

CRMt_{ext}. An ontological model for ancient textual entities

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CRMt_{ext} is an **ontological model** based on CIDOC CRM developed since 2015 to support the study of **ancient documents** by identifying relevant textual entities and by modelling the scientific process related to the investigation of ancient texts and their features in order to foster integration with other cultural heritage research fields. CRMt_{ext} is intended to identify and define in a clear and unambiguous way the main entities involved in the study and edition of ancient handwritten texts and to describe them by means of appropriate ontological instruments in a multidisciplinary perspective.

The CRMt_{ext} extension provides tools for managing this kind of complexity by defining classes and properties for describing a handwritten text in all its aspects, from its creation (and/or destruction) in the past, down to its present conservation, investigation and study by scholars, including its transcription, translation, interpretation and publication. The full **compatibility** of CRMt_{ext} with the **CIDOC CRM ontology** and its extensions ensures persistent interoperability of data encoded by means of its entities with other **semantic information** produced in cultural heritage and digital humanities.

The model consists of the following classes:

- TX1 Written Text.** Subclass of E25 Man-Made Feature
- TX2 Writing.** Subclass of F28 Expression Creation
- TX3 Writing System.** Subclass of E29 Design or Procedure
- TX4 Writing Field.** Subclass of E25 Man-Made Feature
- TX5 Reading.** Subclass of the CRMt_{ext} S4 Observation
- TX6 Transcription.** Subclass of E7 Activity
- TX7 Written Text Segment.** Subclass of TX1 Written Text
- TX8 Grapheme.** Subclass E90 Symbolic Object
- TX9 Glyph.** Subclass of E25 Man-Made Feature
- TX10 Style.** Subclass of E29 Design or Procedure

and properties:

- TXP1** used writing system (writing system used for)
- TXP2** includes (is included within)
- TXP3** rendered (is rendered by)
- TXP4** has segment (is segment of)
- TXP5** wrote (was written by)
- TXP6** encodes (is encoding of)
- TXP7** has item (is item of)
- TXP8** has component (is component of)
- TXP9** is encoded using (was used to encode) read (was read by)
- TXP10** transcribed (was transcribed by) has style (is style of)

