	E17 Type Assignment	E1 CRM Entity
P42	assigned (was assigned by)	E17 Type Assignment	E55 Type
P43	has dimension (is dimension of)	E18 Physical Stuff	E54 Dimension
P44	has condition (condition of)	E18 Physical Stuff	E3 Condition State
P45	consists of (is incorporated in)	E18 Physical Stuff	E57 Material
P46	is composed of (forms part of)	E18 Physical Stuff	E18 Physical Stuff
P49	has former or current keeper (is former or current keeper of)	E19 Physical Object	E39 Actor
P50	- has current keeper (is current keeper of)	E19 Physical Object	E39 Actor
P51	has former or current owner (is former or current owner of)	E19 Physical Object	E39 Actor
P52	- has current owner (is current owner of)	E19 Physical Object	E39 Actor
P53	has former or current location (is former or current location of)	E19 Physical Object	E53 Place
P54	- has current permanent location (is current permanent location of)	E19 Physical Object	E53 Place
P55	- has current location (currently holds)	E19 Physical Object	E53 Place
P56	bears feature (is found on)	E19 Physical Object	E26 Physical Feature
P57	has number of parts	E19 Physical Object	E60 Number
P58	has section definition (defines section)	E19 Physical Object	E46 Section Definition

Property id	Property Name	Entity – Domain	Entity - Range
P59	has section (is located on or within)	E19 Physical Object	E53 Place
P60	is member of (has members)	E21 Person	E40 Legal Body
P61	has gender (is gender of)	E21 Person	E76 Gender
P62	depicts object (is depicted by)	E24 Physical Man-Made Stuff	E18 Physical Stuff
P63	depicts event (is depicted by)	E24 Physical Man-Made Stuff	E5 Event
P64	depicts concept (is depicted by)	E24 Physical Man-Made Stuff	E55 Type
P65	shows visual item (is shown by)	E24 Physical Man-Made Stuff	E36 Visual Item
P66	refers to concept (is referred to by)	E28 Conceptual Object	E55 Type
P67	refers to (is referred to by)	E28 Conceptual Object	E1 CRM Entity
P70	- documents (is documented in)	E31 Document	E1 CRM Entity
P68	usually employs (is usually employed by)	E29 Design or Procedure	E57 Material
P69	is associated with	E29 Design or Procedure	E29 Design or Procedure
P71	contains (is part of)	E32 Authority Document	E55 Type
P72	has language (is language of)	E33 Linguistic Object	E56 Language
P73	has translation (is translation of)	E33 Linguistic Object	E33 Linguistic Object
P74	has current or former residence (is current or former residence of)	E39 Actor	E53 Place
P75	possesses (is possessed by)	E39 Actor	E30 Right
P76	has contact points (provides access to)	E39 Actor	E51 Contact Point
P77	consists of (belongs to)	E40 Legal Body	E40 Legal Body
P79	begins at qualify	E52 Time-Span	E62 String
P80	ends at qualify	E52 Time-Span	E62 String
P81	at least covering	E52 Time-Span	E61 Time Primitive
P82	at most within	E52 Time-Span	E61 Time Primitive
P83	had at least duration	E52 Time-Span	E54 Dimension
P84	had at most duration	E52 Time-Span	E54 Dimension
P85	consists of (forms part of)	E52 Time-Span	E52 Time-Span
P86	falls within (contains)	E52 Time-Span	E52 Time-Span
P88	consists of (forms part of)	E53 Place	E53 Place
P89	falls within (contains)	E53 Place	E53 Place
P90	value	E54 Dimension	E60 Number
P91	unit	E54 Dimension	E58 Measurement Unit
P92	brought into existence (was brought into existence by)	E63 Beginning of Existence	E77 Existence
P94	- <i>has created (was created by)</i>	E65 Conceptual Creation	E28 Conceptual Object
P95	- <i>has formed (was formed by)</i>	E66 Formation	E74 Group
P98	- <i>brought into life (was born)</i>	E67 Birth	E21 Person
P108	- <i>has produced (was produced by)</i>	E12 Production	E24 Physical Man-Made Stuff
P93	took out of existence (was taken out of existence by)	E64 End of Existence	E77 Existence
P13	- <i>destroyed (was destroyed by)</i>	E6 Destruction	E19 Physical Object
P99	- <i>dissolved (was dissolved by)</i>	E68 Dissolution	E74 Group
P97	from father (was father for)	E67 Birth	E21 Person
P100	- <i>was death of (died in)</i>	E69 Death	E21 Person
P101	had as general use (was use of)	E70 Stuff	E55 Type
P103	was intended for (was intention of)	E71 Man-Made Stuff	E55 Type
P104	is subject to (applies to)	E72 Legal Object	E30 Right
P105	right held by (has right on)	E72 Legal Object	E39 Actor
P106	is composed of (forms part of)	E73 Information Object	E73 Information Object
P107	had member (was member of)	E74 Group	E39 Actor

E1 CRM Entity

Belongs to: Meta Entity
Superclass of: Temporal Entity
Existence
Time-Span
Place
Dimension

Scope note: This is the abstract concept of the entities of our universe of discourse. It carries the rule that all entities can be classified by a type, which further refines the specific subclass an instance belongs to, and a free text field for anything we want to express and that is not captured by formal links.

Properties:

identification

is identified by (identifies): Appellation

property note: this is the superproperty of “E19Physical Object.(is identified by)”, “E52 Time-Span.(is identified by)”, “E53 Place.(is identified by)”, “E71Man-Made Stuff.(has title)”.

classifications

has type (is type of): Type

other descriptions

has note: String

(has type : Type)

The entity is referenced by:

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Period Hierarchy

All entities in this hierarchy are instances of the metaclass “Period Type”, which is the container for all these entities.

E2 Temporal Entity

Belongs to: Period Type
Subclass of: CRM Entity
Superclass of: Condition State
Period

Scope note: This is an abstract entity and has no examples. It groups together things such as events, states and other phenomena which are limited in time. It is specialized into Period, which holds on some geographic area, and Condition State, which holds for, on, or over a certain object.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

temporal definitions

has time-span (is time-span of): Time-Span

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

E3 Condition State

Belongs to: Period Type
Subclass of: Temporal Entity

Scope note: The state of an object characterized by a certain condition and a time-span, e.g. "In ruins from 1695 until 1952", where the qualifier "in ruins" is represented as the condition state type.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Condition State

falls within (contains): Condition State

other descriptions

has note: String

(has type : Type)

The entity is referenced by:

Condition Assessment: has identified (identified by)

Physical Stuff: has condition (condition of)

and itself

The entity inherits references:

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

E4 Period

Belongs to: Period Type
Subclass of: Temporal Entity
Superclass of: Event

Scope note: A period is characterized by a coherent set of phenomena and or manifestations (explicitly intended or not), which are assumed to have taken place over a certain space and time.

Examples: Glacial period, bronze period, Ming Dynasty, Impressionism, Neolithic Period, Mc Carthy Era, The Sixties, Niniveh, 'Sturm und Drang'.

There are different opinions as to whether a 'style' is defined by physical features or by the historical context.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

spatial definitions

took place at (witnessed): Place

property note: this is the superproperty of "moved to", "moved from".

spatial definitions, short cut

took place on or within (witnessed): Physical Object

property note: It is short cut of the "Section Definition"

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions

has note: String

(has type : Type)

The entity is referenced only by itself.

The entity inherits references:

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

E5 Event

Belongs to: Period Type
Subclass of: Period
Superclass of: End of Existence
Beginning of Existence
Activity

Scope note: A change of state in cultural, social, physical systems, regardless of scale, brought about by a series or group of coherent physical, cultural, technological or legal phenomena.

Examples : World War II, Battle of Stalingrad, Earthquake in Lisbon, birth of Cleopatra, my birthday celebration 28-6-1995, the Yal ta Conference, "a tile fell from my roof", the CIDOC Conference 2005.

The distinction between and event and a period is partly a question of scale. Viewed at a broad scale, an event is an ‘instantaneous’ change of state. At a fine scale, the event can be analysed into its component phenomena within a space and time frame, i.e., a period. The reverse is not necessarily the case, not all periods give rise to a noteworthy change of state.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

active participants

had participants (participated in): Actor

property note: this is the superproperty of “carried out by”, “has formed”, “by mother”, “brought into life”, “dissolved”, “was death”.

passive participants

occurred in the presence of (was present at): Stuff

property note: this is the superproperty of “destroyed”, “used object”, “transferred title of”, “moved”, “transferred custody of”, “has modified”, “concerned”, “registered”, “measured”, “has created”.

spatial definitions

took place at (witnessed): Place

spatial definitions, short cut

took place on or within (witnessed): Physical Object

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions

has note: String

(has type : Type)

The entity is referenced by:

Physical Man-Made Stuff: depicts event (is depicted by)
(mode of depiction : Type)

The entity inherits references:

Period: consists of (forms part of)

Period: falls within (contains)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

E6 Destruction

Belongs to: Period Type
Subclass of: End of Existence

Scope note: An event which causes one or more objects to lose their identity as the current subjects of documentation. Some destruction are intentional, others are independent of human activity. The decision as to the point at which an object is destroyed rather than modified may be arbitrary in some cases. The same event may, in some cases, be documented both as a destruction of one or more objects and as the creation of others using parts or material from the original, or, alternatively, as a modification. In the former case, the object record would close, in the latter, it would continue.

For living beings, death is usually more clearly defined.

Examples: The Lisbon Earthquake, the destruction of Nineveh, “I broke a champagne glass yesterday”, the shooting of the last wolf in Germany in 1729.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

active participants

had participants (participated in): Actor

passive participants

destroyed (was destroyed by): Physical Object

property note: this is the subproperty of “occurred in the presence of”, “took out of existence”

took out of existence (was taken out of existence by): Existence

occurred in the presence of (was present at): Stuff

spatial definitions

took place at (witnessed): Place

spatial definitions, short cut

took place on or within (witnessed): Physical Object

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Physical Man-Made Stuff: depicts event (is depicted by)

(mode of depiction : Type)

Period: falls within (contains)

Period: consists of (forms part of)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

E7 Activity

Belongs to: Period Type
Subclass of: Event
Superclass of: Formation
Conceptual Creation
Modification
Transfer of Custody
Acquisition
Move
Attribute Assignment

Scope note: An action or a series of actions, carried out by actors (people, groups or organisations) which follow a certain explicit or implicit intention and result as a collective effect in some change of state in the cultural, social, physical systems we are interested in. This notion includes both complex and long lasting actions such as the building of a settlement, or a war, as well as simple, short-lived actions such as the opening of a door. It does not include the notion of activity in the sense of professions and other non-targeted notions. These are seen rather as belonging to a part in the hierarchy above Event.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

active participants

carried out by (performed): Actor

(in the role of : Type)

property note: this is the superproperty of “transferred title to”, “transferred title from”, “custody surrendered by”, “custody received by” and subproperty of “had participants”.

had participants (participated in): Actor

passive participants

took into account (was taken into account by): Conceptual Object

property note: The equivalent of using something physical. May be better "used: Stuff".

used object (was used for): Physical Object

(mode of use: String)

property note: this is the subproperty of “occurred in the presence of”.

occurred in the presence of (was present at): Stuff

motivations

was motivation for (motivated): Conceptual Object

motivated the creation of (was created for): Conceptual Object

was intended use of (was made for): Man-Made Stuff

(mode of use: String)

had specific purpose (was purpose of): Activity

had as general purpose (was purpose of): Type

spatial definitions

took place at (witnessed): Place

spatial definitions, short cut

took place on or within (witnessed): Physical Object

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions

has note: String

(has type : Type)

The entity is referenced only by itself.

The entity inherits references:

Physical Man-Made Stuff: depicts event (is depicted by)
(mode of depiction : Type)

Period: consists of (forms part of)

Period: falls within (contains)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)
(has type : Type)

E8 Acquisition

Belongs to: Period Type
Subclass of: Activity

Scope note: This entity describes the transfer of the legal ownership from one legal person to another. Either one of the actors may be omitted, unknown or not existing. The entity describes the beginning, the end or the transfer of an ownership, acquisition from unknown source or loss of title, depending on the circumstances. It takes a neutral position with respect to the actors involved. The museum notion of "accession" seems to differ between institutions. We preferred therefore to model the notions of legal ownership and physical custody instead, which are well defined in international business. Institutions can choose to model their specific notions as combinations of these.

Annexation, donation, purchase, field collection - where legal title is appropriated by the collector, are types of acquisition. Examples: a fish collected in international waters, a painting bequeathed to a museum.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

active participants

transferred title to (acquired title of): Actor

property note: this is the subproperty of "carried out by"

transferred title from (surrendered title of): Actor

property note: this is the subproperty of "carried out by"

had participants (participated in): Actor

carried out by (performed): Actor

(in the role of : Type)

passive participants

transferred title of (changed ownership by): Physical Object

property note: this is the subproperty of "occurred in the presence of"

took into account (was taken into account by): Conceptual Object

occurred in the presence of (was present at): Stuff

used object (was used for): Physical Object

(mode of use: String)

motivations

was motivation for (motivated): Conceptual Object

motivated the creation of (was created for): Conceptual Object

was intended use of (was made for): Man-Made Stuff

(mode of use : String)

had specific purpose (was purpose of): Activity

had as general purpose (was purpose of): Type

spatial definitions

took place at (witnessed): Place

spatial definitions, short cut

took place on or within (witnessed): Physical Object

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Activity: had specific purpose (was purpose of)

*Physical Man-Made Stuff: depicts event (is depicted by)
(mode of depiction : Type)*

Period: consists of (forms part of)

Period: falls within (contains)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

*Conceptual Object: refers to (is referred to by)
(has type : Type)*

E9 Move

Belongs to: Period Type
Subclass of: Activity

Scope note: This entity captures the change of physical location of a museum object for exhibitions, conservation, reorganization, loans, study etc.

e.g. Taking objects from storage and putting them on display is a type of move.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

active participants

had participants (participated in): Actor

carried out by (performed): Actor

(in the role of: Type)

passive participants

moved (moved by): Physical Object

property note: this is the subproperty of “occurred in the presence of”

took into account (was taken into account by): Conceptual Object

occurred in the presence of (was present at): Stuff

used object (was used for): Physical Object

(mode of use: String)

motivations

was motivation for (motivated): Conceptual Object

motivated the creation of (was created for): Conceptual Object

was intended use of (was made for): Man-Made Stuff

(mode of use: String)

had specific purpose (was purpose of): Activity

had as general purpose (was purpose of): Type

spatial definitions

moved to (occupied): Place

property note: this is the subproperty of “took place at”.

moved from (vacated): Place

property note: this is the subproperty of “took place at”.

took place at (witnessed): Place

spatial definitions, short cut

took place on or within (witnessed): Physical Object

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Activity: had specific purpose (was purpose of)

Physical Man-Made Stuff: depicts event (is depicted by)

(mode of depiction : Type)

Period: consists of (forms part of)

Period: falls within (contains)
Type Assignment: classified (was classified by)
Document: documents (is documented in)
Conceptual Object: refers to (is referred to by)
(has type : Type)

E10 Transfer of Custody

Belongs to: Period Type
Subclass of: Activity

Scope note: This entity describes the transfer of physical custody from one legal person to another. Either one of the actors may be omitted, unknown or not existing. The entity may describe the beginning, the end or the transfer of custody, field collection or declared loss of an object, depending on the circumstances. It takes a neutral position with respect to the actors involved.

The distinction between legal and physical custody can be modelled as types.

Some events can simultaneously be considered as acquisition, transfer of custody and move. For example, purchase of a Polynesian feather hat at a market. In other cases, separate events are involved, e.g. purchase by telephone of an object on auction, physical transportation, and reception by the new owner.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

active participants

custody surrendered by (surrendered custody): Actor

property note: this is the subproperty of “carried out by”

custody received by (received custody): Actor

property note: this is the subproperty of “carried out by”

had participants (participated in): Actor

carried out by (performed): Actor

(in the role of: Type)

passive participants

transferred custody of (custody changed by): Physical Object

property note: this is the subproperty of “occurred in the presence of”

took into account (was taken into account by): Conceptual Object

occurred in the presence of (was present at): Stuff

used object (was used for): Physical Object

(mode of use: String)

motivations

was motivation for (motivated): Conceptual Object

motivated the creation of (was created for): Conceptual Object

was intended use of (was made for): Man-Made Stuff

(mode of use: String)

had specific purpose (was purpose of): Activity

had as general purpose (was purpose of): Type

spatial definitions

took place at (witnessed): Place

spatial definitions, short cut

took place on or within (witnessed): Physical Object

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions

has note: String

(has type: Type)

The entity is not referenced.

The entity inherits references:

Activity: had specific purpose (was purpose of)

*Physical Man-Made Stuff: depicts event (is depicted by)
(mode of depiction : Type)*

Period: consists of (forms part of)

Period: falls within (contains)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

*Conceptual Object: refers to (is referred to by)
(has type : Type)*

E11 Modification

Belongs to: Period Type
Subclass of: Activity
Superclass of: Production

Scope note: This entity comprises all activities which intentionally alter physical objects, regardless of the degree of intervention: creation of some item from raw material, restorations, use of ancient objects in jewelry, etc.. Since many cases the distinction between modification and creation is not clear, and the actions implied are basically the same, modification is regarded as the more general (and less ambiguous) concept. This implies that some items may be consumed or destroyed in a modification process, and others emerge from it. Typically, objects involved in the process, such as tools, materials, etc., which are foreseen by the applied technique are modeled as attributes of the Design or Procedure, for reasons of efficient data representation. Nevertheless, unusual and remarkable items used for a specific instance of a process should be referred to here.

This entity is thought to be collective, e.g. the printing of a thousand books should be one event. Conservation actions can be modeled as a type of modification.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

active participants

had participants (participated in): Actor

carried out by (performed): Actor

(in the role of: Type)

passive participants

has modified (was modified by): Physical Man-Made Stuff

property note: this is the superproperty of “has produced” and subproperty of “occurred in the presence of”.

took into account (was taken into account by): Conceptual Object

occurred in the presence of (was present at): Stuff

used object (was used for): Physical Object

(mode of use: String)

following

used general technique (was technique of): Type

used specific technique (was used by): Design or Procedure

motivations

was motivation for (motivated): Conceptual Object

motivated the creation of (was created for): Conceptual Object

was intended use of (was made for): Man-Made Stuff

(mode of use: String)

had specific purpose (was purpose of): Activity

had as general purpose (was purpose of): Type

spatial definitions

took place at (witnessed): Place

spatial definitions, short cut

took place on or within (witnessed): Physical Object

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions
has note: String
(has type : Type)

The entity is not referenced.

The entity inherits references:

Activity: had specific purpose (was purpose of)
Physical Man-Made Stuff: depicts event (is depicted by)
(mode of depiction : Type)
Period: consists of (forms part of)
Period: falls within (contains)
Type Assignment: classified (was classified by)
Document: documents (is documented in)
Conceptual Object: refers to (is referred to by)
(has type : Type)

E12 Production

Belongs to: Period Type
Subclass of: Modification
Beginning of Existence

Scope note: This entity specializes the notion of modification into production, i.e. activities which are designed to and succeed in creating one or a series of new items, new in the sense that there is no obvious similarity to the consumed items and material. Examples: painting a watercolour, printing an etching, producing a series of household forks, the recasting of the mermaid in Copenhagen.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

active participants

had participants (participated in): Actor

carried out by (performed): Actor

(in the role of : Type)

passive participants

brought into existence (was brought into existence by): Existence

took into account (was taken into account by): Conceptual Object

has produced (was produced by): Physical Man-Made Stuff

property note: this is the subproperty of “has modified”, “brought into existence”.

has modified (was modified by): Physical Man-Made Stuff

occurred in the presence of (was present at): Stuff

used object (was used for): Physical Object

(mode of use: String)

following

used general technique (was technique of) : Type

used specific technique (was used by): Design or Procedure

motivations

was motivation for (motivated): Conceptual Object

motivated the creation of (was created for): Conceptual Object

was intended use of (was made for): Man-Made Stuff

(mode of use: String)

had specific purpose (was purpose of): Activity

had as general purpose (was purpose of): Type

spatial definitions

took place at (witnessed): Place

spatial definitions, short cut

took place on or within (witnessed): Physical Object

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Activity: had specific purpose (was purpose of)

Physical Man-Made Stuff: depicts event (is depicted by)
(mode of depiction : Type)
Period: consists of (forms part of)
Period: falls within (contains)
Type Assignment: classified (was classified by)
Document: documents (is documented in)
Conceptual Object: refers to (is referred to by)
(has type : Type)

E13 Attribute Assignment

Belongs to: Period Type
Subclass of: Activity
Superclass of: Condition Assessment
Identifier Assignment
Measurement
Type Assignment

Scope note: This entity comprises the actions of making assertions about properties of an object. It serves the documentation of how the respective assessment came about, and whose opinion it was. All the attributes or properties assigned in such an action can also be seen as directly attached to the respective object, possibly as a collection of contradictory values. All cases of direct links from objects to values which are, in this model, also referred to indirectly through an action, are characterized as "short cuts" of this action. This redundant modeling of two alternative views is preferred because many implementations may have good reasons to model either the action or the short cut, and the relation between both alternatives can be captured by simple rules.

In addition, the entity describes the actions of people making propositions and statements during certain museum procedures, e.g. the person and date when a condition statement was made, an identifier was assigned, the museum object was measured, etc.. Which kinds of such assignments and statements need to be documented explicitly in schema structures rather than free text, depends on a museum's practice. In the latter case shortcuts may be used which refer directly to the museum object.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

active participants

had participants (participated in): Actor

carried out by (performed): Actor

(in the role of: Type)

passive participants

took into account (was taken into account by): Conceptual Object

occurred in the presence of (was present at): Stuff

used object (was used for): Physical Object

(mode of use: String)

motivations

was motivation for (motivated): Conceptual Object

motivated the creation of (was created for): Conceptual Object

was intended use of (was made for): Man-Made Stuff

(mode of use: String)

had specific purpose (was purpose of): Activity

had as general purpose (was purpose of): Type

spatial definitions

took place at (witnessed): Place

spatial definitions, short cut

took place on or within (witnessed): Physical Object

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions

has note: String
(has type : Type)

The entity is not referenced.

The entity inherits references:

Activity: had specific purpose (was purpose of)

Physical Man-Made Stuff: depicts event (is depicted by)
(mode of depiction : Type)

Period: consists of (forms part of)

Period: falls within (contains)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)
(has type : Type)

E14 Condition Assessment

Belongs to: Period Type
Subclass of: Attribute Assignment

Scope note: This entity describes the action of assessing the condition of preservation of an object over a particular period, either by inspection, measurement or historical studies.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

active participants

had participants (participated in): Actor

carried out by (performed): Actor

(in the role of: Type)

passive participants

concerned (was assessed by): Physical Stuff

property note: this is the subproperty of “occurred in the presence of”.

took into account (was taken into account by): Conceptual Object

occurred in the presence of (was present at): Stuff

used object (was used for): Physical Object

(mode of use: String)

attributions

has identified (identified by): Condition State

motivations

was motivation for (motivated): Conceptual Object

motivated the creation of (was created for): Conceptual Object

was intended use of (was made for): Man-Made Stuff

(mode of use: String)

had specific purpose (was purpose of): Activity

had as general purpose (was purpose of): Type

spatial definitions

took place at (witnessed): Place

spatial definitions, short cut

took place on or within (witnessed): Physical Object

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Activity: had specific purpose (was purpose of)

Physical Man-Made Stuff: depicts event (is depicted by)

(mode of depiction : Type)

Period: consists of (forms part of)

Period: falls within (contains)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

E15 Identifier Assignment

Belongs to: Period Type
Subclass of: Attribute Assignment

Scope note: This entity describes the action of assigning an identifier, such as a museum number, to an object. The interest in this action arises when objects are exchanged, and multiple identifiers are used, or the identification system of an organization is changed. In order to cover these cases, it is important to document by whom, when and for what purpose an identifier is assigned to a museum object.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

active participants

had participants (participated in): Actor

carried out by (performed): Actor

(in the role of : Type)

passive participants

registered (was registered by): Physical Object

property note: this is the subproperty of “occurred in the presence of”.

took into account (was taken into account by): Conceptual Object

occurred in the presence of (was present at): Stuff

used object (was used for): Physical Object

(mode of use: String)

attributions

assigns (is assigned by): Object Identifier

deassigns (is deassigned by): Object Identifier

motivations

was motivation for (motivated): Conceptual Object

motivated the creation of (was created for): Conceptual Object

was intended use of (was made for): Man-Made Stuff

(mode of use: String)

had specific purpose (was purpose of): Activity

had as general purpose (was purpose of): Type

spatial definitions

took place at (witnessed): Place

spatial definitions, short cut

took place on or within (witnessed): Physical Object

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Activity: had specific purpose (was purpose of)

Physical Man-Made Stuff: depicts event (is depicted by)

(mode of depiction : Type)

Period: consists of (forms part of)

Period: falls within (contains)
Type Assignment: classified (was classified by)
Document: documents (is documented in)
Conceptual Object: refers to (is referred to by)
(has type : Type)

E16 Measurement

Belongs to: Period Type
Subclass of: Attribute Assignment

Scope note: This entity describes actions of measuring physical properties by counting or use of some tool, whether by simple yardstick or complex radiation detection device. The interest is in the method and care applied, in order to decide afterwards on the reliability of the result. For properties which may change value over time, such as length, due to shrinkage, the date is of direct relevance as well. Details of methods and devices are best handled as free text, whereas basic methods such as "C14" should be encoded in the type field.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

active participants

had participants (participated in): Actor

carried out by (performed): Actor

(in the role of: Type)

passive participants

measured (was measured by): Physical Stuff

property note: this is the subproperty of "occurred in the presence of".

took into account (was taken into account by): Conceptual Object

occurred in the presence of (was present at): Stuff

used object (was used for): Physical Object

(mode of use: String)

attributions

observed dimension (was observed): Dimension

motivations

was motivation for (motivated): Conceptual Object

motivated the creation of (was created for): Conceptual Object

was intended use of (was made for): Man-Made Stuff

(mode of use: String)

had specific purpose (was purpose of): Activity

had as general purpose (was purpose of): Type

spatial definitions

took place at (witnessed): Place

spatial definitions, short cut

took place on or within (witnessed): Physical Object

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Activity: had specific purpose (was purpose of)

Physical Man-Made Stuff: depicts event (is depicted by)

(mode of depiction : Type)

Period: consists of (forms part of)

Period: falls within (contains)
Type Assignment: classified (was classified by)
Document: documents (is documented in)
Conceptual Object: refers to (is referred to by)
(has type : `Type)

E17 Type Assignment

Belongs to: Period Type
Subclass of: Attribute Assignment

Scope note: This entity describes the act of scientifically classifying some entity, an object, a work, an action or whatever. The value of classification depends critically on general and personal knowledge and the scientific system used. Therefore the interest lies in the author and date.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

active participants

had participants (participated in): Actor

carried out by (performed): Actor

(in the role of: Type)

passive participants

classified (was classified by): CRM Entity

took into account (was taken into account by): Conceptual Object

occurred in the presence of (was present at): Stuff

used object (was used for): Physical Object

(mode of use: String)

attributions

assigned (was assigned by): Type

motivations

was motivation for (motivated): Conceptual Object

motivated the creation of (was created for): Conceptual Object

was intended use of (was made for): Man-Made Stuff

(mode of use: String)

had specific purpose (was purpose of): Activity

had as general purpose (was purpose of): Type

spatial definitions

took place at (witnessed): Place

spatial definitions, short cut

took place on or within (witnessed): Physical Object

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Activity: had specific purpose (was purpose of)

Physical Man-Made Stuff: depicts event (is depicted by)

(mode of depiction : Type)

Period: consists of (forms part of)

Period: falls within (contains)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Object Hierarchy

All entities in this hierarchy are instances of the metaclass “Object Type”. Two submetaclasses are defined, the “Physical Object Type” for the hierarchy of the “Physical Objects”, the kinds of things which have weight, are created once and can be destroyed, and the “Concept Type” for the “Concepts”, the intellectual or other products which are created once, and can exist on multiple carriers, and hence can rather be forgotten or lost than destroyed.

Physical Objects:

E18 Physical Stuff

Belongs to: Physical Object Type
Subclass of: Legal Object
Stuff
Superclass of: Physical Object
Physical Man-Made Stuff
Physical Feature

Scope Note: Physical stuff is an abstract notion that groups all physical objects, man-made and natural, as well as physical features of objects, such as holes. We use the term 'feature' to refer to anything of a material nature, such as scratches, holes, rivers, and stains, which it would be strange to refer to as 'objects'.

Properties:

identification

is identified by (identifies): Appellation

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

short cut, legal status

right held by (has right on): Actor

(has type : Type)

(has note : String)

physical status, short cut

has dimension (is dimension of): Dimension

property note: It is short cut of the path "Measurement changed by – Dimension – observed dimension".

has condition (condition of): Condition State

property note: It is short cut of the path "Assessment changed by – Condition Assessment – has identified".

structures

consists of (is incorporated in): Material

is composed of (forms part of): Physical Stuff

other descriptions

had as general use (was use of): Type

has note: String

(has type : Type)

The entity is referenced by:

Physical Man-Made Stuff: depicts object (is depicted by)

(mode of depiction: Type)

Condition Assessment: concerned (was assessed by)

Measurement: measured (was measured by)

and itself

The entity inherits references:

Event: occurred in the presence of (was present at)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E19 Physical Object

Belongs to: Physical Object Type
Subclass of: Physical Stuff
Superclass of: Biological Object
Man-Made Object

Scope note: A discrete, real item of material nature which constitutes a unit for documentation. The decision as to what constitutes a complete item, rather than parts or components, may be purely administrative.

Examples : John Smith, Aphrodite of Milos, the Palace of Knossos, the Cullinan diamond, Apollo 13 a the time of launch.

Properties:

identifications

is identified by (identifies): Object Identifier

property note: this is the subproperty of “E1CRM Entity.(is identified by)”, and superproperty of “E19 Physical Object.(preferred identifier is)”.

preferred identifier is (is preferred identifier of): Object Identifier

property note: this is the subproperty of “E19Physical Object.(is identified by)”.

is identified by (identifies): Appellation

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

legal status, short cut

has former or current keeper (is former or current keeper of) : Actor

property note: this is the superproperty of “has current keeper”. It is short cut of the path “Custody changed by – Transfer of Custody – custody received / surrendered by”.

has current keeper (is current keeper of) : Actor

property note: this is the subproperty of “has former or current keeper”. It is short cut of the path “Custody changed by – Transfer of Custody – custody received / surrendered by”.

has former or current owner (is former or current owner of): Actor

property note: this is the superproperty of “has current owner”. It is short cut of the path “Acquisition changed by – Acquisition – transferred title from / to”

has current owner (is current owner of): Actor

property note: this is the subproperty of “has former or current owner”. ”. It is short cut of the path “Acquisition changed by – Acquisition – transferred title from / to”

right held by (has right on): Actor

(has type: Type)

(has note: String)

physical status, short cut

has dimension (is dimension of): Dimension

has condition (condition of): Condition State

locations, short cut

has former or current location (is former or current location of) : Place

property note: this is the superproperty of “has current permanent location”, “has current location”. It is short cut of the path “Move changed by – Move – moved from / to”

has current permanent location (is current permanent location of): Place

property note: this is the subproperty of “has former or current location”. It is short cut of the path “Move changed by – Move – moved from / to”

has current location (currently holds) : Place

property note: this is the subproperty of “has former or current location”. It is short cut of the path “Move changed by – Move – moved from / to”

structures

bears feature (is found on): Physical Feature

has number of parts: Number

has section definition (defines section): Section Definition

is composed of (forms part of): Physical Stuff

consists of (is incorporated in): Material

structures, short cut

has section (is located on or within): Place

property note: It is short cut of the “Section Definition”

other descriptions

had as general use (was use of): Type

has note: String

(has type : Type)

The entity is referenced by:

Period: took place on or within (witnessed)

Destruction: destroyed (was destroyed by)

Activity: used object (was used for)

(mode of use: String)

Acquisition: transferred title of (changed ownership by)

Move: moved (moved by)

Transfer of Custody: transferred custody of (custody changed by)

Identifier Assignment: registered (was registered by)

The entity inherits references:

Physical Man-Made Stuff: depicts object (is depicted by)

(mode of depiction : Type)

Physical Stuff: is composed of (forms part of)

Condition Assessment: concerned (was assessed by)

Measurement: measured (was measured by)

Event: occurred in the presence of (was present at)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E20 Biological Object

Belongs to: Physical Object Type
Subclass of: Physical Object
Superclass of: Person

Scope note: An individual, real item of material nature, which lives, has lived, or is a natural products of living organisms. Artificial objects which incorporate biological elements, such as Victorian butterfly frames, can be classified as both natural and man-made objects.

Examples : Me, Tut-Ankh-Amun, Boukephalas.

Properties:

identifications

is identified by (identifies): Object Identifier
preferred identifier is (is preferred identifier of): Object Identifier
is identified by (identifies): Appellation

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

legal status, short cut

has former or current keeper (is former or current keeper of) : Actor
has current keeper (is current keeper of) : Actor
has former or current owner (is former or current owner of): Actor
has current owner (is current owner of): Actor
right held by (has right on): Actor
(has type: Type)
(has note: String)

physical status, short cut

has dimension (is dimension of): Dimension
has condition (condition of): Condition State

locations, short cut

has former or current location (is former or current location of) : Place
has current permanent location (is current permanent location of): Place
has current location (currently holds) : Place

structures

bears feature (is found on): Physical Feature
has number of parts: Number
has section definition (defines section): Section Definition
consists of (is incorporated in): Material
is composed of (forms part of): Physical Stuff

structures, short cut

has section (is located on or within): Place

other descriptions

had as general use (was use of): Type
has note: String
(has type : Type)

The entity is not referenced.

The entity inherits references:

Activity: used object (was used for)
(mode of use : String)
Physical Man-Made Stuff: depicts object (is depicted by)
(mode of depiction : Type)
Physical Stuff: is composed of (forms part of)

Event: occurred in the presence of (was present at)
Period: took place on or within (witnessed)
Condition Assessment: concerned (was assessed by)
Destruction: destroyed (was destroyed by)
Identifier Assignment: registered (was registered by)
Move: moved (moved by)
Acquisition: transferred title of (changed ownership by)
Transfer of Custody: transferred custody of (custody changed by)
Type Assignment: classified (was classified by)
Document: documents (is documented in)
Measurement: measured (was measured by)
Conceptual Object: refers to (is referred to by)
(has type : Type)
Beginning of Existence: brought into existence (was brought into existence by)
End of Existence: took out of existence (was taken out of existence by)

E21 Person

Belongs to: Actor Type
Physical Object Type
Subclass of: Biological Object
Actor

Scope note: A real person, who lives or is assumed to have lived.

Examples : John Smith, Tut-Ankh-Amun.

Legendary figures, such as Ulysses and King Arthur, who may have existed, fall into this class if the documentation refers to them as historical figures. In cases where doubt exists as to whether several persons are in fact identical, multiple instances can be created and linked to indicate their relationship.

Properties:

identifications

is identified by (identifies): Object Identifier

preferred identifier is (is preferred identifier of): Object Identifier

is identified by (identifies): Appellation

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

legal status, short cut

has former or current keeper (is former or current keeper of) : Actor

has current keeper (is current keeper of) : Actor

has former or current owner (is former or current owner of): Actor

has current owner is (current owner of): Actor

right held by (has right on): Actor

(has type: Type)

(has note: String)

physical status, short cut

has dimension (is dimension of): Dimension

has condition (condition of): Condition State

locations, short cut

has former or current location (is former or current location of) : Place

has current permanent location (is current permanent location of): Place

has current location (currently holds) : Place

structures

bears feature (is found on): Physical Feature

has number of parts: Number

has section definition (defines section): Section Definition

consists of (is incorporated in): Material

is composed of (forms part of): Physical Stuff

structures, short cut

has section (is located on or within): Place

other descriptions

is member of (has members): Legal Body

has gender (is gender of): Gender

has current or former residence (is current or former residence of): Place

had as general use (was use of): Type

possesses (is possessed by): Right

has contact points (provides access to): Contact Point

has note: String

(has type : Type)

The entity is referenced by:

Birth: by mother (gave birth)
Birth: from father (was father for)
Birth: *brought into life (was born)*
Death: *was death of (died in)*

The entity inherits references:

Activity: carried out by (performed)
(in the role of : Type)
Legal Object: right held by (has right on)
(has type : Type)
(has note : String)
Activity: used object (was used for)
(mode of use : String)
Physical Man-Made Stuff: depicts object (is depicted by)
(mode of depiction : Type)
Physical Object: has current owner (is current owner of)
Physical Object: has former or current owner (is former or current owner of)
Physical Object: has current keeper (is current keeper of)
Physical Object: has former or current keeper (is former or current keeper of)
Physical Stuff: is composed of (forms part of)
Event: had participants (participated in)
Event: occurred in the presence of (was present at)
Period: took place on or within (witnessed)
Condition Assessment: concerned (was assessed by)
Destruction: destroyed (was destroyed by)
Identifier Assignment: registered (was registered by)
Move: moved (moved by)
Acquisition: transferred title from (surrendered title of)
Acquisition: transferred title to (acquired title of)
Acquisition: transferred title of (changed ownership by)
Transfer of Custody: custody received by (received custody)
Transfer of Custody: custody surrendered by (surrendered custody)
Transfer of Custody: transferred custody of (custody changed by)
Type Assignment: classified (was classified by)
Document: documents (is documented in)
Measurement: measured (was measured by)
Conceptual Object: refers to (is referred to by)
(has type : Type)
Group: had member (was member of)
Beginning of Existence: brought into existence (was brought into existence by)
End of Existence: took out of existence (was taken out of existence by)

E22 Man-Made Object

Belongs to: Physical Object Type
Subclass of: Physical Object
Physical Man-Made Stuff
Superclass of: Iconographic Object

Scope note: A discrete real item of material nature, which is an artifact of technological actions.

Example : My car, chassis no. AMT-9566-XXX9384,
The Portland Vase,
The Colloseum, The Parthenon.

Properties:

identifications

is identified by (identifies): Object Identifier
is identified by (identifies): Appellation
preferred identifier is (is preferred identifier of): Object Identifier
has title (is title of): Title
(has type : Type)

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

legal status, short cut

has former or current keeper (is former or current keeper of) : Actor
has current keeper (is current keeper of) : Actor
has former or current owner (is former or current owner of): Actor
has current owner (is current owner of): Actor
right held by (has right on): Actor
(has type: Type)
(has note: String)

intellectual contents

depicts concept (is depicted by): Type
(mode of depiction : Type)
depicts event (is depicted by): Event
(mode of depiction : Type)
depicts object (is depicted by): Physical Stuff
(mode of depiction : Type)

physical status, short cut

has dimension (is dimension of): Dimension
has condition (condition of): Condition State

locations, short cut

has former or current location (is former or current location of) : Place
has current permanent location (is current permanent location of): Place
has current location (currently holds) : Place

structures

bears feature (is found on): Physical Feature
has number of parts: Number
is composed of (forms part of): Physical Stuff
shows visual item (is shown by): Visual Item
has section definition (defines section): Section Definition
consists of (is incorporated in): Material

structures, short cut

has section (is located on or within): Place

other descriptions

was intended for (was intention of): Type

had as general use (was use of): Type
has note: String
(has type : Type)

The entity is not referenced.

The entity inherits references :

Activity: used object (was used for)
(mode of use : String)
Activity: was intended use of (was made for)
(mode of use : String)
Physical Man-Made Stuff: depicts object (is depicted by)
(mode of depiction : Type)
Physical Stuff: is composed of (forms part of)
Event: occurred in the presence of (was present at)
Period: took place on or within (witnessed)
Condition Assessment: concerned (was assessed by)
Destruction: destroyed (was destroyed by)
Identifier Assignment: registered (was registered by)
Move: moved (moved by)
Acquisition: transferred title of (changed ownership by)
Transfer of Custody: transferred custody of (custody changed by)
Type Assignment: classified (was classified by)
Document: documents (is documented in)
Production: has produced (was produced by)
Modification: has modified (was modified by)
Measurement: measured (was measured by)
Conceptual Object: refers to (is referred to by)
(has type : Type)
Beginning of Existence: brought into existence (was brought into existence by)
End of Existence: took out of existence (was taken out of existence by)

E23 Iconographic Object

(former E22, former E24)

Belongs to: Physical Object Type
Subclass of: Man-Made Object
Information Object

Scope note: This entity comprises objects which are designed primarily or in addition to another functionality to represent or depict something in an optical manner, be it concrete or abstract. Examples: Paintings, Sculpture, a vase in form of a head, a decoration on a medieval gun.

This entity has a certain pragmatic value in the fine arts since it conveniently groups together objects such as paintings, drawings, watercolours and other similar objects. From a philosophical point of view, representation is an 'intentional' act. Natural objects may resemble other objects by chance but they can represent only as a result of intervention by some fairly sophisticated semiotic arrangements.

Properties:

identifications

is identified by (identifies): Object Identifier
is identified by (identifies): Appellation
preferred identifier is (is preferred identifier of): Object Identifier
has title (is title of): Title
(has type : Type)

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

legal status, short cut

right held by (has right on): Actor
(has type: Type)
(has note: String)
has former or current keeper (is former or current keeper of) : Actor
has current keeper (is current keeper of) : Actor
has former or current owner (is former or current owner of): Actor
has current owner (is current owner of): Actor

intellectual contents

refers to concept (is referred to by): Type
refers to (is referred to by): CRM Entity
(has type : Type)
depicts concept (is depicted by): Type
(mode of depiction : Type)
depicts event (is depicted by): Event
(mode of depiction : Type)
depicts object (is depicted by): Physical Stuff
(mode of depiction : Type)

physical status, short cut

has dimension (is dimension of): Dimension
has condition (condition of): Condition State

locations, short cut

has former or current location (is former or current location of) : Place
has current permanent location (is current permanent location of): Place
has current location (currently holds) : Place

structures

bears feature (is found on): Physical Feature
has number of parts: Number
shows visual item (is shown by): Visual Item

is composed of (forms part of): Information Object
has section definition (defines section): Section Definition
consists of (is incorporated in): Material
is composed of (forms part of): Physical Stuff
structures, short cut
has section (is located on or within): Place
other descriptions
was intended for (was intention of): Type
had as general use (was use of): Type
has note: String
(has type : Type)

The entity is not referenced.

The entity inherits references:

Activity: used object (was used for)
(mode of use : String)
Activity: was intended use of (was made for)
(mode of use : String)
Physical Man-Made Stuff: depicts object (is depicted by)
(mode of depiction : Type)
Physical Stuff: is composed of (forms part of)
Event: occurred in the presence of (was present at)
Conceptual Creation: has created (was created by)
Period: took place on or within (witnessed)
Condition Assessment: concerned (was assessed by)
Destruction: destroyed (was destroyed by)
Identifier Assignment: registered (was registered by)
Move: moved (moved by)
Acquisition: transferred title of (changed ownership by)
Transfer of Custody: transferred custody of (custody changed by)
Type Assignment: classified (was classified by)
Document: documents (is documented in)
Production: has produced (was produced by)
Modification: has modified (was modified by)
Measurement: measured (was measured by)
Activity: motivated the creation of (was created for)
Information Object: is composed of (forms part of)
Activity: took into account (was taken into account by)
Conceptual Object: refers to (is referred to by)
(has type : Type)
Beginning of Existence: brought into existence (was brought into existence by)
End of Existence: took out of existence (was taken out of existence by)
Activity: was motivation for (motivated)

E24 Physical Man-Made Stuff

Belongs to: Physical Object Type
Subclass of: Physical Stuff
Man-Made Stuff
Superclass of: Man-Made Object
Man-Made Feature

Scope Note: Man-Made Stuff is a general class that groups man-made objects and features. The distinction between 'objects' and 'features' is useful since it avoids referring to things like holes and texture as objects. Features and objects share many common characteristics however, hence the need for a general class of man-made things.

Properties:

identifications

is identified by (identifies): Appellation
has title (is title of): Title
(has type : Type)

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

short cut, legal status

right held by (has right on): Actor
(has type : Type)
(has note : String)

intellectual contents

depicts object (is depicted by): Physical Stuff
(mode of depiction : Type)
depicts event (is depicted by): Event
(mode of depiction : Type)
depicts concept (is depicted by): Type
(mode of depiction : Type)

physical status, short cut

has dimension (is dimension of): Dimension
has condition (condition of): Condition State

structures

shows visual item (is shown by): Visual Item
consists of (is incorporated in): Material
is composed of (forms part of): Physical Stuff

other descriptions

was intended for (was intention of): Type
had as general use (was use of): Type
has note: String
(has type : Type)

The entity is referenced by:

Modification: has modified (was modified by)
Production: has produced (was produced by)

The entity inherits references:

Activity: was intended use of (was made for)
(mode of use : String)
Physical Man-Made Stuff: depicts object (is depicted by)
(mode of depiction : Type)
Physical Stuff: is composed of (forms part of)
Event: occurred in the presence of (was present at)

Type Assignment: classified (was classified by)
Condition Assessment: concerned (was assessed by)
Measurement: measured (was measured by)
Document: documents (is documented in)
Conceptual Object: refers to (is referred to by)
(has type : Type)
Beginning of Existence: brought into existence (was brought into existence by)
End of Existence: took out of existence (was taken out of existence by)

E25 Man-Made Feature

Belongs to: Physical Object Type
Subclass of: Physical Man-Made Stuff
Physical Feature

Scope Note: Man-Made Features are those physical features which result from human intervention. Cf. E27 Physical Feature.

Properties:

identifications

is identified by (identifies): Appellation

has title (is title of): Title

(has type : Type)

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

short cut, legal status

right held by (has right on): Actor

(has type : Type)

(has note : String)

intellectual contents

depicts concept (is depicted by): Type

(mode of depiction : Type)

depicts event (is depicted by): Event

(mode of depiction : Type)

depicts object (is depicted by): Physical Stuff

(mode of depiction : Type)

physical status, short cut

has dimension (is dimension of): Dimension

has condition (condition of): Condition State

structures

shows visual item (is shown by): Visual Item

consists of (is incorporated in): Material

is composed of (forms part of): Physical Stuff

other descriptions

was intended for (was intention of): Type

had as general use (was use of): Type

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Activity: was intended use of (was made for)

(mode of use : String)

Physical Man-Made Stuff: depicts object (is depicted by)

(mode of depiction : Type)

Physical Stuff: is composed of (forms part of)

Condition Assessment: concerned (was assessed by)

Measurement: measured (was measured by)

Physical Object: bears feature (is found on)

Event: occurred in the presence of (was present at)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Production: has produced (was produced by)

Modification: has modified (was modified by)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E26 Physical Feature

Belongs to: Physical Object Type
Subclass of: Physical Stuff
Superclass of: Man-Made Feature,
Site

Scope Note: This class was introduced in order to avoid the counter-intuitive sense of referring to holes and similar features of objects as physical objects. Features are logically or physically attached to a particular physical object, and they share many of the attributes of physical objects - they can be measured and dated, and we can sometimes say who was responsible for them. However, you can't pick up a hole and put it in your pocket - Yellow Submarine notwithstanding. Physical feature groups together all features of physical objects. Cf. Man-made features for the results of human intervention.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

short cut, legal status

right held by (has right on): Actor

(has type : Type)

(has note : String)

physical status, short cut

has dimension (is dimension of): Dimension

has condition (condition of): Condition State

structures

consists of (is incorporated in): Material

is composed of (forms part of): Physical Stuff

other descriptions

had as general use (was use of): Type

has note: String

(has type : Type)

The entity is referenced by:

Physical Object: bears feature (is found on)

The entity inherits references:

Physical Man-Made Stuff: depicts object (is depicted by)

(mode of depiction : Type)

Physical Stuff: is composed of (forms part of)

Condition Assessment: concerned (was assessed by)

Measurement: measured (was measured by)

Event: occurred in the presence of (was present at)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E27 Site

Belongs to: Physical Object Type
Subclass of: Physical Feature

Scope Note: A site is a recognisable place that can be represented by an Iconographic object, such as a photograph, painting or map. A site is composed of relatively immobile material items and features in a particular configuration at a particular location.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

short cut, legal status

right held by (has right on): Actor

(has type : Type)

(has note : String)

physical status, short cut

has dimension (is dimension of): Dimension

has condition (condition of): Condition State

structures

consists of (is incorporated in): Material

is composed of (forms part of): Physical Stuff

other descriptions

had as general use (was use of): Type

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Physical Man-Made Stuff: depicts object (is depicted by)
(mode of depiction : Type)

Physical Stuff: is composed of (forms part of)

Condition Assessment: concerned (was assessed by)

Measurement: measured (was measured by)

Physical Object: bears feature (is found on)

Event: occurred in the presence of (was present at)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

The Conceptual Objects:

All object types of double nature, physical and conceptual, are already listed under the physical object types.

E28 Conceptual Object

Belongs to: Concept Type
Subclass of: Man-Made Stuff
Superclass of: Right
Information Object

Scope note: This entity is the attempt to group the non-material products of our minds, and specifically to allow for reasoning about their identity, circumstances of creation and historical implications. Characteristically, these things are created, invented or thought, and somehow documented or communicated between persons. Conceptual objects need not have a particular carrier, but may be found on several different carriers, such as paper, electronic signals, marks, audio media, paintings, photos, human memory, etc. They cannot be destroyed as long as they exist on at least one carrier or in memory. Examples include texts, maps, photos, music, sounds, fairy tales, signs, patterns, symbols, plans, rights, and rules. A greater distinction could be made between products having a clear identity, such as a specific text, or photographs, and the ideas and concepts shared and traded by groups of people.

Properties:

identifications

is identified by (identifies): Appellation
has title (is title of): Title
(has type : Type)

classifications

has type (is type of): Type

intellectual contents

refers to concept (is referred to by): Type

refers to (is referred to by): CRM Entity

(has type : Type)

property note: this is the superproperty of “documents”.

other descriptions

was intended for (was intention of): Type
had as general use (was use of): Type
has note: String
(has type : Type)

The entity is referenced by:

Activity: took into account (was taken into account by)

Activity: was motivation for (motivated)

Activity: motivated the creation of (was created for)

Conceptual Creation: has created (was created by)

The entity inherits references:

Activity: was intended use of (was made for)
(mode of use : String)

Event: occurred in the presence of (was present at)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)
(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E29 Design or Procedure

Belongs to: Concept Type
Subclass of: Information Object

Scope note: An established plan for execution of a series or group of technological actions, which result in a physical change of state in certain pieces of material and/or any physical object.

Examples: All elements of the AAT "processes and techniques" facets., a plan for a building, conservation procedures, complex editing techniques, flint napping, etc..

Properties:

identifications

is identified by (identifies): Appellation

has title (is title of): Title

(has type : Type)

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

legal status, short cut

right held by (has right on): Actor

(has type: Type)

(has note: String)

intellectual contents

refers to concept (is referred to by): Type

refers to (is referred to by) : CRM Entity

(has type: Type)

structures

is composed of (forms part of): Information Object

other descriptions

**usually employs (is usually employed by): Material
is associated with: Design or Procedure**

had as general use (was use of): Type

was intended for (was intention of) : Type

has note: String

(has type: Type)

The entity is referenced by:

Modification: used specific technique (was used by)
and itself

The entity inherits references:

Activity: was intended use of (was made for)

(mode of use : String)

Event: occurred in the presence of (was present at)

Conceptual Creation: has created (was created by)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Activity: motivated the creation of (was created for)

Information Object: is composed of (forms part of)

Activity: took into account (was taken into account by)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

Activity: was motivation for (motivated)

E30 Right

Belongs to: Concept Type
Subclass of: Conceptual Object

Scope Note: Rights are used in the sense of legal privileges such as the right of property, reproduction rights, etc.

Properties:

identifications

is identified by (identifies): Appellation

has title (is title of): Title

(has type : Type)

classifications

has type (is type of): Type

intellectual contents

refers to concept (is referred to by): Type

refers to (is referred to by): CRM Entity

(has type : Type)

other descriptions

was intended for (was intention of): Type

had as general use (was use of): Type

has note: String

(has type : Type)

The entity is referenced by:

Legal Object: is subject to (applies to)

Actor: possesses (is possessed by)

The entity inherits references:

Activity: was intended use of (was made for)

(mode of use : String)

Event: occurred in the presence of (was present at)

Conceptual Creation: has created (was created by)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Activity: motivated the creation of (was created for)

Activity: took into account (was taken into account by)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

Activity: was motivation for (motivated)

E31 Document

Belongs to: Concept Type
Subclass of: Information Object
Superclass of: Authority Document

Scope note: This entity comprises items which make propositions about reality, whether intentionally or by chance. The means may be text, graphics, images, sound, video. Examples: Books on history, maps, photos.

Properties:

identifications

is identified by (identifies): Appellation
has title (is title of): Title
(has type : Type)

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

short cut, legal status

right held by (has right on): Actor
(has type : Type)
(has note : String)

intellectual contents

documents (is documented in): CRM Entity

property note: this is the subproperty of “refers to”.

refers to concept (is referred to by): Type
refers to (is referred to by): CRM Entity
(has type : Type)

structures

is composed of (forms part of): Information Object

other descriptions

was intended for (was intention of): Type
had as general use (was use of): Type
has note: String
(has type : Type)

The entity is not referenced.

The entity inherits references:

Activity: was intended use of (was made for)
(mode of use : String)

Event: occurred in the presence of (was present at)

Conceptual Creation: has created (was created by)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Activity: motivated the creation of (was created for)

Information Object: is composed of (forms part of)

Activity: took into account (was taken into account by)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

Activity: was motivation for (motivated)

E32 Authority Document

Belongs to: Concept Type
Subclass of: Document

Scope note: This entity describes encyclopedia, thesauri, authority lists: all documents which define terminology or conceptual systems for consistent use.

e.g. Webster's, Getty Art and Architecture Thesaurus, MDA Archaeological Objects Thesaurus, This Document, etc.

Properties:

identifications

is identified by (identifies): Appellation

has title (is title of): Title

(has type : Type)

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

short cut, legal status

right held by (has right on): Actor

(has type : Type)

(has note : String)

intellectual contents

refers to concept (is referred to by): Type

refers to (is referred to by): CRM Entity

(has type : Type)

documents (is documented in): CRM Entity

structures

contains (is part of): Type

is composed of (forms part of): Information Object

other descriptions

was intended for (was intention of): Type

had as general use (was use of): Type

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Activity: was intended use of (was made for)

(mode of use : String)

Event: occurred in the presence of (was present at)

Conceptual Creation: has created (was created by)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Activity: motivated the creation of (was created for)

Information Object: is composed of (forms part of)

Activity: took into account (was taken into account by)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

Activity: was motivation for (motivated)

E33 Linguistic Object

Belongs to: Concept Type
Subclass of: Information Object
Superclass of: Inscription
Title

Scope note: This entity comprises texts of all kind, be they written or recorded speech, in any physical language.

Properties:

identifications

is identified by (identifies): Appellation

has title (is title of): Title

(has type : Type)

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

short cut, legal status

right held by (has right on): Actor

(has type : Type)

(has note : String)

intellectual contents

has translation (is translation of): Linguistic Object

refers to concept (is referred to by): Type

refers to (is referred to by): CRM Entity

(has type : Type)

structures

is composed of (forms part of): Information Object

other descriptions

has language (is language of): Language

was intended for (was intention of): Type

had as general use (was use of): Type

has note: String

(has type : Type)

The entity is only referenced by itself.

The entity inherits references:

Activity: was intended use of (was made for)

(mode of use : String)

Event: occurred in the presence of (was present at)

Conceptual Creation: has created (was created by)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Activity: motivated the creation of (was created for)

Information Object: is composed of (forms part of)

Activity: took into account (was taken into account by)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

Activity: was motivation for (motivated)

E34 Inscription

Belongs to: Concept Type
Subclass of: Linguistic Object
Mark

Scope note: This entity comprises texts attached to a physical object. The attributes of the entity could be extended to include alphabet used, rather than documenting these features in the note. NB The entity does *not* describe idiosyncratic characteristics of individual physical embodiments of an inscription but the underlying prototype, e.g. Dürer's signature.

Properties:

identifications

is identified by (identifies): Appellation

has title (is title of): Title

(has type : Type)

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

short cut, legal status

right held by (has right on): Actor

(has type : Type)

(has note : String)

intellectual contents

refers to concept (is referred to by): Type

refers to (is referred to by): CRM Entity

(has type : Type)

has translation (is translation of): Linguistic Object

structures

is composed of (forms part of): Information Object

other descriptions

has language (is language of): Language

was intended for (was intention of): Type

had as general use (was use of): Type

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Activity: was intended use of (was made for)

(mode of use : String)

Event: occurred in the presence of (was present at)

Conceptual Creation: has created (was created by)

Linguistic Object: has translation (is translation of)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Physical Man-Made Stuff: shows visual item (is shown by)

Activity: motivated the creation of (was created for)

Information Object: is composed of (forms part of)

Activity: took into account (was taken into account by)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

Activity: was motivation for (motivated)

E35 Title

Belongs to: Concept Type
Appellation Type
Subclass of: Linguistic Object
Appellation

Scope note: This entity comprises the short pieces of texts that are used, by the creator or tradition, to characterize or identify a work, often alluding to its subject. The work may be linguistic, musical, iconographic or other.

Examples: Giaconda, La Joconde, Mona Lisa, Die Dreigroschenoper, La Pie, La Marseillaise.

Properties:

identifications

is identified by (identifies): Appellation
has title (is title of): Title
(has type : Type)

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

short cut, legal status

right held by (has right on): Actor
(has type : Type)
(has note : String)

intellectual contents

refers to concept (is referred to by): Type
refers to (is referred to by): CRM Entity
(has type : Type)
has translation (is translation of): Linguistic Object

structures

is composed of (forms part of): Information Object

other descriptions

has language (is language of): Language
was intended for (was intention of): Type
had as general use (was use of): Type
has note: String
(has type : Type)

The entity is referenced by:

Man-Made Stuff: *has title (is title of)*
(has type : Type)

The entity inherits references:

Activity: was intended use of (was made for)
(mode of use : String)

Event: occurred in the presence of (was present at)

Conceptual Creation: has created (was created by)

Linguistic Object: has translation (is translation of)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Activity: motivated the creation of (was created for)

Information Object: is composed of (forms part of)

CRM Entity: is identified by (identifies)

Activity: took into account (was taken into account by)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

Activity: was motivation for (motivated)

E36 Visual Item

Belongs to: Concept Type
Subclass of: Information Object
Superclass of: Mark
Image

Scope Note: Visual Items refers to the intellectual or conceptual aspect of recognizable marks and images. When we identify a trade mark, say the ICOM logo, we are generally prepared to say that the same logo is used on any number of publications. The size, orientation and colour may change, but something uniquely identifiable remains. The same can be said of images which are reproduced many times. What these examples highlight is that visual items are independent of their physical support. The visual items class provides a means of identifying and linking together objects which carry the same visual symbols, marks, images or whatever.

Properties:

identifications

is identified by (identifies): Appellation

has title (is title of): Title

(has type : Type)

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

short cut, legal status

right held by (has right on): Actor

(has type : Type)

(has note : String)

intellectual contents

refers to concept (is referred to by): Type

refers to (is referred to by): CRM Entity

(has type : Type)

structures

is composed of (forms part of): Information Object

other descriptions

was intended for (was intention of): Type

had as general use (was use of): Type

has note: String

(has type : Type)

The entity is referenced by:

Physical Man-Made Stuff: shows visual item (is shown by)

The entity inherits references:

Activity: was intended use of (was made for)

(mode of use : String)

Event: occurred in the presence of (was present at)

Conceptual Creation: has created (was created by)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Activity: motivated the creation of (was created for)

Information Object: is composed of (forms part of)

Activity: took into account (was taken into account by)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

Activity: was motivation for (motivated)

E37 Mark

Belongs to: Concept Type
Subclass of: Visual Item
Superclass of: Inscription

Scope note:

Martin Doerr: Symbols, signs, signatures or short texts applied to physical objects by arbitrary techniques in order to indicate the creator, owner, dedications, purpose, etc.

Examples: Minoan double axe mark, ©, ☺, STOP! .

This entity specifically does not include marks such as scratches, which have no semantic significance. These can be documented as physical features.

Properties:

identifications

is identified by (identifies): Appellation

has title (is title of): Title

(has type : Type)

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

short cut, legal status

right held by (has right on): Actor

(has type : Type)

(has note : String)

intellectual contents

refers to concept (is referred to by): Type

refers to (is referred to by): CRM Entity

(has type : Type)

structures

is composed of (forms part of): Information Object

other descriptions

was intended for (was intention of): Type

had as general use (was use of): Type has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Activity: was intended use of (was made for)

(mode of use : String)

Event: occurred in the presence of (was present at)

Conceptual Creation: has created (was created by)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Physical Man-Made Stuff: shows visual item (is shown by)

Activity: motivated the creation of (was created for)

Information Object: is composed of (forms part of)

Activity: took into account (was taken into account by)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

Activity: was motivation for (motivated)

E38 Image

Belongs to: Concept Type
Subclass of: Visual Item

Scope note: This entity refers to distributions of form and colour which may be found on surfaces such as photos, paintings, prints, and sculptures etc. or directly on electronic media. The degree to which variations in the distribution of form and colour are tolerated depends on a given purpose.

The 'depiction' links between objects and depicted subjects may be regarded as short cuts of an intermediate image node capturing the optical features of the depiction. Cf E25

Examples: The front side of all 20 Frs notes.

Properties:

identifications

is identified by (identifies): Appellation

has title (is title of): Title

(has type : Type)

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

short cut, legal status

right held by (has right on): Actor

(has type : Type)

(has note : String)

intellectual contents

refers to concept (is referred to by): Type

refers to (is referred to by): CRM Entity

(has type : Type)

structures

is composed of (forms part of): Information Object

other descriptions

was intended for (was intention of): Type

had as general use (was use of): Type

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Activity: was intended use of (was made for)

(mode of use : String)

Event: occurred in the presence of (was present at)

Conceptual Creation: has created (was created by)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Physical Man-Made Stuff: shows visual item (is shown by)

Activity: motivated the creation of (was created for)

Information Object: is composed of (forms part of)

Activity: took into account (was taken into account by)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)
Activity: was motivation for (motivated)

Actors Hierarchy

All entities in this hierarchy are instances of the metaclass “Actor Type”.

Until now, only one subclass is defined, the physical person. As this has a physical nature as well, it is listed already under physical objects (In a passive sense, as patient, mummy etc.). Here in the future, all kinds of social organizations should be characterized.

E39 Actor

Belongs to: Actor Type
Subclass of: Existence
Superclass of: Group
Person

Scope note: People, either individuals or a groups of persons, or organisations, under the aspect of their role in activities. E.g. The ISO central committee, the Benaki Museum in Athens, Greece, the Bauhaus in Weimar, Germany, Monet, Me.

An informal group, such as a school of artists, may acquire an identity and perform actions without ever becoming an officially established legal entity. Such cases should be documented as instances of Actors, using an appropriate sub type.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

other descriptions

**has current or former residence (is current or former residence of): Place
possesses (is possessed by): Right**

has contact points (provides access to): Contact Point

has note: String

(has type : Type)

The entity is referenced by:

Activity: carried out by (performed)

(in the role of : Type)

Acquisition: transferred title to (acquired title of)

Acquisition: transferred title from (surrendered title of)

Transfer of Custody: custody surrendered by (surrendered custody)

Transfer of Custody: custody received by (received custody)

Legal Object: right held by (has right on)

(has type : Type)

(has note : String)

Physical Object: has former or current keeper (is former or current keeper of)

Physical Object: has current keeper (is current keeper of)

Physical Object: has former or current owner (is former or current owner of)

Physical Object: has current owner (is current owner of)

Event: had participants (participated in)

Group: had member (was member of)

The entity inherits references:

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E40 Legal Body

Belongs to: Actor Type
Subclass of: Group

Scope Note: A legal body is any institution or group of people which can act collectively as an agent i.e. it can perform actions, own property, create or destroy and be held responsible for its actions. The term 'personne morale' is often used in French.

Examples: MDA (Europe) Ltd., GreenPeace.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

structures

consists of (belongs to): Legal Body

had member (was member of): Actor

other descriptions

has current or former residence (is current or former residence of): Place

possesses (is possessed by): Right

has contact points (provides access to): Contact Point

has note: String

(has type : Type)

The entity is referenced by:

Person: is member of (has members)
and itself.

The entity inherits references:

Activity: carried out by (performed)

(in the role of : Type)

Acquisition: transferred title to (acquired title of)

Acquisition: transferred title from (surrendered title of)

Transfer of Custody: custody surrendered by (surrendered custody)

Transfer of Custody: custody received by (received custody)

Type Assignment: classified (was classified by)

Legal Object: right held by (has right on)

(has type : Type)

(has note : String)

Physical Object: has former or current keeper (is former or current keeper of)

Physical Object: has current keeper (is current keeper of)

Physical Object: has former or current owner (is former or current owner of)

Physical Object: has current owner (is current owner of)

Event: had participants (participated in)

Document: documents (is documented in)

Formation: has formed (was formed by)

Dissolution: dissolved (was dissolved by)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Group: had member (was member of)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

Person (repetition from under Biological Object)

Belongs to: Actor Type
Physical Object Type
Subclass of: Actor
Biological Object

Properties (See under Biological Object)

Appellations Hierarchy

All entities in this hierarchy are instances of the metaclass “Appellation Type. This hierarchy is thought to capture all kinds of social or technical identifiers, names, numbers, codes etc. To which degree there is an overlap with conceptual objects should be discussed.

E41 Appellation

Belongs to: Appellation Type
Subclass of: Existence
Superclass of: Object Identifier
Place Appellation
Time Appellation
Title
Conceptual Object Appellation

Scope note: This entity comprises all names in the proper sense. Codes or words, meaningless or meaningful, in the script of some group or encoding of an electronic system, used solely to identify a specific instance of some category within a certain context. These words do not identify the object by their meaning but by convention, tradition or agreement.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

other descriptions

has note: String

(has type : Type)

The entity is referenced by :

CRM Entity: is identified by (identifies)

The entity inherits references:

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E42 Object Identifier

Belongs to: Appellation Type
Subclass of: Appellation

Scope note: Unique codes assigned to objects in order to identify them uniquely within the context of one or more organizations. Typically alphanumeric sequences.

examples: MM.GE.195, 13.45.1976, etc.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

other descriptions

has note: String

(has type : Type)

The entity is referenced by:

Identifier Assignment: assigns (is assigned by)

Identifier Assignment: deassigns (is deassigned by)

Physical Object: is identified by (identifies)

Physical Object: preferred identifier is (is preferred identifier of)

The entity inherits references:

CRM Entity: is identified by (identifies)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E44 Place Appellation

Belongs to: Appellation Type
Subclass of: Appellation
Superclass of: Address
Section Definition
Spatial Coordinates
Place Name

Scope Note: A place appellation is any sort of identifier used to refer to a place. Place appellations may vary over time, and the same appellation may be used to refer to several places, either because of cultural shifts, or because things move around. These unstable aspects of place appellations are dealt with in the more general Appellation class. Place appellations can be extremely varied in form, postal addresses and spatial coordinates and parts of buildings can all be considered as place appellations.

Examples: Vienna, Wien, Aquae Sulis Minerva, Bath, Cambridge, “The Other Place”. “The City”.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

other descriptions

has note: String

(has type : Type)

The entity is referenced by:

Place: is identified by (identifies)

The entity inherits references:

CRM Entity: is identified by (identifies)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E45 Address

Belongs to: Appellation Type
Subclass of: Place Appellation
Contact Point

Scope Note: An address is generally a postal address used for mailing. An address can be considered both as the name of a place and as a contact point for an actor. This dual aspect is reflected in the multiple inheritance.

Example : 1-29-3 Otsuka, Bunkyo-ku,
Tokyo, 121, Japan

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

CRM Entity: is identified by (identifies)

Type Assignment: classified (was classified by)

Actor: has contact points (provides access to)

Place: is identified by (identifies)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E46 Section Definition

Belongs to: Appellation Type
Subclass of: Place Appellation
Superclass of

Scope Note: section definition groups together names used to refer to parts of objects. The 'prow' of a boat, the 'frame' of the picture, the 'basement' of the building are all section definitions. The entity highlights the fact that parts of objects can be treated as locations. (cf. E53 Place) In answer to the question 'where is the signature?' one might reply 'on the lower left corner'.

Example: The entrance lobby to MDA House, Matthew's bedroom, the poop deck of H.M.S. Victory, the Venus de Milo's left buttock, "left inner side of the box".

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

other descriptions

has note: String

(has type : Type)

The entity is referenced by:

Physical Object: has section definition (defines section)

The entity inherits references:

CRM Entity: is identified by (identifies)

Type Assignment: classified (was classified by)

Place: is identified by (identifies)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E47 Spatial Coordinates

Belongs to: Appellation Type
Subclass of: Place Appellation

Scope Note: Coordinates are a specific form of place appellation, that is, a means of referring to a particular place. (cf E53 place) Coordinates are not restricted to longitude, latitude and altitude. Any regular system of reference that maps onto a physical object can be considered as coordinates.

Examples: 6°5'29"N 45°12'13"W,
Black queen's bishop 4.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

CRM Entity: is identified by (identifies)

Type Assignment: classified (was classified by)

Place: is identified by (identifies)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E48 Place Name

Belongs to: Appellation Type
Subclass of: Place Appellation

Scope Note: A place name is a particular and common form of place appellation. 'Greece', 'Athens', 'Geneva', are all place names. Place names may shift their meaning over time. Cf Place appellations.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

CRM Entity: is identified by (identifies)

Type Assignment: classified (was classified by)

Place: is identified by (identifies)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E49 Time Appellation

Belongs to: Appellation Type
Subclass of: Appellation
Superclass of: Date

Scope Note: Time appellation groups all forms of names or codes, such as historical periods, and dates, which are used to refer to specific time frames. Time appellations may vary in their degree of precision, and they may be relative to other time frames, 'prehistoric' for example. These aspects of time appellations are dealt with in the more general 'appellations' class.

In contrast to cultural periods, proper names are seldom given to particular Time-spans, hence it was decided to exclude a specific entity 'Time-spans name'. Time-spans are often referred to in association with cultural periods, and events e.g. 'the duration of Ming Dynasty'. cf. E52 Time-span.

Examples: Meiji, 1st half of the XX century, Quaternary, 1215 Hegira. Last century.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

other descriptions

has note: String

(has type : Type)

The entity is referenced by:

Time-Span: is identified by (identifies)

The entity inherits references:

CRM Entity: is identified by (identifies)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E50 Date

Belongs to: Appellation Type
Subclass of: Time Appellation
Superclass of:

Scope Note: Dates are a specific form of time appellation. Dates may vary in their degree of precision. E.g. 1900, 4-4-1959, 19640604.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

CRM Entity: is identified by (identifies)

Type Assignment: classified (was classified by)

Time-Span: is identified by (identifies)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

Title (Repetition from under Linguistic Object)

Belongs to: Concept Type
Appellation Type
Subclass of: Appellation
Linguistic Object

Properties: (see under Linguistic Object)

Appellation associated entities:

E51 Contact Point

(new)

Belongs to: Meta Entity
Subclass of: Existence
Superclass of: Address

Scope Note: This entity comprises identifiers used to communicate with Actors. Examples: E-mail addresses, telephone numbers, post office boxes, Fax numbers, etc. NB postal addresses can be considered both as place appellations and Contact Points.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

other descriptions

has note: String

(has type : Type)

The entity is referenced by:

Actor: has contact points (provides access to)

The entity inherits references:

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

Address (Repetition from under Place Appellation)

Belongs to: Appellation Type
Subclass of: Contact Point
Place Appellation

Properties: (see under Place Appellation)

Measures Hierarchy

All entities in this hierarchy are instances of the metaclass “Measure Type”. Three submetaclasses are defined, the “Time Type” for the hierarchy of determinators of a date range in any possible system (e.g. rules of Egyptian kings, Julian dates, C14 etc.), the “Location Type” for the determinators of areas in space, relative to the surface of the earth or other relevant methods, and the “Dimension Types” for all relative measures, as money, lengths, durations, degrees etc.

E52 Time-Span

(former E36)

Belongs to: Time Type
Subclass of: CRM Entity

Scope note: A determination of a range of dates or duration without any further connotations, to be used to confine periods, events, and any other phenomena valid for a certain time. A time appellation is a verbal form which refers to a time-span. The time-span itself is a temporal extent in the sense of Galilean physics. Different time-appellations may express the same time-span.

Examples : from 12-17-1993 to 12-8-1996, 14h30 – 16h22 4th July 1945, 9.30 am 1.1.1999 to 2.00 pm 1.1.1999, Duration of the Ming Dynasty.

Properties:

identifications

is identified by (identifies): Time Appellation

property note: this is the subproperty of “E1CRM Entity.(is identified by)”.

is identified by (identifies): Appellation

classifications

has type (is type of): Type

numerical values

begins at qualify: String

ends at qualify: String

at least covering: Time Primitive

property note : the inner bound, can be omitted

at most within: Time Primitive

property note : the outer bound (ensuring recall)

had at least duration: Dimension

had at most duration: Dimension

structures

consists of (forms part of): Time-Span

falls within (contains): Time-Span

other descriptions

has note: String

(has type : Type)

The entity is referenced by:

Temporal Entity: has time-span (is time-span of)
and by itself

The entity inherits references:

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

E53 Place

Belongs to: Location Type
Subclass of: CRM Entity

Scope note: This entity describes extents in space, in particular on the surface of the earth, in the pure sense of physics: independent from temporal phenomena and matter. Places are usually determined by reference to the position of “immobile” objects such as buildings, cities, mountains, and rivers. On a large time-scale however, these things are either not persistent or may actually move, with respect to each other. This motivates the search for a global or absolute system of reference.

However, relative references are more relevant in the context of cultural documentation and records of relative places tend to be more precise. In particular, we are often interested in position in relation to large objects, such as ships, which move. Any object can serve as a reference for place determination; therefore the model foresees the notion of a "section" of a physical object as a place determination of equal validity.

Matching between multiple reference systems is in principle possible for a given moment in time, but depends on the precision and completeness of the information available. However, the resolution of places to “absolute” coordinates is not, in general, necessary in cultural documentation systems, and absolute referencing may be dependent on the present state of global knowledge.

Example: the place at which Nelson died is known with reference to a large mobile object – H.M.S Victory. A resolution of this place in terms of absolute coordinates requires knowledge about the position of the vessel and the precise time of his death, either of which may be revised. Hence, documenting only an absolute reference effectively removes the possibility of recalculating. It is more relevant to preserve the *reasoning* behind an assumption than the result.

Hence a *place* can be determined by combining, one or more times, a frame of reference and a location with respect to this frame. These combinations are modelled by Place Appellation. (Instance of place are themselves nameless.)

Example: The place referred to by the “Fish collected at three miles north of the confluence of the Arve and the Rhone, or N W. (GPS)”, Here -> <-

Properties:

identifications

is identified by (identifies): Place Appellation

property note: this is the subproperty of “E1CRM Entity.(is identified by)”.

is identified by (identifies): Appellation

classifications

has type (is type of): Type

structures

consists of (forms part of): Place

falls within (contains): Place

other descriptions

has note: String

(has type : Type)

The entity is referenced by:

Period: took place at (witnessed)

Move: moved to (occupied)

Move: moved from (vacated)

Physical Object: has section (located on or within)

Physical Object: has former or current location (is former or current location of)
Physical Object: has current permanent location (is current permanent location of)
Physical Object: has current location (currently holds)
Actor: has current or former residence (is current or former residence of)
and by itself

The entity inherits references:

Type Assignment: classified (was classified by)
Document: documents (is documented in)
Conceptual Object: refers to (is referred to by)
(has type : Type)

E54 Dimension

Belongs to: Measure Type
Subclass of: CRM Entity

Scope note: This entity is an abstract class for properties that are measured by some calibrated means and result in numerical values,

Examples: currency: £26.00, length: 4 cm, diameter 26 mm, weight 150 lbs, density : 0.85 gm/cc, luminescence : 56 ISO lumens, tin content: 0.46 %, taille au garot : 5 hands, C14 date : 2460 years, etc.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

numerical values

value: Number

unit: Measurement Unit

other descriptions

has note: String

(has type : Type)

The entity is referenced by:

Measurement: observed dimension (was observed)

Physical Stuff: has dimension (is dimension of)

Time-Span: had at most duration

Time-Span: had at least duration

The entity inherits references:

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Types Hierarchy

All entities in this hierarchy are instances of the metaclass “Type Type”. This hierarchy does not belong to the CIDOC Entities in the proper sense, as its instances are names for aggregations, sets, or undefined masses of physical items or intellectual constructs. They are thought as elements of authority files on one side, on the other they are used to refer to entities of the Model or any refinement of it as data elements at appropriate points from within the Model in a consistent way. This implies, that the respective authorities must be compatible in structure with the Model. As a rule, every entity of the model gives rise to a “Type Type”, which are not listed here, as they are defined by rule. Only those types of types not generated by the rule are given explicitly:

E55 Type

Belongs to: Type Type
Subclass of: Existence
Superclass of: Language
Material
Measurement Unit
Gender

Scope note: This entity captures the names of all entities in the model and any refinements of these entities which do not require further analysis of their formal properties, but which represent typological distinctions important to a given user group. The semantic interpretation of these subtypes is based on the agreement of specific groups. Instances of the Type entity have to be formally organized in thesauri, with scope notes, illustrations, etc. to clarify their meaning. In general, it is expected that different domains and cultural groups develop different thesauri in parallel. Consistent reasoning on the expansion of sub terms used in a thesaurus is possible insofar as it conforms to both the entities and the hierarchies of this Model.

Examples: Weight, length, depth are types of measurement. Portrait, sketch, animation could be types of depiction. Oral, written could be types of language. Excellent, good, poor could be types of condition state.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

other descriptions

has note: String

(has type : Type)

The entity is referenced by:

CRM Entity: has type (is type of)

Physical Man-Made Stuff: depicts concept (is depicted by)
(mode of depiction : Type)

Type Assignment: assigned (was assigned by)

Modification: used general technique (was technique of)

Activity: had as general purpose (was purpose of)

Conceptual Object: refers to concept (is referred to by)

Authority Document: contains (is part of)

Man-Made Stuff: was intended for (was intention of)

Stuff: had as general use (was use of)

CRM Entity: has note: has type

Conceptual Object: refers to (is referred to by): has type

Physical Man-Made Stuff: depicts object (is depicted by): mode of depiction

Physical Man-Made Stuff: depicts concept (is depicted by): mode of depiction

Physical Man-Made Stuff: depicts event (is depicted by): mode of depiction

Activity: carried out by (performed): in the role of

Legal Object: right held by (has right on): has type

Man-Made Stuff: has title (is title of): has type

The entity inherits references:

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E56 Language

Belongs to: Type Type
Subclass of: Type

Scope note: This entity comprises the names identifying natural languages. Internationally used codes are recommended (ISO...). This type does not correspond to another explicit entity in the Model.
Example: ISO language codes.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

other descriptions

has note: String

(has type : Type)

The entity is referenced by:

Linguistic Object: has language (is language of)

The entity inherits references:

CRM Entity: has type (is type of)

*Physical Man-Made Stuff: depicts concept (is depicted by)
(mode of depiction : Type)*

Type Assignment: assigned (was assigned by)

Modification: used general technique (was technique of)

Activity: had as general purpose (was purpose of)

Conceptual Object: refers to concept (is referred to by)

Authority Document: contains (is part of)

Man-Made Stuff: was intended for (was intention of)

Stuff: had as general use (was use of)

CRM Entity: has note: has type

Conceptual Object: refers to (is referred to by): has type

Physical Man-Made Stuff: depicts object (is depicted by): mode of depiction

Physical Man-Made Stuff: depicts concept (is depicted by): mode of depiction

Physical Man-Made Stuff: depicts event (is depicted by): mode of depiction

Activity: carried out by (performed): in the role of

Legal Object: right held by (has right on): has type

Man-Made Stuff: has title (is title of): has type

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E57 Material

Belongs to: Type Type
Subclass of: Type

Scope note: This entity comprises the names used to identify materials. Internationally used codes and terminology are recommended. This type does not correspond to any other explicit entity in the Model, because materials do not have well-defined instances, especially after they are used. Discrete pieces of raw-materials kept in museums, such as bricks, sheets of fabric, pieces of metal, should be modelled separately just as other objects. Discrete used or processed pieces, such as the stones from Nefer Titi's temple, should be modelled as parts.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

other descriptions

has note: String

(has type : Type)

The entity is referenced by:

Physical Stuff: consists of (is incorporated in)

Design or Procedure: usually employs (is usually employed by)

The entity inherits references :

CRM Entity: has type (is type of)

Physical Man-Made Stuff: depicts concept (is depicted by)

(mode of depiction : Type)

Type Assignment: assigned (was assigned by)

Modification: used general technique (was technique of)

Activity: had as general purpose (was purpose of)

Conceptual Object: refers to concept (is referred to by)

Authority Document: contains (is part of)

Man-Made Stuff: was intended for (was intention of)

Stuff: had as general use (was use of)

CRM Entity: has note: has type

Conceptual Object: refers to (is referred to by): has type

Physical Man-Made Stuff: depicts object (is depicted by): mode of depiction

Physical Man-Made Stuff: depicts concept (is depicted by): mode of depiction

Physical Man-Made Stuff: depicts event (is depicted by): mode of depiction

Activity: carried out by (performed): in the role of

Legal Object: right held by (has right on): has type

Man-Made Stuff: has title (is title of): has type

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E58 Measurement Unit

Belongs to: Type Type
Subclass of: Type

Scope Note: This entity provides the authority list for all types of measurement units: feet, inches, centimeters, litres, lumens, etc.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

other descriptions

has note: String

(has type : Type)

The entity is referenced by:

Dimension: unit

The entity inherits references:

CRM Entity: has type (is type of)

*Physical Man-Made Stuff: depicts concept (is depicted by)
(mode of depiction : Type)*

Type Assignment: assigned (was assigned by)

Modification: used general technique (was technique of)

Activity: had as general purpose (was purpose of)

Conceptual Object: refers to concept (is referred to by)

Authority Document: contains (is part of)

Man-Made Stuff: was intended for (was intention of)

Stuff: had as general use (was use of)

CRM Entity: has note: has type

Conceptual Object: refers to (is referred to by): has type

Physical Man-Made Stuff: depicts object (is depicted by): mode of depiction

Physical Man-Made Stuff: depicts concept (is depicted by): mode of depiction

Physical Man-Made Stuff: depicts event (is depicted by): mode of depiction

Activity: carried out by (performed): in the role of

Legal Object: right held by (has right on): has type

Man-Made Stuff: has title (is title of): has type

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

Other entities:

E59 Primitive Value

Belongs to: Value Type

Scope Note: This entity is a container for primitive values used as documentation elements which are not further analysed. As such they are not considered as elements within our universe of discourse. No specific implementation recommendations are made.

The entity is not referenced.

E60 Number

Belongs to: Value Type
Subclass of: Primitive Value

Scope Note: Integers, real or complex numbers.

The entity is referenced by:

Physical Object: has number of parts
Dimension: value

E61 Time Primitive

Belongs to: Value Type
Subclass of: Primitive Value

Scope Note: This entity is a primitive value that should implement appropriate validation and interval logic for date ranges and precision relevant to cultural documentation. It is not further analysed in this model

The entity is referenced by:

Time-Span: at most within
Time-Span: at least covering

E62 String

Belongs to: Value Type
Subclass of: Primitive Value

Scope Note: This entity is a primitive value to be used for any kind of documentation which lacks formal structure defined within the model e.g. free text, bitmaps, vector graphics, etc.

The entity is referenced by:

CRM Entity: has note

Legal Object: right held by (has right on): has note

Activity: used object (was used for): mode of use

Activity: was intended use of (was made for): mode of use

Time-Span: begins at qualify

Time-Span: ends at qualify

E63 Beginning of Existence

Belongs to: Period Type
Subclass of: Event
Superclass of: Conceptual Creation
Production
Formation
Birth

Scope note: Entity for temporal reasoning about things beginning to exist – Intellectual products, physical items, groups of people, living beings, a hook for termini postquem and antequem. It may turn out useful to define more specializations of this entity for Natural History.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

active participants

had participants (participated in): Actor

passive participants

brought into existence (was brought into existence by): Existence

property note: this is the superproperty of “has produced”, “has formed”, “brought into life”, “has created”.

occurred in the presence of (was present at): Stuff

spatial definitions

took place at (witnessed): Place

short cut, spatial definitions

took place on or within (witnessed): Physical Object

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references :

Physical Man-Made Stuff : depicts event (is depicted by)

(mode of depiction : Type)

Period : falls within (contains)

Period : consists of (forms part of)

Type Assignment : classified (was classified by)

Document : documents (is documented in)

Conceptual Object : refers to (is referred to by)

(has type : Type)

E64 End of Existence

Belongs to: Period Type
Subclass of: Event
Superclass of: Destruction
Dissolution
Death

Scope note: Entity for temporal reasoning about things stopping to exist –
physical items, groups of people, living beings –
A hook for termini postquem and antequem.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

active participants

had participants (participated in): Actor

passive participants

took out of existence (was taken out of existence by): Existence

property note: this is the superproperty of “destroyed”, “dissolved” “was death of”.

occurred in the presence of (was present at): Stuff

spatial definitions

took place at (witnessed): Place

short cut, spatial definitions

took place on or within (witnessed): Physical Object

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Physical Man-Made Stuff: depicts event (is depicted by)

(mode of depiction : Type)

Period: falls within (contains)

Period: consists of (forms part of)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

E65 Conceptual Creation

Belongs to: Period Type
Subclass of: Beginning of Existence
Activity

Scope note: The creation of an immaterial product – Text, music, image, movie, Law etc.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

active participants

had participants (participated in): Actor

carried out by (performed): Actor

(in the role of: Type)

passive participants

has created (was created by): Conceptual Object

property note: this is a subproperty of “brought into existence”, “occurred in the presence of”

brought into existence (was brought into existence by): Existence

took into account (was taken into account by): Conceptual Object

occurred in the presence of (was present at): Stuff

used object (was used for): Physical Object

(mode of use : String)

motivations

was motivation for (motivated): Conceptual Object

motivated the creation of (was created for): Conceptual Object

had specific purpose (was purpose of): Activity

had as general purpose (was purpose of): Type

was intended use of (was made for): Man-Made Stuff

(mode of use : String)

short cut, spatial definitions

took place on or within (witnessed): Physical Object

spatial definitions

took place at (witnessed): Place

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Physical Man-Made Stuff: depicts event (is depicted by)

(mode of depiction : Type)

Period: falls within (contains)

Period: consists of (forms part of)

Activity: had specific purpose (was purpose of)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

E66 Formation

Belongs to: Period Type
Subclass of: Beginning of Existence
Activity

Scope note: The formation or foundation of a formal or informal group of people

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

active participants

had participants (participated in): Actor

carried out by (performed): Actor

(in the role of : Type)

passive participants

has formed (was formed by): Group

property note: this is a subproperty of “brought into existence”, “had participants”.

brought into existence (was brought into existence by): Existence

took into account (was taken into account by): Conceptual Object

occurred in the presence of (was present at): Stuff

used object (was used for): Physical Object

(mode of use : String)

motivations

was motivation for (motivated): Conceptual Object

motivated the creation of (was created for): Conceptual Object

had specific purpose (was purpose of): Activity

had as general purpose (was purpose of): Type

was intended use of (was made for): Man-Made Stuff

(mode of use : String)

short cut, spatial definitions

took place on or within (witnessed): Physical Object

spatial definitions

took place at (witnessed): Place

temporal definitions

has time-span (is time- span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Physical Man-Made Stuff: depicts event (is depicted by)

(mode of depiction : Type)

Period: falls within (contains)

Period: consists of (forms part of)

Activity: had specific purpose (was purpose of)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

E67 Birth

Belongs to: Period Type
Subclass of: Beginning of Existence

Scope note: The birth of a human being.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

active participants

by mother (gave birth): Person

property note: this is the subproperty of “had participants”.

from father (was father for): Person

had participants (participated in): Actor

passive participants

brought into life (was born): Person

property note: this is a subproperty of “brought into existence”, “had participants”.

brought into existence (was brought into existence by): Existence

occurred in the presence of (was present at): Stuff

spatial definitions

took place at (witnessed): Place

short cut, spatial definitions

took place on or within (witnessed): Physical Object

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Physical Man-Made Stuff: depicts event (is depicted by)

(mode of depiction : Type)

Period: falls within (contains)

Period: consists of (forms part of)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

E68 Dissolution

Belongs to: Period Type
Subclass of: End of Existence

Scope note: The formal or informal end of a group of people. If it was a deliberate act, the instance should also be instantiated as an activity

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

active participants

had participants (participated in): Actor

passive participants

dissolved (was dissolved by): Group

property note: this is a subproperty of “took out of existence”, “had participants”.

took out of existence (was taken out of existence by): Existence

occurred in the presence of (was present at): Stuff

short cut, spatial definitions

took place on or within (witnessed): Physical Object

spatial definitions

took place at (witnessed): Place

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Physical Man-Made Stuff: depicts event (is depicted by)

(mode of depiction : Type)

Period: falls within (contains)

Period: consists of (forms part of)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

E69 Death

Belongs to: Period Type
Subclass of: End of Existence

Scope note: The death of a human being. If the person was killed, the instance should also be instantiated as an activity

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

active participants

had participants (participated in): Actor

passive participants

was death of (died in) : Person

property note: this is a subproperty of “took out of existence”, “had participants”.

took out of existence (was taken out of existence by): Existence

occurred in the presence of (was present at): Stuff

spatial definitions

took place at (witnessed): Place

short cut, spatial definitions

took place on or within (witnessed): Physical Object

temporal definitions

has time-span (is time-span of): Time-Span

structures

consists of (forms part of): Period

falls within (contains): Period

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Physical Man-Made Stuff: depicts event (is depicted by)

(mode of depiction : Type)

Period: falls within (contains)

Period: consists of (forms part of)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

E70 Stuff

Belongs to: Object Type
Subclass of: Existence
Superclass of: Man-Made Stuff
Physical Stuff

Scope note: An identifiable, discrete, persistent item which constitutes a unit for documentation, be it an intellectual product or a physical thing. Such items are characterized by a relative stability, i.e. either a solid physical form, an electronic encoding, a reproducible pattern, a logical concept or structure. It introduces the concept of **being used**.
Excluded are liquids flowing, gases moving around etc. A packaged liquid however fits this entity.

Properties

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

other descriptions

had as general use (was use of): Type

(moved up from E19 Physical Object)

has note: String

(has type : Type)

The entity is referenced by:

Event: occurred in the presence of (was present at)

The entity inherits references:

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E71 Man-Made Stuff

Belongs to: Object Type
Subclass of: Stuff
Superclass of: Physical Man-Made Stuff
Conceptual Object

Scope note: An identifiable, discrete, persistent item deliberately produced, invented or created by humans which constitutes a unit for documentation, be an intellectual product, idea or a physical thing.

Properties

identifications

has title (is title of): Title

(has type : Type)

(taken over from E19 Physical Object)

property note: this is the subproperty of “E1CRM Entity.(is identified by)”,

is identified by (identifies): Appellation

classifications

has type (is type of): Type

other descriptions

was intended for (was intention of): Type

(moved up from E22 Man-Made Object)

had as general use (was use of): Type

has note: String

(has type : Type)

The entity is referenced by:

Activity: was intended use of (was made for)
(mode of use : String)

The entity inherits references:

Event: occurred in the presence of (was present at)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E72 Legal Object

Belongs to: Object Type
Subclass of: Existence
Superclass of: Information Object
Physical Stuff

Scope note: An identifiable item which can be owned or people can have a right on. It is not restricted to Stuff. May be Legal Bodies should be included.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

(taken over from Physical Object)

short cut, legal status

right held by (has right on): Actor

(has type : Type)

(has note : String)

(taken over from Physical Object)

property note: It is short cut of the “Right”.

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E73 Information Object

Belongs to: Concept Type
Subclass of: Conceptual Object
Legal Object
Superclass of: Iconographic Object
Linguistic Object
Visual Item
Document
Design or Procedure

Scope note: An identifiable immaterial item which constitutes a unit for documentation and has an objectively recognizable structure. Examples are data sets, images, texts, procedure prescriptions. It does not include types, ideas etc.

Properties:

identifications

is identified by (identifies): Appellation
has title (is title of): Title
(has type : Type)

classifications

has type (is type of): Type

legal status

is subject to (applies to): Right

short cut, legal status

right held by (has right on): Actor
(has type : Type)
(has note : String)

intellectual contents

refers to concept (is referred to by): Type
refers to (is referred to by): CRM Entity
(has type : Type)

structures

is composed of (forms part of): Information Object

other descriptions

was intended for (was intention of): Type
had as general use (was use of): Type
has note: String
(has type : Type)

The entity is referenced only by itself.

Information Object: is composed of (forms part of)

The entity inherits references:

Activity: was intended use of (was made for)
(mode of use : String)

Event: occurred in the presence of (was present at)

Conceptual Creation: has created (was created by)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Activity: motivated the creation of (was created for)

Activity: took into account (was taken into account by)

Conceptual Object: refers to (is referred to by)
(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

Activity: was motivation for (motivated)

E74 Group

Belongs to: Actor Type
Subclass of: Actor
Superclass of: Legal Body

Scope note: A group is any gathering of people that acts collectively or in a similar way due to any kind of social bounds or contact. Nationality can be handled as a link to a group of appropriate type. Note the distinction between citizenship and ethnic group and other subtleties not easily expressible by nationality adjectives.
Examples: A group of people painting together at some happening, A tribe of indigenous people, an artist workshop, a *museum*, “Those at the Bastille”, a nation, a *government*, a *company*.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

structures

had member (was member of): Actor

property note: Any kind of belonging to a group. May be seen as shortcut of a respective temporal entity

other descriptions

has current or former residence (is current or former residence of): Place

possesses (is possessed by): Right

has contact points (provides access to): Contact Point

has note: String

(has type : Type)

The entity is referenced by:

Dissolution: dissolved (was dissolved by)

Formation: has formed (was formed by)

The entity inherits references:

Activity: carried out by (performed)

(in the role of : Type)

Legal Object: right held by (has right on)

(has type : Type)

(has note : String)

Physical Object: has current owner (is current owner of)

Physical Object: has former or current owner (is former or current owner of)

Physical Object: has current keeper (is current keeper of)

Physical Object: has former or current keeper (is former or current keeper of)

Event: had participants (participated in)

Acquisition: transferred title from (surrendered title of)

Acquisition: transferred title to (acquired title of)

Transfer of Custody: custody received by (received custody)

Transfer of Custody: custody surrendered by (surrendered custody)

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Group: had member (was member of)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E75 Conceptual Object Appellation

Belongs to: Appellation Type
Subclass of: Appellation

Scope note: Specific Identifiers of an intellectual product or standardized pattern
Examples: ISBN 3-7913-1418-1, ISO2788-1986 (E)

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

other descriptions

has note: String

(has type : Type)

The entity is not referenced.

The entity inherits references:

Type Assignment: classified (was classified by)

Document: documents (is documented in)

CRM Entity: is identified by (identifies)

Conceptual Object: refers to (is referred to by)

(has type : Type)

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E76 Gender

Belongs to: Type Type
Subclass of: Type

Scope note:

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

other descriptions

has note: String

(has type : Type)

The entity is referenced by:

Person: has gender (is gender of)

The entity inherits references:

CRM Entity: has type (is type of)

*Physical Man-Made Stuff: depicts concept (is depicted by)
(mode of depiction : Type)*

Type Assignment: assigned (was assigned by)

Modification: used general technique (was technique of)

Activity: had as general purpose (was purpose of)

Conceptual Object: refers to concept (is referred to by)

Authority Document: contains (is part of)

Man-Made Stuff: was intended for (was intention of)

Stuff: had as general use (was use of)

CRM Entity: has note: has type

Conceptual Object: refers to (is referred to by): has type

Physical Man-Made Stuff: depicts object (is depicted by): mode of depiction

Physical Man-Made Stuff: depicts concept (is depicted by): mode of depiction

Physical Man-Made Stuff: depicts event (is depicted by): mode of depiction

Activity: carried out by (performed): in the role of

Legal Object: right held by (has right on): has type

Man-Made Stuff: has title (is title of): has type

Type Assignment: classified (was classified by)

Document: documents (is documented in)

*Conceptual Object: refers to (is referred to by)
(has type : Type)*

Beginning of Existence: brought into existence (was brought into existence by)

End of Existence: took out of existence (was taken out of existence by)

E77 Existence

Belongs to: MetaEntity
Subclass of: CRM Entity
Superclass of: Legal Object
Stuff
Contact Point
Type
Appellation
Actor

Scope note: This is an abstract entity, which comprises the kinds of things that have the potential to exist for a relevant time-span preserving their identity. It comprises physical items and intellectual products, groups of people, living beings, etc. Types are included in their nature as intellectual product, in particular in natural history, where types are based on the finding of a prototypical specimen. Appellations are included in their nature as creations of the people using them.

Examples: ISBN 3-00-007556-9, me, Arethusa ophioglossoides, Shakespeare's Hamlet, Aphrodite of Milos.

Properties:

identifications

is identified by (identifies): Appellation

classifications

has type (is type of): Type

other descriptions

has note: String

(has type : Type)

The entity is referenced by:

End of Existence: took out of existence (was taken out of existence by)

Beginning of Existence: brought into existence (was brought into existence by)

The entity inherits references :

Type Assignment: classified (was classified by)

Document: documents (is documented in)

Conceptual Object: refers to (is referred to by)

(has type : Type)

APPENDIX

Index of the properties of the CIDOC CRM sorted alphabetic :

Property id	Entity – Domain	Domain id	Property Name	Entity - Range	Range id
P42	Type Assignment	E17	assigned (was assigned by)	Type	E55
P37	Identifier Assignment	E15	assigns (is assigned by)	Object Identifier	E42
P81	Time-Span	E52	at least covering	Time Primitive	E61
P82	Time-Span	E52	at most within	Time Primitive	E61
P56	Physical Object	E19	bears feature (is found on)	Physical Feature	E26
P79	Time-Span	E52	begins at qualify	String	E62
P92	Beginning of Existence	E63	brought into existence (was brought into existence by)	Existence	E77
P98	Birth	E67	<i>brought into life (was born)</i>	Person	E21
P96	Birth	E67	by mother (gave birth)	Person	E21
P14	Activity	E7	carried out by (performed) (in the role of : Type)	Actor	E39
P41	Type Assignment	E17	classified (was classified by)	CRM Entity	E1
P34	Condition Assessment	E14	concerned (was assessed by)	Physical Stuff	E18
P77	Legal Body	E40	consists of (belongs to)	Legal Body	E40
P85	Time-Span	E52	consists of (forms part of)	Time-Span	E52
P88	Place	E53	consists of (forms part of)	Place	E53
P5	Condition State	E3	consists of (forms part of)	Condition State	E3
P9	Period	E4	consists of (forms part of)	Period	E4
P45	Physical Stuff	E18	consists of (is incorporated in)	Material	E57
P71	Authority Document	E32	contains (is part of)	Type	E55
P29	Transfer of Custody	E10	<i>custody received by (received custody)</i>	Actor	E39
P28	Transfer of Custody	E10	<i>custody surrendered by (surrendered custody)</i>	Actor	E39
P38	Identifier Assignment	E15	deassigns (is deassigned by)	Object Identifier	E42
P64	Physical Man-Made Stuff	E24	depicts concept (is depicted by) (mode of depiction : Type)	Type	E55
P63	Physical Man-Made Stuff	E24	depicts event (is depicted by) (mode of depiction : Type)	Event	E5
P62	Physical Man-Made Stuff	E24	depicts object (is depicted by) (mode of depiction : Type)	Physical Stuff	E18

Property id	Entity – Domain	Domain id	Property Name	Entity - Range	Range id
P13	Destruction	E6	destroyed (was destroyed by)	Physical Object	E19
P99	Dissolution	E68	<i>dissolved (was dissolved by)</i>	Group	E74
P70	Document	E31	documents (is documented in)	CRM Entity	E1
P80	Time-Span	E52	ends at qualify	String	E62
P6	Condition State	E3	falls within (contains)	Condition State	E3
P10	Period	E4	falls within (contains)	Period	E4
P86	Time-Span	E52	falls within (contains)	Time-Span	E52
P89	Place	E53	falls within (contains)	Place	E53
P97	Birth	E67	from father (was father for)	Person	E21
P21	Activity	E7	had as general purpose (was purpose of)	Type	E55
P83	Time-Span	E52	had at least duration	Dimension	E54
P84	Time-Span	E52	had at most duration	Dimension	E54
P107	Group	E74	had member (was member of)	Actor	E39
P11	Event	E5	had participants (participated in)	Actor	E39
P20	Activity	E7	had specific purpose (was purpose of)	Activity	E7
P101	Stuff	E70	had as general use (was use of)	Type	E55
P44	Physical Stuff	E18	has condition (condition of)	Condition State	E3
P76	Actor	E39	has contact points (provides access to)	Contact Point	E51
P94	Conceptual Creation	E65	<i>has created (was created by)</i>	Conceptual Object	E28
P50	Physical Object	E19	has current keeper (is current keeper of)	Actor	E39
P55	Physical Object	E19	has current location (currently holds)	Place	E53
P74	Actor	E39	has current or former residence (is current or former residence of)	Place	E53
P52	Physical Object	E19	has current owner (is current owner of)	Actor	E39
P54	Physical Object	E19	has current permanent location (is current permanent location of)	Place	E53
P43	Physical Stuff	E18	has dimension (is dimension of)	Dimension	E54
P35	Condition Assessment	E14	has identified (identified by)	Condition State	E3
P95	Formation	E66	<i>has formed (was formed by)</i>	Group	E74
P49	Physical Object	E19	has former or current keeper (is former or current keeper of)	Actor	E39
P53	Physical Object	E19	has former or current location (is former or current location of)	Place	E53
P51	Physical Object	E19	has former or current owner (is former or current owner of)	Actor	E39
P61	Person	E21	has gender (is gender of)	Gender	E76
P72	Linguistic Object	E33	has language (is language of)	Language	E56
P3	CRM Entity	E1	has note (has type : Type)	String	E62
P31	Modification	E11	has modified (was modified by)	Physical Man-Made Stuff	E24

Property id	Entity – Domain	Domain id	Property Name	Entity - Range	Range id
P57	Physical Object	E19	has number of parts	Number	E60
P108	Production	E12	has produced (was produced by)	Physical Man-Made Stuff	E24
P59	Physical Object	E19	has section (is located on or within)	Place	E53
P58	Physical Object	E19	has section definition (defines section)	Section Definition	E46
P4	Temporal Entity	E2	has time-span (is time-span of)	Time-Span	E52
P102	Man-Made Stuff	E71	has title (is title of) (has type : Type)	Title	E35
P73	Linguistic Object	E33	has translation (is translation of)	Linguistic Object	E33
P2	CRM Entity	E1	has type (is type of)	Type	E55
P69	Design or Procedure	E29	is associated with	Design or Procedure	E29
P46	Physical Stuff	E18	is composed of (forms part of)	Physical Stuff	E18
P106	Information Object	E73	is composed of (forms part of)	Information Object	E73
P1	CRM Entity	E1	is identified by (identifies)	Appellation	E41
P47	Physical Object	E19	is identified by (identifies)	Object Identifier	E42
P87	Place	E53	is identified by (identifies)	Place Appellation	E44
P78	Time-Span	E52	is identified by (identifies)	Time Appellation	E49
P60	Person	E21	is member of (has members)	Legal Body	E40
P104	Legal Object	E72	is subject to (applies to)	Right	E30
P39	Measurement	E16	measured (was measured by)	Physical Stuff	E18
P18	Activity	E7	motivated the creation of (was created for)	Conceptual Object	E28
P25	Move	E9	moved (moved by)	Physical Object	E19
P27	Move	E9	<i>moved from (vacated)</i>	<i>Place</i>	E53
P26	Move	E9	<i>moved to (occupied)</i>	<i>Place</i>	E53
P40	Measurement	E16	observed dimension (was observed)	Dimension	E54
P12	Event	E5	occurred in the presence of (was present at)	Stuff	E70
P75	Actor	E39	possesses (is possessed by)	Right	E30
P48	Physical Object	E19	preferred identifier is (is preferred identifier of)	Object Identifier	E42
P67	Conceptual Object	E28	refers to (is referred to by) (has type : Type)	CRM Entity	E1
P66	Conceptual Object	E28	refers to concept (is referred to by)	Type	E55
P36	Identifier Assignment	E15	registered (was registered by)	Physical Object	E19
P105	Legal Object	E72	right held by (has right on) (has type : Type) (has note : String)	Actor	E39
P65	Physical Man-Made Stuff	E24	shows visual item (is shown by)	Visual Item	E36

Property id	Entity – Domain	Domain id	Property Name	Entity - Range	Range id
P15	Activity	E7	took into account (was taken into account by)	Conceptual Object	E28
P93	End of Existence	E64	took out of existence (was taken out of existence by)	Existence	E77
P7	Period	E4	took place at (witnessed)	Place	E53
P8	Period	E4	took place on or within (witnessed)	Physical Object	E19
P30	Transfer of Custody	E10	transferred custody of (custody changed by)	Physical Object	E19
P23	Acquisition	E8	<i>transferred title from (surrendered title of)</i>	<i>Actor</i>	E39
P24	Acquisition	E8	transferred title of (changed ownership by)	Physical Object	E19
P22	Acquisition	E8	<i>transferred title to (acquired title of)</i>	<i>Actor</i>	E39
P91	Dimension	E54	unit	Measurement Unit	E58
P32	Modification	E11	used general technique (was technique of)	Type	E55
P16	Activity	E7	used object (was used for) (mode of use : String)	Physical Object	E19
P33	Modification	E11	used specific technique (was used by)	Design or Procedure	E29
P68	Design or Procedure	E29	usually employs (is usually employed by)	Material	E57
P90	Dimension	E54	value	Number	E60
P100	Death	E69	<i>was death of (died in)</i>	Person	E21
P103	Man-Made Stuff	E71	was intended for (was intention of)	Type	E55
P19	Activity	E7	was intended use of (was made for) (mode of use: String)	Man-Made Stuff	E71
P17	Activity	E7	was motivation for (motivated)	Conceptual Object	E28

Index of the properties of the CIDOC CRM sorted by domain:

Property id	Entity – Domain	Domain id	Property Name	Entity - Range	Range id
P1	CRM Entity	E1	is identified by (identifies)	Appellation	E41
P2	CRM Entity	E1	has type (is type of)	Type	E55
P3	CRM Entity	E1	has note (has type : Type)	String	E62
P4	Temporal Entity	E2	has time-span (is time-span of)	Time-Span	E52
P5	Condition State	E3	consists of (forms part of)	Condition State	E3
P6	Condition State	E3	falls within (contains)	Condition State	E3
P7	Period	E4	took place at (witnessed)	Place	E53
P8	Period	E4	took place on or within (witnessed)	Physical Object	E19
P9	Period	E4	consists of (forms part of)	Period	E4
P10	Period	E4	falls within (contains)	Period	E4
P11	Event	E5	had participants (participated in)	Actor	E39
P12	Event	E5	occurred in the presence of (was present at)	Stuff	E70
P13	Destruction	E6	destroyed (was destroyed by)	Physical Object	E19
P14	Activity	E7	carried out by (performed) (in the role of : Type)	Actor	E39
P15	Activity	E7	took into account (was taken into account by)	Conceptual Object	E28
P16	Activity	E7	used object (was used for) (mode of use : String)	Physical Object	E19
P17	Activity	E7	was motivation for (motivated)	Conceptual Object	E28
P18	Activity	E7	motivated the creation of (was created for)	Conceptual Object	E28
P19	Activity	E7	was intended use of (was made for) (mode of use: String)	Man-Made Stuff	E71
P20	Activity	E7	had specific purpose (was purpose of)	Activity	E7
P21	Activity	E7	had as general purpose (was purpose of)	Type	E55
P22	Acquisition	E8	<i>transferred title to (acquired title of)</i>	<i>Actor</i>	E39
P23	Acquisition	E8	<i>transferred title from (surrendered title of)</i>	<i>Actor</i>	E39
P24	Acquisition	E8	transferred title of (changed ownership by)	Physical Object	E19
P25	Move	E9	moved (moved by)	Physical Object	E19
P26	Move	E9	<i>moved to (occupied)</i>	<i>Place</i>	E53
P27	Move	E9	<i>moved from (vacated)</i>	<i>Place</i>	E53

Property id	Entity – Domain	Domain id	Property Name	Entity - Range	Range id
P28	Transfer of Custody	E10	<i>custody surrendered by (surrendered custody)</i>	Actor	E39
P29	Transfer of Custody	E10	<i>custody received by (received custody)</i>	Actor	E39
P30	Transfer of Custody	E10	transferred custody of (custody changed by)	Physical Object	E19
P31	Modification	E11	has modified (was modified by)	Physical Man-Made Stuff	E24
P32	Modification	E11	used general technique (was technique of)	Type	E55
P33	Modification	E11	used specific technique (was used by)	Design or Procedure	E29
P108	Production	E12	has produced (was produced by)	Physical Man-Made Stuff	E24
P34	Condition Assessment	E14	concerned (was assessed by)	Physical Stuff	E18
P35	Condition Assessment	E14	has identified (identified by)	Condition State	E3
P36	Identifier Assignment	E15	registered (was registered by)	Physical Object	E19
P37	Identifier Assignment	E15	assigns (is assigned by)	Object Identifier	E42
P38	Identifier Assignment	E15	deassigns (is deassigned by)	Object Identifier	E42
P39	Measurement	E16	measured (was measured by)	Physical Stuff	E18
P40	Measurement	E16	observed dimension (was observed)	Dimension	E54
P41	Type Assignment	E17	classified (was classified by)	CRM Entity	E1
P42	Type Assignment	E17	assigned (was assigned by)	Type	E55
P43	Physical Stuff	E18	has dimension (is dimension of)	Dimension	E54
P44	Physical Stuff	E18	has condition (condition of)	Condition State	E3
P45	Physical Stuff	E18	consists of (is incorporated in)	Material	E57
P46	Physical Stuff	E18	is composed of (forms part of)	Physical Stuff	E18
P47	Physical Object	E19	is identified by (identifies)	Object Identifier	E42
P48	Physical Object	E19	preferred identifier is (is preferred identifier of)	Object Identifier	E42
P49	Physical Object	E19	has former or current keeper (is former or current keeper of)	Actor	E39
P50	Physical Object	E19	has current keeper (is current keeper of)	Actor	E39
P51	Physical Object	E19	has former or current owner (is former or current owner of)	Actor	E39
P52	Physical Object	E19	has current owner (is current owner of)	Actor	E39
P53	Physical Object	E19	has former or current location (is former or current location of)	Place	E53
P54	Physical Object	E19	has current permanent location (is current permanent location of)	Place	E53
P55	Physical Object	E19	has current location (currently holds)	Place	E53
P56	Physical Object	E19	bears feature (is found on)	Physical Feature	E26
P57	Physical Object	E19	has number of parts	Number	E60
P58	Physical Object	E19	has section definition (defines section)	Section Definition	E46
P59	Physical Object	E19	has section (is located on or within)	Place	E53
P60	Person	E21	is member of (has members)	Legal Body	E40
P61	Person	E21	has gender (is gender of)	Gender	E76

Property id	Entity – Domain	Domain id	Property Name	Entity - Range	Range id
P62	Physical Man-Made Stuff	E24	depicts object (is depicted by) (mode of depiction : Type)	Physical Stuff	E18
P63	Physical Man-Made Stuff	E24	depicts event (is depicted by) (mode of depiction : Type)	Event	E5
P64	Physical Man-Made Stuff	E24	depicts concept (is depicted by) (mode of depiction : Type)	Type	E55
P65	Physical Man-Made Stuff	E24	shows visual item (is shown by)	Visual Item	E36
P66	Conceptual Object	E28	refers to concept (is referred to by)	Type	E55
P67	Conceptual Object	E28	refers to (is referred to by) (has type : Type)	CRM Entity	E1
P68	Design or Procedure	E29	usually employs (is usually employed by)	Material	E57
P69	Design or Procedure	E29	is associated with	Design or Procedure	E29
P70	Document	E31	documents (is documented in)	CRM Entity	E1
P71	Authority Document	E32	contains (is part of)	Type	E55
P72	Linguistic Object	E33	has language (is language of)	Language	E56
P73	Linguistic Object	E33	has translation (is translation of)	Linguistic Object	E33
P74	Actor	E39	has current or former residence (is current or former residence of)	Place	E53
P75	Actor	E39	possesses (is possessed by)	Right	E30
P76	Actor	E39	has contact points (provides access to)	Contact Point	E51
P77	Legal Body	E40	consists of (belongs to)	Legal Body	E40
P78	Time-Span	E52	is identified by (identifies)	Time Appellation	E49
P79	Time-Span	E52	begins at qualify	String	E62
P80	Time-Span	E52	ends at qualify	String	E62
P81	Time-Span	E52	at least covering	Time Primitive	E61
P82	Time-Span	E52	at most within	Time Primitive	E61
P83	Time-Span	E52	had at least duration	Dimension	E54
P84	Time-Span	E52	had at most duration	Dimension	E54
P85	Time-Span	E52	consists of (forms part of)	Time-Span	E52
P86	Time-Span	E52	falls within (contains)	Time-Span	E52
P87	Place	E53	is identified by (identifies)	Place Appellation	E44
P88	Place	E53	consists of (forms part of)	Place	E53
P89	Place	E53	falls within (contains)	Place	E53
P90	Dimension	E54	value	Number	E60
P91	Dimension	E54	unit	Measurement Unit	E58
P92	Beginning of Existence	E63	brought into existence (was brought into existence by)	Existence	E77

Property id	Entity – Domain	Domain id	Property Name	Entity - Range	Range id
P93	End of Existence	E64	took out of existence (was taken out of existence by)	Existence	E77
P94	Conceptual Creation	E65	<i>has created (was created by)</i>	Conceptual Object	E28
P95	Formation	E66	<i>has formed (was formed by)</i>	Group	E74
P96	Birth	E67	by mother (gave birth)	Person	E21
P97	Birth	E67	from father (was father for)	Person	E21
P98	Birth	E67	<i>brought into life (was born)</i>	Person	E21
P99	Dissolution	E68	<i>dissolved (was dissolved by)</i>	Group	E74
P100	Death	E69	<i>was death of (died in)</i>	Person	E21
P101	Stuff	E70	had as general use (was use of)	Type	E55
P102	Man-Made Stuff	E71	has title (is title of) (has type : Type)	Title	E35
P103	Man-Made Stuff	E71	was intended for (was intention of)	Type	E55
P104	Legal Object	E72	is subject to (applies to)	Right	E30
P105	Legal Object	E72	right held by (has right on) (has type : Type) (has note : String)	Actor	E39
P106	Information Object	E73	is composed of (forms part of)	Information Object	E73
P107	Group	E74	had member (was member of)	Actor	E39

Index of the properties of the CIDOC CRM sorted by Range:

Property id	Entity – Domain	Domain id	Property Name	Entity - Range	Range id
P41	Type Assignment	E17	classified (was classified by)	CRM Entity	E1
P67	Conceptual Object	E28	refers to (is referred to by) (has type : Type)	CRM Entity	E1
P70	Document	E31	documents (is documented in)	CRM Entity	E1
P5	Condition State	E3	consists of (forms part of)	Condition State	E3
P6	Condition State	E3	falls within (contains)	Condition State	E3
P35	Condition Assessment	E14	has identified (identified by)	Condition State	E3
P44	Physical Stuff	E18	has condition (condition of)	Condition State	E3
P9	Period	E4	consists of (forms part of)	Period	E4
P10	Period	E4	falls within (contains)	Period	E4
P63	Physical Man-Made Stuff	E24	depicts event (is depicted by) (mode of depiction : Type)	Event	E5
P20	Activity	E7	had specific purpose (was purpose of)	Activity	E7
P34	Condition Assessment	E14	concerned (was assessed by)	Physical Stuff	E18
P62	Physical Man-Made Stuff	E24	depicts object (is depicted by) (mode of depiction : Type)	Physical Stuff	E18
P46	Physical Stuff	E18	is composed of (forms part of)	Physical Stuff	E18
P39	Measurement	E16	measured (was measured by)	Physical Stuff	E18
P13	Destruction	E6	destroyed (was destroyed by)	Physical Object	E19
P25	Move	E9	moved (moved by)	Physical Object	E19
P36	Identifier Assignment	E15	registered (was registered by)	Physical Object	E19
P8	Period	E4	took place on or within (witnessed)	Physical Object	E19
P30	Transfer of Custody	E10	transferred custody of (custody changed by)	Physical Object	E19
P24	Acquisition	E8	transferred title of (changed ownership by)	Physical Object	E19
P16	Activity	E7	used object (was used for) (mode of use : String)	Physical Object	E19
P98	Birth	E67	<i>brought into life (was born)</i>	Person	E21
P96	Birth	E67	by mother (gave birth)	Person	E21
P97	Birth	E67	from father (was father for)	Person	E21
P100	Death	E69	<i>was death of (died in)</i>	Person	E21
P31	Modification	E11	has modified (was modified by)	Physical Man-Made Stuff	E24
P108	Production	E12	has produced (was produced by)	Physical Man-Made Stuff	E24

Property id	Entity – Domain	Domain id	Property Name	Entity - Range	Range id
P56	Physical Object	E19	bears feature (is found on)	Physical Feature	E26
P94	Conceptual Creation	E65	<i>has created (was created by)</i>	Conceptual Object	E28
P18	Activity	E7	motivated the creation of (was created for)	Conceptual Object	E28
P15	Activity	E7	took into account (was taken into account by)	Conceptual Object	E28
P17	Activity	E7	was motivation for (motivated)	Conceptual Object	E28
P69	Design or Procedure	E29	is associated with	Design or Procedure	E29
P33	Modification	E11	used specific technique (was used by)	Design or Procedure	E29
P104	Legal Object	E72	is subject to (applies to)	Right	E30
P75	Actor	E39	possesses (is possessed by)	Right	E30
P73	Linguistic Object	E33	has translation (is translation of)	Linguistic Object	E33
P102	Man-Made Stuff	E71	has title (is title of) (has type : Type)	Title	E35
P65	Physical Man-Made Stuff	E24	shows visual item (is shown by)	Visual Item	E36
P14	Activity	E7	carried out by (performed) (in the role of : Type)	Actor	E39
P29	Transfer of Custody	E10	<i>custody received by (received custody)</i>	Actor	E39
P28	Transfer of Custody	E10	<i>custody surrendered by (surrendered custody)</i>	Actor	E39
P107	Group	E74	had member (was member of)	Actor	E39
P11	Event	E5	had participants (participated in)	Actor	E39
P50	Physical Object	E19	has current keeper (is current keeper of)	Actor	E39
P52	Physical Object	E19	has current owner (is current owner of)	Actor	E39
P49	Physical Object	E19	has former or current keeper (is former or current keeper of)	Actor	E39
P51	Physical Object	E19	has former or current owner (is former or current owner of)	Actor	E39
P105	Legal Object	E72	right held by (has right on) (has type : Type) (has note : String)	Actor	E39
P23	Acquisition	E8	<i>transferred title from (surrendered title of)</i>	Actor	E39
P22	Acquisition	E8	<i>transferred title to (acquired title of)</i>	Actor	E39
P77	Legal Body	E40	consists of (belongs to)	Legal Body	E40
P60	Person	E21	is member of (has members)	Legal Body	E40
P1	CRM Entity	E1	is identified by (identifies)	Appellation	E41
P37	Identifier Assignment	E15	assigns (is assigned by)	Object Identifier	E42
P38	Identifier Assignment	E15	deassigns (is deassigned by)	Object Identifier	E42
P47	Physical Object	E19	is identified by (identifies)	Object Identifier	E42
P48	Physical Object	E19	preferred identifier is (is preferred identifier of)	Object Identifier	E42

Property id	Entity – Domain	Domain id	Property Name	Entity - Range	Range id
P87	Place	E53	is identified by (identifies)	Place Appellation	E44
P58	Physical Object	E19	has section definition (defines section)	Section Definition	E46
P78	Time-Span	E52	is identified by (identifies)	Time Appellation	E49
P76	Actor	E39	has contact points (provides access to)	Contact Point	E51
P85	Time-Span	E52	consists of (forms part of)	Time-Span	E52
P86	Time-Span	E52	falls within (contains)	Time-Span	E52
P4	Temporal Entity	E2	has time-span (is time-span of)	Time-Span	E52
P88	Place	E53	consists of (forms part of)	Place	E53
P89	Place	E53	falls within (contains)	Place	E53
P55	Physical Object	E19	has current location (currently holds)	Place	E53
P74	Actor	E39	has current or former residence (is current or former residence of)	Place	E53
P54	Physical Object	E19	has current permanent location (is current permanent location of)	Place	E53
P53	Physical Object	E19	has former or current location (is former or current location of)	Place	E53
P59	Physical Object	E19	has section (is located on or within)	Place	E53
P27	Move	E9	<i>moved from (vacated)</i>	<i>Place</i>	E53
P26	Move	E9	<i>moved to (occupied)</i>	<i>Place</i>	E53
P7	Period	E4	took place at (witnessed)	Place	E53
P83	Time-Span	E52	had at least duration	Dimension	E54
P84	Time-Span	E52	had at most duration	Dimension	E54
P43	Physical Stuff	E18	has dimension (is dimension of)	Dimension	E54
P40	Measurement	E16	observed dimension (was observed)	Dimension	E54
P42	Type Assignment	E17	assigned (was assigned by)	Type	E55
P71	Authority Document	E32	contains (is part of)	Type	E55
P64	Physical Man-Made Stuff	E24	depicts concept (is depicted by) (mode of depiction : Type)	Type	E55
P21	Activity	E7	had as general purpose (was purpose of)	Type	E55
P101	Stuff	E70	had as general use (was use of)	Type	E55
P2	CRM Entity	E1	has type (is type of)	Type	E55
P66	Conceptual Object	E28	refers to concept (is referred to by)	Type	E55
P32	Modification	E11	used general technique (was technique of)	Type	E55
P103	Man-Made Stuff	E71	was intended for (was intention of)	Type	E55
P72	Linguistic Object	E33	has language (is language of)	Language	E56
P45	Physical Stuff	E18	consists of (is incorporated in)	Material	E57
P68	Design or Procedure	E29	usually employs (is usually employed by)	Material	E57
P91	Dimension	E54	unit	Measurement Unit	E58

Property id	Entity – Domain	Domain id	Property Name	Entity - Range	Range id
P57	Physical Object	E19	has number of parts	Number	E60
P90	Dimension	E54	value	Number	E60
P81	Time-Span	E52	at least covering	Time Primitive	E61
P82	Time-Span	E52	at most within	Time Primitive	E61
P79	Time-Span	E52	begins at qualify	String	E62
P80	Time-Span	E52	ends at qualify	String	E62
P3	CRM Entity	E1	has note (has type : Type)	String	E62
P12	Event	E5	occurred in the presence of (was present at)	Stuff	E70
P19	Activity	E7	was intended use of (was made for) (mode of use: String)	Man-Made Stuff	E71
P106	Information Object	E73	is composed of (forms part of)	Information Object	E73
P99	Dissolution	E68	<i>dissolved (was dissolved by)</i>	Group	E74
P95	Formation	E66	<i>has formed (was formed by)</i>	Group	E74
P61	Person	E21	has gender (is gender of)	Gender	E76
P92	Beginning of Existence	E63	brought into existence (was brought into existence by)	Existence	E77
P93	End of Existence	E64	took out of existence (was taken out of existence by)	Existence	E77