

Excavation domain: Archaeological Modelling Patterns Needed

Working document: *Draft version 0.6 [24/11/2022]*

Editors: G. Bruseker, D. Nenova (taken.solutions)

Contributors: G. Bruseker, D. Nenova (taken.solutions), M. Katsianis (PP)

This sheet is meant to elicit the common problems / questions that a researcher might have in representing their data with a semantic framework and provide answers in the language of archaeologists.

The questions are divided into topics. Each question is expected to form the basis of a small pattern documenting the answer to this question in the form of:

- Description of the Problem
- Discussion of Relevant Ontology Properties and Classes
- Diagram (draw.io) of standard solution(s)
- Documentation of mapping paths

This document is meant as an open invitation both to elicit the basic modelling problems faced in representing archaeological excavation data semantically and to start providing patterns / recipes for solving them. As such, it is meant to grow and be filled out by those using it. The set of questions presently listed and the topic headings are only a beginning which can be added to as much as answers can be added to each question.

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Modelling Contexts

- How does one model the key features of an excavation unit, context, trench, etc. ?

Concept	Origin	Path to Target	Target	Reference
trench	A9 Archaeological Excavation	AP3 investigates	E53 Place	Christaki et al 2017
trench	A9 Archaeological Excavation	P9 consists of → A1 Excavation Process Unit → P7 took place at	E53 Place	Giagkoudi et al 2018
feature	A1 Excavation Process Unit	P9 consists of → S19_Encounter Event → AP17 found → A7 Embedding → AP18 is embedding of	E18 Physical Thing	Christaki et al 2017
feature	A1 Excavation Process Unit	P9 consists of → S19_Encounter Event → O19 has found object	E26 Physical Feature	Giagkoudi et al 2018
feature	A8 Stratigraphic Unit	AP15 contains	E26 Physical Feature	Giagkoudi et al 2018
feature	S19 Encounter Event	O19 has found object	E25 Human Made Feature	Marlet et al 2019

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: A2_Stratigraphic_Volume_Unit (Excavation Unit/Context - depending on methodology)				
Identifier Type	->P1_is_identified_by->E42_Identifier->P2_has_type->E55_Type	This field is used to document the type of unique identifier the excavation unit is referred to by	Concept	
Identifier	->P1_is_identified_by->E42_Identifier->P190_has_symbolic_content->rdf:literal	This field is used to document the unique identifier the excavation unit is referred to by	String	
Source Reference Work for Identifier	->P1_is_identified_by->E42_Identifier->P67i_is_referred_to_by->E33_Linguistic_Object	This field is used to document the textual source the excavation unit's identifier may have been found in	Reference Model	E33_Linguistic_Object
Identifier Data Assignment	->P1_is_identified_by->E42_Identifier->P141i->E13_Attribute_Assignment	This field is used to document any attributes associated with the assignment of the identifier, such as the person or institution responsible for the creation of the identifier, the timespan, the specific use, etc. This field points at a collection of fields equipped to accommodate these attributes.	Collection	<i>Data_Assignment</i>
Part of Location	->P89_falls_within->E53_Place	This field is used to relate the excavation unit to a spatial unit such as trench, area, sector, etc.	Reference Model	E53_Place
Part of Activity	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p9i_for_ms_part_of->PE35_Project	This field is used to relate the excavation unit to an archaeological project, to which it belongs	Reference Model	PE35_Project
Unit Reference	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p67i_is_referred_to_by->E33_Linguistic_Object	This field is used to record any textual reference associated with the excavation unit.	Reference Model	E33_Linguistic_Object
Unit Timespan	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p4_has_timespan->E52_Time-span	This field is used to record the time-span (start date-end date) of the excavation of the excavation unit.	Collection	

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Physically Related Volume Unit	->p01i_is_domain_of->APC11_has_physical_relation->p02_has_range->A2_Stratigraphic_Volume_Unit	This field is used to document the physical relation between the excavated unit and another excavation unit.	Reference Model	A2_Stratigraphic_Volume_Unit
Stratigraphically Related Volume Unit	->p01i_is_domain_of->APC13_has_stratigraphic_relation->p02_has_range->A2_Stratigraphic_Volume_Unit	This field is used to document the stratigraphic relation between the excavated unit and another excavation unit.	Reference Model	A2_Stratigraphic_Volume_Unit
Stratigraphically Related Stratigraphic Unit	->p01i_is_domain_of->APC13_has_stratigraphic_relation->p02_has_range->A8_Stratigraphic_Unit	This field is used to document the stratigraphic relation between the excavated unit and a stratigraphic unit.	Reference Model	A8_Stratigraphic_Unit
Physically Related Stratigraphic Unit	->p01i_is_domain_of->APC11_has_physical_relation->p02_has_range->A8_Stratigraphic_Unit	This field is used to document the physical relation between the excavated unit and a stratigraphic unit.	Reference Model	A8_Stratigraphic_Unit
Stratigraphically Related Excavation Interface	->p01i_is_domain_of->APC13_has_stratigraphic_relation->p02_has_range->A10_Excavation_Interface	This field is used to document the stratigraphic relation between the excavated unit and an excavation interface.	Reference Model	A2_Stratigraphic_Volume_Unit
Physically Related Excavation Interface	->p01i_is_domain_of->APC11_has_physical_relation->p02_has_range->A10_Excavation_Interface	This field is used to document the physical relation between the excavated unit and an excavation interface.	Reference Model	A2_Stratigraphic_Volume_Unit
Stratigraphically Related Stratigraphic Interface	->p01i_is_domain_of->APC13_has_stratigraphic_relation->p02_has_range->A3_Stratigraphic_Interface	This field is used to document the stratigraphic relation between the excavated unit and a stratigraphic interface.	Reference Model	A2_Stratigraphic_Volume_Unit
Physically Related Stratigraphic	->p01i_is_domain_of->APC11_has_physical_relation->p02_has_range->A3_Stratigraphic_Interface	This field is used to document the physical relation between the excavated unit and a stratigraphic interface.	Reference Model	A2_Stratigraphic_Volume_Unit

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Interface				
Stratigraphic Relationship Type	->p01i_is_domain_of->APC13_has_stratigraphic_relation->ap13.1_has_type->E55_Type	This field is used to document the type of stratigraphic relation (earlier, later, etc.) between the excavated interface and another excavation unit.	Concept	
Physical Relationship Type	->p01i_is_domain_of->APC11_has_physical_relation->ap11.1_has_type->E55_Type	This field is used to document the type of physical relation (above, below, etc.) between the excavated interface and an excavation unit.	Concept	
Statement Language	->P67i_is_referred_to_by->E33_Linguistic_Object->P72_has_language->E56_Language	This field is used to document the language of a free text statement made about the excavation unit.	Concept	
Source Reference Work for Statement	->P67i_is_referred_to_by->E33_Linguistic_Object->P67i_is_referred_to_by->E33_Linguistic_Object	This field is used to document any textual reference related to the free text statement made about the excavation unit.	Reference Model	E33_Linguistic_Object
Depicted by Image	->p138i_has_representation->E36_Visual_Item	This field is used to relate the excavation unit to an image depicting it.	Reference Model	E36_Visual_Item
Digital Reference	->P67i_is_referred_to_by->D1_Digital_Object	This field is used to relate the excavation unit to a digital object representing it (such digital objects can be digital photographs, drawings, maps, plans, audio, video, etc. of various types and file formats)	Reference Model	D1_Digital_Object
Excavation Participant	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p01i_is_domain_of->PC14_carried_out_by->p02_has_range->E21_Person	This field is used to relate the excavation unit to a person participating in its excavation process.	Reference Model	E21_Person

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Excavation Participant Role	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p01i_is_domain_of->PC14_carried_out_by->p14.1_in_the_role_of->E55_Type	This field is used to document the specific role of a person (trench supervisor, excavator, etc.) participating in the excavation process of the excavation unit.	Concept	
Type	->P2_has_type->E55_Type	This field is used to document the generic type of an excavation unit.	Concept	
Coordinates WKT	->P168_place_is_defined_by->geo:wkt	This field is used to record the WKT coordinates of the excavation unit.	Annotation Data Type	
Excavation Technique	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p32_used_general_technique->E55_Type	This field is used to record the excavation techniques used to excavate the excavation unit.	Concept	
Excavation Tools	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p125_used_object_of_type->E55_Type	This field is used to record the tool types used to excavate the excavation unit.	Concept	
Inclusions Type	->ap21_contains->E18_Physical_Object->p2_has_type->E55_Type	This field is used to document the type of physical inclusions observed within the excavation unit. Such inclusions as pebbles, roots, etc.	Concept	
Inclusions Dimension	->ap21_contains->E18_Physical_Object->p43_has_dimension->E54_Dimension	This field is used to document the dimensions (rare, occasional, abundant, etc. or small, medium, large, etc.) of physical inclusions observed within the excavation unit. This field points at a collection of dimension fields which allow defining the type of the described dimension as well as the relevant value as well as other relevant dimension attributes.	Collection	<i>Dimension</i>

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Artefacts Inclusions Dimensions	->ap21_contains->E22_Human-Made_Object->p43_has_dimension->E54_Dimension	This field is used to document the dimensions (rare, occasional, abundant, etc. or small, medium, large, etc.) of human-made inclusions observed within the excavation unit. This field points at a collection of dimension fields which allow defining the type of the described dimension as well as the relevant value as well as other relevant dimension attributes. This field does not relate to the finds collected from the unit specifically, but it represents a general observation on the contents of the unit.	Collection	<i>Dimension</i>
Artefact Inclusions Type	->ap21_contains->E22_Human-Made_Object->p2_has_type->E55_Type	This field is used to document the type of human-made inclusions observed within the excavation unit. Such inclusions are pottery, lithics, etc.	Concept	
Excavation Participant Group	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p01i_is_domain_of->PC14_carried_out_by->p02_has_range->E74_Group	This field is used to relate the excavation unit to a group or institution participating in its excavation process. Such groups can be museums, funding bodies, etc.	Reference Model	E74_Group
Excavation Participant Group Role	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p01i_is_domain_of->PC14_carried_out_by->p14.1_in_the_role_of->E55_Type	This field is used to document the type of group associated with the excavation unit.	Concept	
Excavation Period	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p10_falls_within->E4_Period	This field is used to document the general time period during which the unit has been excavated. Such periods can be 'WWII', 'the early 90s', etc.	Reference Model	E21_Person
Documented_By	->p67i_is_referred_to_by->E33_Linguistic_Object->p94i_created_by->E65_Creation->p14_carried_out_by->E21_Person	This field is used to relate the excavation unit record to the person creating the record (i.e. registrar).	Reference Model	E21_Person

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Documentation Timespan	->p67i_is_referred_to_by->E33_Linguistic_Object->p94i_created_by->E65_Creation->p4_has_time-span->E52_Time-span	This field is used to document the date/time during which the excavation unit record was created.	Collection	<i>Time-span</i>
Encountered Feature	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p9_consists_of->S19_Encounter_Event->O19_encountered->E25_Human-Made_Feature	This field is used to document any human-made feature encountered during the excavation process of the excavation unit.	Reference Model	E25_Human-Made_Feature
Part of Stratigraphic Unit	->p46i_forms_part_of->A8_Stratigraphic_Unit	This field is used to relate the excavation unit to the overall stratigraphic unit it belongs to.	Reference Model	A8_Stratigraphic_Unit
Observed Property Type	->O9_observed_property_type->S9_Property_Type	This field is used to record the type of an attribute describing the soil of the excavation unit such as texture, colour, etc.	Concept	
Observed Property Value	->O16_observed_property_value->p54_Dimension	This field is used to record the value of the attribute type describing the soil of the excavation unit.	Collection	<i>Dimension</i>
Spatial Extent	->q11i_is_approximated_by->SP6_Declarative_Place	This field is used to record the spatial extent of the stratigraphic volume unit.	Collection	<i>Coordinates</i>

Drawio diagram (Excavation Unit):

<https://drive.google.com/file/d/19pvLvJaIFJqRAY6MzG-lb67qkHBuP3pp/view?usp=sharing>

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: A10_Excavation_Interface (Excavation Interface)				
Identifier Type	->P1_is_identified_by->E42_Identifier->P2_has_type->E55_Type	This field is used to document the type of unique identifier the excavation interface is referred to by	Concept	

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Identifier	->P1_is_identified_by->E42_Identifier->P190_has_symbolic_content->rdf:literal	This field is used to document the unique identifier the excavation interface is referred to by	String	
Source Reference Work for Identifier	->P1_is_identified_by->E42_Identifier->P67i_is_referred_to_by->E33_Linguistic_Object	This field is used to document the textual source the excavation interface's identifier may have been found in	Reference Model	E33_Linguistic_Object
Identifier Data Assignment	->P1_is_identified_by->E42_Identifier->P141i->E13_Attribute_Assignment	This field is used to document any attributes associated with the assignment of the identifier, such as the person or institution responsible for the creation of the identifier, the timespan, the specific use, etc. This field points at a collection of fields equipped to accommodate these attributes.	Collection	<i>Data_Assignment</i>
Part of Location	->P89_falls_within->E53_Place	This field is used to relate the excavation interface to a spatial unit such as trench, area, sector, etc.	Reference Model	E53_Place
Part of Activity	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p9i_for_ms_part_of->PE35_Project	This field is used to relate the excavation interface to an archaeological project, to which it belongs	Reference Model	PE35_Project
Unit Reference	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p67i_is_referred_to_by->E33_Linguistic_Object	This field is used to record any textual reference associated with the excavation interface.	Reference Model	E33_Linguistic_Object
Unit Timespan	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p4_has_timespan->E52_Time-span	This field is used to record the time-span (start date-end date) of the excavation of the excavation interface.	Collection	
Physically Related Volume Unit	->p01i_is_domain_of->APC11_has_physical_relation->p02_has_range->A2_Stratigraphic_Volume_Unit	This field is used to document the physical relation between the excavated interface and an excavation unit.	Reference Model	A2_Stratigraphic_Volume_Unit

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Stratigraphically Related Volume Unit	->p01i_is_domain_of->APC13_has_stratigraphic_relation->p02_has_range->A2_Stratigraphic_Volume_Unit	This field is used to document the stratigraphic relation between the excavated interface and an excavation unit.	Reference Model	A2_Stratigraphic_Volume_Unit
Stratigraphically Related Stratigraphic Unit	->p01i_is_domain_of->APC13_has_stratigraphic_relation->p02_has_range->A8_Stratigraphic_Unit	This field is used to document the stratigraphic relation between the excavated interface and a stratigraphic unit.	Reference Model	A8_Stratigraphic_Unit
Physically Related Stratigraphic Unit	->p01i_is_domain_of->APC11_has_physical_relation->p02_has_range->A8_Stratigraphic_Unit	This field is used to document the physical relation between the excavated interface and a stratigraphic unit.	Reference Model	A8_Stratigraphic_Unit
Stratigraphically Related Excavation Interface	->p01i_is_domain_of->APC13_has_stratigraphic_relation->p02_has_range->A10_Excavation_Interface	This field is used to document the stratigraphic relation between the excavated interface and an excavation interface.	Reference Model	A2_Stratigraphic_Volume_Unit
Physically Related Excavation Interface	->p01i_is_domain_of->APC11_has_physical_relation->p02_has_range->A10_Excavation_Interface	This field is used to document the physical relation between the excavated interface and an excavation interface.	Reference Model	A2_Stratigraphic_Volume_Unit
Stratigraphically Related Stratigraphic Interface	->p01i_is_domain_of->APC13_has_stratigraphic_relation->p02_has_range->A3_Stratigraphic_Interface	This field is used to document the stratigraphic relation between the excavated interface and a stratigraphic interface.	Reference Model	A2_Stratigraphic_Volume_Unit
Physically Related Stratigraphic Interface	->p01i_is_domain_of->APC11_has_physical_relation->p02_has_range->A3_Stratigraphic_Interface	This field is used to document the physical relation between the excavated interface and a stratigraphic interface.	Reference Model	A2_Stratigraphic_Volume_Unit
Stratigraphic Relationship Type	->p01i_is_domain_of->APC13_has_stratigraphic_relation->ap13.1_has_type->E55_Type	This field is used to document the type of stratigraphic relation (earlier, later, etc.) between the excavated interface and another excavation unit.	Concept	

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Physical Relationship Type	->p01i_is_domain_of->APC11_has_physical_relation->ap11.1_has_type->E55_Type	This field is used to document the type of physical relation (above, below, etc.) between the excavated interface and an excavation unit.	Concept	
Statement Type	->P67i_is_referred_to_by->E33_Linguistic_Object->P2_has_type->E55_Type	This field is used to document the type of free text statement (such as comments, notes, unit interpretation) made about the excavation unit.	Concept	
Statement	->P67i_is_referred_to_by->E33_Linguistic_Object->P190_has_symbolic_content->rdf:literal	This field is used to document the content of free text statement made about the excavation unit.	String	
Statement Language	->P67i_is_referred_to_by->E33_Linguistic_Object->P72_has_language->E56_Language	This field is used to document the language of free text statement made about the excavation unit.	Concept	
Source Reference Work for Statement	->P67i_is_referred_to_by->E33_Linguistic_Object->P67i_is_referred_to_by->E33_Linguistic_Object	This field is used to document any textual reference related to the free text statement made about the excavation unit.	Reference Model	E33_Linguistic_Object
Depicted by Image	->p138i_has_representation->E36_Visual_Item	This field is used to relate the excavation unit to an image depicting it.	Reference Model	E36_Visual_Item
Digital Reference	->P67i_is_referred_to_by->D1_Digital_Object	This field is used to relate the excavation unit to a digital object representing it (such digital objects can be digital photographs, drawings, maps, plans, audio, video, etc. of various types and file formats)	Reference Model	D1_Digital_Object
Excavation Participant	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p01i_is_domain_of->PC14_carried_out_by->p02_has_range->E21_Person	This field is used to relate the excavation unit to a person participating in its excavation process.	Reference Model	E21_Person

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Excavation Participant Role	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p01i_is_domain_of->PC14_carried_out_by->p14.1_in_the_role_of->E55_Type	This field is used to document the specific role of a person (trench supervisor, excavator, etc.) participating in the excavation process of the excavation unit.	Concept	
Type	->P2_has_type->E55_Type	This field is used to document the generic type of an excavation unit.	Concept	
Coordinates WKT	->P168_place_is_defined_by->geo:wkt	This field is used to record the WKT coordinates of the excavation unit.	Annotation Data Type	
Excavation Technique	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p32_used_general_technique->E55_Type	This field is used to record the excavation techniques used to excavate the excavation unit.	Concept	
Excavation Tools	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p125_used_object_of_type->E55_Type	This field is used to record the tool types used to excavate the excavation unit.	Concept	
Inclusions Type	->ap21_contains->E18_Physical_Object->p2_has_type->E55_Type	This field is used to document the type of physical inclusions observed within the excavation unit. Such inclusions as pebbles, roots, etc.	Concept	
Inclusions Dimension	->ap21_contains->E18_Physical_Object->p43_has_dimension->E54_Dimension	This field is used to document the dimensions (rare, occasional, abundant, etc. or small, medium, large, etc.) of physical inclusions observed within the excavation unit. This field points at a collection of dimension fields which allow defining the type of the described dimension as well as the relevant value as well as other relevant dimension attributes.	Collection	<i>Dimension</i>

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Artefacts Inclusions Dimensions	->ap21_contains->E22_Human-Made_Object->p43_has_dimension->E54_Dimension	This field is used to document the dimensions (rare, occasional, abundant, etc. or small, medium, large, etc.) of human-made inclusions observed within the excavation unit. This field points at a collection of dimension fields which allow defining the type of the described dimension as well as the relevant value as well as other relevant dimension attributes. This field does not relate to the finds collected from the unit specifically, but it represents a general observation on the contents of the unit.	Collection	<i>Dimension</i>
Artefact Inclusions Type	->ap21_contains->E22_Human-Made_Object->p2_has_type->E55_Type	This field is used to document the type of human-made inclusions observed within the excavation unit. Such inclusions are pottery, lithics, etc.	Concept	
Excavation Participant Group	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p01i_is_domain_of->PC14_carried_out_by->p02_has_range->E74_Group	This field is used to relate the excavation unit to a group or institution participating in its excavation process. Such groups can be museums, funding bodies, etc.	Reference Model	E74_Group
Excavation Participant Group Role	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p01i_is_domain_of->PC14_carried_out_by->p14.1_in_the_role_of->E55_Type	This field is used to document the type of group associated with the excavation unit.	Concept	
Excavation Period	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p10_falls_with->E4_Period	This field is used to document the general time period during which the unit has been excavated. Such periods can be 'WWII', 'the early 90s', etc.	Reference Model	E21_Person
Documented_By	->p67i_is_referred_to_by->E33_Linguistic_Object->p94i_created_by->E65_Creation->p14_carried_out_by->E21_Person	This field is used to relate the excavation unit record to the person creating the record (i.e. registrar).	Reference Model	E21_Person

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Documentation Timespan	->p67i_is_referred_to_by->E33_Linguistic_Object->p94i_created_by->E65_Creation->p4_has_time-span->E52_Time-span	This field is used to document the date/time during which the excavation unit record was created.	Collection	<i>Time-span</i>
Encountered Feature	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p9_consists_of->S19_Encounter_Event->O19_encountered->E25_Human-Made_Feature	This field is used to document any human-made feature encountered during the excavation process of the excavation unit.	Reference Model	E25_Human-Made_Feature
Part of Stratigraphic Unit	->p46i_forms_part_of->A8_Stratigraphic_Unit	This field is used to relate the excavation unit to the overall stratigraphic unit it belongs to.	Reference Model	A8_Stratigraphic_Unit
Observed Property Type	->O9_observed_property_type->S9_Property_Type	This field is used to record the type of an attribute describing the interface such as texture, colour, etc.	Concept	
Observed Property Value	->O16_observed_property_value->p54_Dimension	This field is used to record the value of the attribute type describing the interface.	Collection	<i>Dimension</i>
Spatial Extent	->q11i_is_approximated_by->SP6_Declarative_Place	This field is used to record the spatial extent of the stratigraphic volume unit.	Collection	<i>Coordinates</i>

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: E53_Place (trench, area, sector, etc.)				
Identifier Type	->P1_is_identified_by->E42_Identifier[8_1]->P2_has_type->E55_Type[9_1]	This field is used to record the type of the identifier attributed to the documented place.	Concept	

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Identifier	->P1_is_identified_by->E42_Identifier[8_1]->P190_has_symbolic_content->rdf:literal	This field is used to record an identifier attributed to the documented place.	String	
Source Reference Work for Identifier	->P1_is_identified_by->E42_Identifier[8_1]->P67i_is_referred_to_by->E33_Linguistic_Object[45_1]	This field is used to link to a source text in which the identifier denoting the documented place is used.	Reference Model	E33_Linguistic_Object
Identifier Data Assignment	->P1_is_identified_by->E42_Identifier[8_1]->P141i-->E13_Attribute_Assignment[434_1]	This field is used to indicate the details of the data assignment of this identifier to the documented placet.	Collection	Data Assignment
Name Type	->P1_is_identified_by->E33_E41_Linguistic_Apellation[4_1]->P2_has_type->E55_Type[5_1]	This field is used to record the type of the name attributed to the documented place.	Concept	
Name	->P1_is_identified_by->E33_E44_Linguistic_Apellation[4_1]->P190_has_symbolic_content->rdf:literal	This field is used to record the string value of the name attributed to the documented place.	String	
Statement	->P67i_is_referred_to_by->E33_Linguistic_Object[13_1]->P190_has_symbolic_content->rdf:literal	This field is used to record the actual textual content of the statement describing the documented place.	String	
Statement Language	->P67i_is_referred_to_by->E33_Linguistic_Object[13_1]->P72_has_language-->E56_Language[16_1]	This field is used to record the language of the statement describing the documented place.	Concept	
Statement Type	->P67i_is_referred_to_by->E33_Linguistic_Object[13_1]->P2_has_type->E55_Type[14_1]	This field is used to record the formal type of the statement made about the documented place.	Concept	
Source Reference Work for Statement	->P67i_is_referred_to_by->E33_Linguistic_Object[13_1]->P67i_is_referred_to_by->E33_Linguistic_Object[55_1]	This field is used to link to a source text from which the statement describing the documented place is derived.	Reference Model	E33_Linguistic_Object

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Type	->P2_has_type->E55_Type[11_1]	This field is used to record the formal type of the documented place.	Concept	
Highest Possible Dimension Value	->P43_has_dimension->E54_Dimension[98_1]->P90b_has_value->rdf:literal	This field is used to record the highest possible value for a dimension when the value of the dimension is known as a range.	Integer	
Dimension Unit	->P43_has_dimension->E54_Dimension[98_1]->P91_has_unit->E58_Measurement_Unit[99_1]	This field is used to record the unit for the documented instance of dimension.	Concept	
Dimension Value	->P43_has_dimension->E54_Dimension[98_1]->P90_has_value:rdf:literal	This field is used to record the value for the documented instance of dimension.	Integer	
Source Reference Work for Dimension	->P43_has_dimension->E54_Dimension[98_1]->P67i_is_referred_to_by->E33_Linguistic_Object[103_1]	This field is used to link the documented dimension to a statement that describes it.	Reference Model	E33_Linguistic_Object
Dimension Type	->P43_has_dimension->E54_Dimension[98_1]->P2_has_type->E55_Type[104_1]	This field is used to record the formal type of the documented dimension.	Concept	
Lowest Possible Dimension Value	->P43_has_dimension->E54_Dimension[98_1]->P90a_has_value->rdf:literal	This field is used to record the lowest possible value for a dimension when the value of the dimension is known as a range.	Integer	
Dimension Data Assignment	->P43_has_dimension->E54_Dimension[98_1]->P141i_is_assigned_to->E13_Attribute_Assignment[435_1]	This field is used to indicate the details of the data assignment of this dimension to the documented place.	Collection	<i>Data Assignment</i>
Statement about Dimension	->P43_has_dimension->E54_Dimension[98_1]->P67i_is_referred_to_by->E33_Linguistic_Object[453_1]	This field is used to link the dimension of a documented entity to a statement that describes it.	Collection	<i>Dimension</i>
Part of Location	->P89_falls_within->E53_Place[29_1]	This field is used to record the broader place	Reference	E53_Place

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
		to which the documented place belongs as part.	Model	
Depicted by Image	->p138i_has_representation->E36_Image	This field is used to relate the documented place to an image depicting it.	Reference Model	E36_Image
Coordinates WKT	->P168_place_is_defined_by->geo:wkt	This field is used to link a documented place to the WKT coordinates that define it.	Annotation Data Type	
Digital Reference	->P67i_is_referred_to_by->D1_Digital_Object[426_1]	This field is used to link the documented place to a digital object, expressed as a uri, which describes it.	uri	
Place Coordinate System	->Q11i_is_approximated_by->SP6_Declarative_Place->Q10i_is_place_defined_by->SP5_Geometric_Place_Expression->Q9_is_expressed_in_terms_of->SP4_Spatial_Coordinate_Reference_System	This field is used to document the spatial coordinate system used for the recording of the spatial coordinates of the documented place.	Concept	
Place Coordinate	->Q11i_is_approximated_by->SP6_Declarative_Place->Q10i_is_place_defined_by->SP5_Geometric_Place_Expression->p1_is_identified_by->E41_Appellation	This field is used to document a spatial coordinate defining the location of the documented place.	String	
Place Coordinate Type	->Q11i_is_approximated_by->SP6_Declarative_Place->Q10i_is_place_defined_by->SP5_Geometric_Place_Expression->p1_is_identified_by->E41_Appellation->p2_has_type->E55_Type	This field is used to document the type of the spatial coordinate (x, y, or z, etc.) defining the location of the documented place.	Concept	
Place Coordinate Statement	->Q11i_is_approximated_by->SP6_Declarative_Place->Q10i_is_place_defined_by->SP5_Geometric_Place_Expression->p67i_is_referred_to_by->E33_Linguistic_Object	This field is used to record a free text statement about the spatial extent of the place.	Collection	<i>Coordinates</i>
Excavation Carried Out By Person	->p7i_witnessed->A9_Archaeological_Excavation->p01i_is_domain_of->PC14_Carried_Out_By->p02_has_range->E21_Person	This field is used to relate to a person who carried out an excavation at the documented place.	Reference Model	E21_Person

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Excavation Carried Out By Group	->p7i_witnessed->A9_Archaeological_Excavation->p01i_is_domain_of->PC14_Carried_Out_By->p02_has_range->E74_Group	This field is used to relate to a group involved in the excavation at the documented place.	Reference Model	E74_Group
Excavation Carried Out By Role	->p7i_witnessed->A9_Archaeological_Excavation->p01i_is_domain_of->PC14_Carried_Out_By->p14.1_in_the_role_of->E55_Type	This field is used to record the role of an actor involved in an excavation at the documented place.	Concept	

Drawio diagram (Place - trench, sector, area, etc):

<https://drive.google.com/file/d/1cVUniGo3FAOAd4aXx5UxReoumnzXsYQj/view?usp=sharing>

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: E25_Human-Made_Feature (Feature, wall, earthen construction)				
Identifier Type	->P1_is_identified_by->E42_Identifier[8_1]->P2_has_type->E55_Type[9_1]	This field is used to record the type of the identifier attributed to the documented feature.	Concept	
Identifier Data Assignment	->P1_is_identified_by->E42_Identifier[8_1]->P141i->E13_Attribute_Assignment[434_1]	This field is used to indicate the details of the data assignment of this identifier to the documented feature.	Collection	<i>Data Assignment</i>
Dimension Type	->P43_has_dimension->E54_Dimension[98_1]->P2_has_type->E55_Type[104_1]	This field is used to record the formal type of the documented dimension.	Concept	
Identifier	->P1_is_identified_by->E42_Identifier[8_1]->P190_has_symbolic_content->rdf:literal	This field is used to record an identifier attributed to the documented feature.	String	

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Highest Possible Dimension Value	->P43_has_dimension->E54_Dimension[98_1]->P90b_has_value->rdf:literal	This field is used to record the highest possible value for a dimension when the value of the dimension is known as a range.	Integer	
Dimension Unit	->P43_has_dimension->E54_Dimension[98_1]->P91_has_unit->E58_Measurement_Unit[99_1]	This field is used to record the unit for the documented instance of dimension.	Concept	
Lowest Possible Dimension Value	->P43_has_dimension->E54_Dimension[98_1]->P90a_has_value->rdf:literal	This field is used to record the lowest possible value for a dimension when the value of the dimension is known as a range.	Integer	
Dimension Data Assignment	->P43_has_dimension->E54_Dimension[98_1]->P141i->E13_Attribute_Assignment[435_1]	This field is used to indicate the details of the data assignment of this dimension to the documented feature.	Collection	<i>Data Assignment</i>
Dimension Value	->P43_has_dimension->E54_Dimension[98_1]->P90_has_value:rdf:literal	This field is used to record the value for the documented instance of dimension.	Integer	
Statement about Dimension	->P43_has_dimension->E54_Dimension[98_1]->P67i_is_referred_to_by->E33_Linguistic_Object[453_1]	This field is used to link the dimension of a documented feature to a statement that describes it.	Collection	<i>Dimension</i>
Source Reference Work for Dimension	->P43_has_dimension->E54_Dimension[98_1]->P67i_is_referred_to_by->E33_Linguistic_Object[103_1]	This field is used to link the documented dimension to a statement that describes it.	Reference Model	E33_Linguistic_Object
Source Reference Work for Identifier	->P1_is_identified_by->E42_Identifier[8_1]->P67i_is_referred_to_by->E33_Linguistic_Object[45_1]	This field is used to link to a source text in which the identifier denoting the documented feature is used.	Reference Model	E33_Linguistic_Object
Type	->P2_has_type->E55_Type[11_1]	This field is used to record the formal type of the documented feature.	Concept	

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Statement Type	->P67i_is_referred_to_by->E33_Linguistic_Object[13_1]->P2_has_type->E55_Type[14_1]	This field is used to record the formal type of the statement made about the documented feature.	Concept	
Creation Event Period	->P94i_was_created_by->E65_Creation[71_1]->P17_occurs_during->E4_Period[84_1]	This field is used to link the documented feature creation activity to the period during which it occurred.	Reference Model	E4_Period
Object Function	->p130_shows_features_of->E55_Type[S23_1]->p101_had_as_general_use->E55_Type[S33_1]		Concept	
Statement Language	->P67i_is_referred_to_by->E33_Linguistic_Object[13_1]->P72_has_language->E56_Language[16_1]	This field is used to record the language of the statement describing the documented feature.	Concept	
Source Reference Work for Statement	->P67i_is_referred_to_by->E33_Linguistic_Object[13_1]->P67i_is_referred_to_by->E33_Linguistic_Object[55_1]	This field is used to link to a source text from which the statement describing the documented feature is derived.	Reference Model	E33_Linguistic_Object
Object General Type	->p130_shows_features_of->E55_Type	This field is used to record the generic type of the documented feature.	Concept	
Statement	->P67i_is_referred_to_by->E33_Linguistic_Object[13_1]->P190_has_symbolic_content->rdf:literal	This field is used to record the actual textual content of the statement describing the documented feature.	String	
Depicted by Image	->p138i_has_representation->E36_Visual_Item	This field is used to relate the documented feature to an image depicting it.	Reference Model	E36_Visual_Item
Object Parallel	->zp43i_is_similarity_subject_of->ZE14_Similarity_Status->zp44_has_similarity_target->E25_Human-Made_Feature	This field is used to relate the documented feature to another artefact closely resembling it.	Reference Model	E25_Human-Made_Feature
Object Parallel Type	->zp43i_is_similarity_subject_of->ZE14_Similarity_Status->zp44_has_similarity_target->E55_Type	This field is used to define a generic established type, which the documented feature closely resembles (i.e. Dragendorf 44).	Concept	

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Object Parallel Source	->zp43i_is_similarity_subject_of->ZE14_Similarity_Status->zp44_has_similarity_target->E25_Human-Made_Feature->p67i_referred_by->E33_Linguistic_Object	This field is used to refer to a bibliographic reference, containing information about an artefact resembling the documented feature, without having a specific type defined.	Reference Model	E33_Linguistic_Object
Object Part of Site	->p46i_forms_part_of->E27-Site	This field is used to relate the documented feature to an archaeological site it belongs to.	Reference Model	E27_Site
Object Spatial Extent	->p39i_was_measured_by->E16_Measurement->p141_assigned->SP6_Declarative_Place	This field is used to record the spatial extent of the documented feature.	Collection	<i>Coordinates</i>
Part of Stratigraphic Unit	->p46i_forms_part_of->A8_Stratigraphic_Unit	This field is used to relate the documented feature to a stratigraphic layer it belongs to.	Reference Model	A8_Stratigraphic_Unit
Part of Stratigraphic Volume Unit	->p46i_forms_part_of->A2_Stratigraphic_Volume_Unit	This field is used to relate the documented feature to an excavation unit it belongs to.	Reference Model	A2_Stratigraphic_Volume_Unit

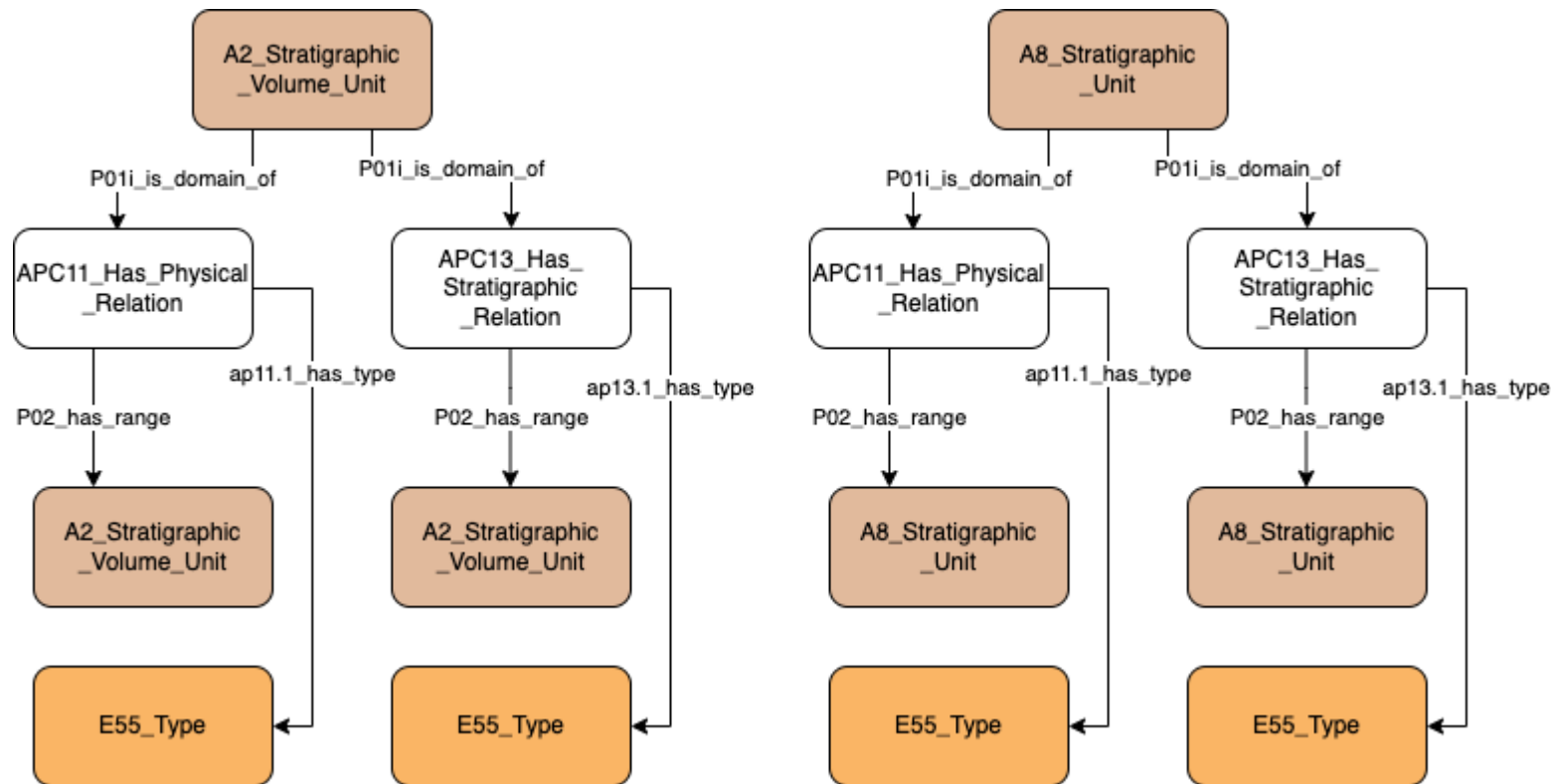
Drawio diagram (Feature):

https://drive.google.com/file/d/1-wDbfgpzCy8Ux_XrRFNSipjF6GIGdc5N/view?usp=sharing

- How does one model stratigraphic relations?
- How does one model physical relations?

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: A2_Stratigraphic_Volume_Unit (Excavation Unit/Context - based on methodology)				
Physically Related Volume Unit	->p01i_is_domain_of->APC11_has_physical_relation->p02_has_range->A2_Stratigraphic_Volume_Unit	This field is used to document the physical relation between the excavated unit and another excavation unit.	Reference Model	A2_Stratigraphic_Volume_Unit
Volume Unit Physical Relationship Type	->p01i_is_domain_of->APC11_has_physical_relation->ap11.1_has_type->E55_Type	This field is used to document the type of physical relation (above, below, etc.) between the excavated unit and another other excavation unit.	Concept	
Stratigraphically Related Volume Unit	->p01i_is_domain_of->APC13_has_stratigraphic_relation->p02_has_range->A2_Stratigraphic_Volume_Unit	This field is used to document the stratigraphic relation between the excavated unit and another excavation unit.	Reference Model	A2_Stratigraphic_Volume_Unit
Volume Unit Stratigraphic Relationship Type	->p01i_is_domain_of->APC13_has_stratigraphic_relation->ap13.1_has_type->E55_Type	This field is used to document the type of stratigraphic relation (earlier, later, etc.) between the excavated unit and another excavation unit.	Concept	
Part of Stratigraphic Unit	->p46i_forms_part_of->A8_Stratigraphic_Unit	This field is used to relate the stratigraphic unit to the overall stratigraphic unit it belongs to.	Reference Model	A8_Stratigraphic_Unit
Root Node: A8_Stratigraphic_Unit (Stratigraphic Unit/Context - based on methodology)				
Physically Related	->p01i_is_domain_of->APC11_has_physical_relation->p02_has_range->A8_Stratigraphic_Unit	This field is used to document the physical relation between the excavated stratigraphic unit	Reference Model	A8_Stratigraphic_Volume_Unit

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Stratigraphic Unit		and another stratigraphic unit.		
Volume Unit Physical Relationship Type	->p01i_is_domain_of->APC11_has_physical_relation->ap11.1_has_type->E55_Type	This field is used to document the type of physical relation (above, below, etc.) between the excavated stratigraphic unit and another stratigraphic unit.	Concept	
Stratigraphically Related Stratigraphic Unit	->p01i_is_domain_of->APC13_has_stratigraphic_relation->p02_has_range->A8_Stratigraphic_Unit	This field is used to document the stratigraphic relation between the excavated stratigraphic unit and another stratigraphic unit.	Reference Model	A8_Stratigraphic_Volume_Unit
Volume Unit Stratigraphic Relationship Type	->p01i_is_domain_of->APC13_has_stratigraphic_relation->ap13.1_has_type->E55_Type	This field is used to document the type of stratigraphic relation (earlier, later, etc.) between the excavated stratigraphic unit and another stratigraphic unit.	Concept	

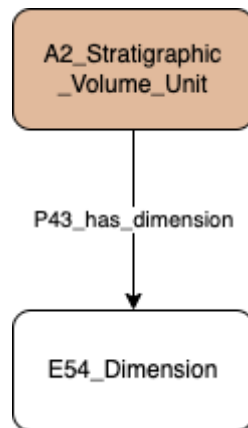


More complex diagram see here:

https://drive.google.com/file/d/1SI9Gc2XZpEbSBbWacGuAf_NTiAOncXj7/view?usp=sharing

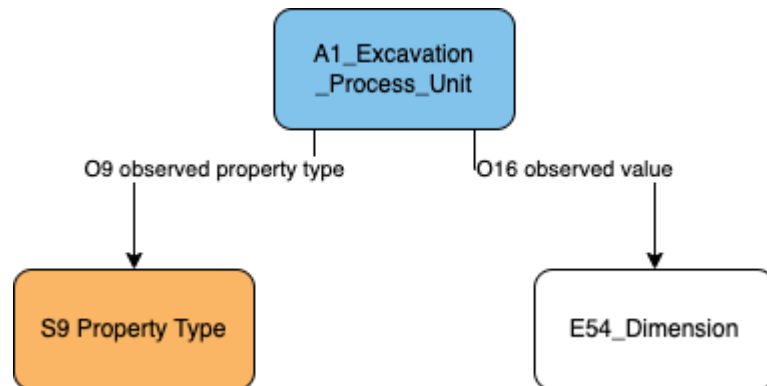
- How does one model excavated volume?

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: A2_Stratigraphic_Volume_Unit				
Excavated Matter Type	->p43_has_dimension->p54_Dimension	This field is used to document the dimension of the excavated unit.	Collection	<i>Dimension</i>



- How does one model soil definition?

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: A1_Excavation_Process_Unit				
Excavated Matter Type	->O9_observed_property_type->S9_Property_Type	This field is used to document the generic type of excavated matter.	Concept	
Excavated Matter Dimension	->O16_observed_property_value->E54_Dimension	This field is used to describe different attributes of the excavated soil such as moisture, texture, colour, etc. The field refers to a collection of fields allowing you to define which parameter you are describing and the value associated with it.	Collection	<i>Dimension</i>



Modelling Processes

- How does one model the overall excavation project?

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: PE35_Project (Excavation Unit/Context)				
Name Type	->P1_is_identified_by->E33_E41_Linguistic_Apellation->P2_has_type->E55_Type	This field is used to document the type of name the archaeological project is referred to by.	Concept	
Name	->P1_is_identified_by->E33_E44_Linguistic_Apellation->P190_has_symbolic_content->rdf:literal	This field is used to document the content of the name the archaeological project is referred to by.	String	
Source Reference Work	->P67i_is_referred_to_by->E33_Linguistic_Object	This field is used to document the general bibliographic references associated with the overall archaeological project.	Reference Model	E33_Linguistic_Object
Identifier Type	->P1_is_identified_by->E42_Identifier->P2_has_type->E55_Type	This field is used to document the type of unique identifier the archaeological project is referred to by	Concept	
Identifier	->P1_is_identified_by->E42_Identifier->P190_has_symbolic_content->rdf:literal	This field is used to document the unique identifier the archaeological project is referred to by	String	
Source Reference Work for Identifier	->P1_is_identified_by->E42_Identifier->P67i_is_referred_to_by->E33_Linguistic_Object	This field is used to document the textual source the archaeological project's identifier may have been found in	Reference Model	E33_Linguistic_Object
Identifier Data Assignment	->P1_is_identified_by->E42_Identifier->P141i-->E13_Attribute_Assignment	This field is used to document any attributes associated with the assignment of the identifier, such as the person or institution responsible for the creation of the identifier, the timespan, the specific use, etc. This field points at a collection of fields	Collection	<i>Data assignment</i>

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
		equipped to accommodate these attributes.		
Begin of the Begin	->P4_has_time-span->E52_Time-Span->P82a_at_some_time_within->xsl:date	This field is used to document the start date of the archaeological project.	Date	
End of the End	->P4_has_time-span->E52_Time-Span->P82b_at_some_time_within->xsl:date	This field is used to document the end date of the archaeological project.	Date	
Statement about TimeSpan	->P4_has_time-span->E52_Time-Span->P67i_is_referred_to_by->E33_Linguistic_Object	This field is used to document a statement of the time-span of the archaeological project.	Collection	<i>Statement</i>
TimeSpan Type	->P4_has_time-span->E52_Time-Span->P2_has_type->E55_Type	This field is used to document the type of time-span (i.e. 'from first day of excavation', 'from first day of project planning until publication', etc) assigned to the archaeological project.	Concept	
Activity Person	->p01i_is_domain_of->PC14_carried_out_by->p02_has_range->E21_Person	This field is used to relate the archaeological project to a person associated with it.	Reference Model	E21_Person
Activity Group	->p01i_is_domain_of->PC14_carried_out_by->p02_has_range->E74_Group	This field is used to relate the archaeological project to a group associated with it.	Reference Model	E74_Group
Activity Person Role	->p01i_is_domain_of->PC14_carried_out_by->p14.1_in_the_role_of->E55_Type	This field is used to document the role of a person associated with the archaeological project (i.e. project director, conservator, illustrator, etc.).	Concept	
Activity Group Role	->p01i_is_domain_of->PC14_carried_out_by->p14.1_in_the_role_of->E55_Type	This field is used to document the role of a group/institution associated with the archaeological project (i.e. sponsor, permit provider, etc.).	Concept	
Statement Type	->P67i_is_referred_to_by->E33_Linguistic_Object->P2_has_type->E55_Type	This field is used to document the type of free text statement (such as comments, notes, goals, etc.) made about the archaeological project.	Concept	
Statement	->P67i_is_referred_to_by->E33_Linguistic_Object->P190_has_symbolic_content->rdf:literal	This field is used to document the content of free text statement made about the archaeological project.	String	

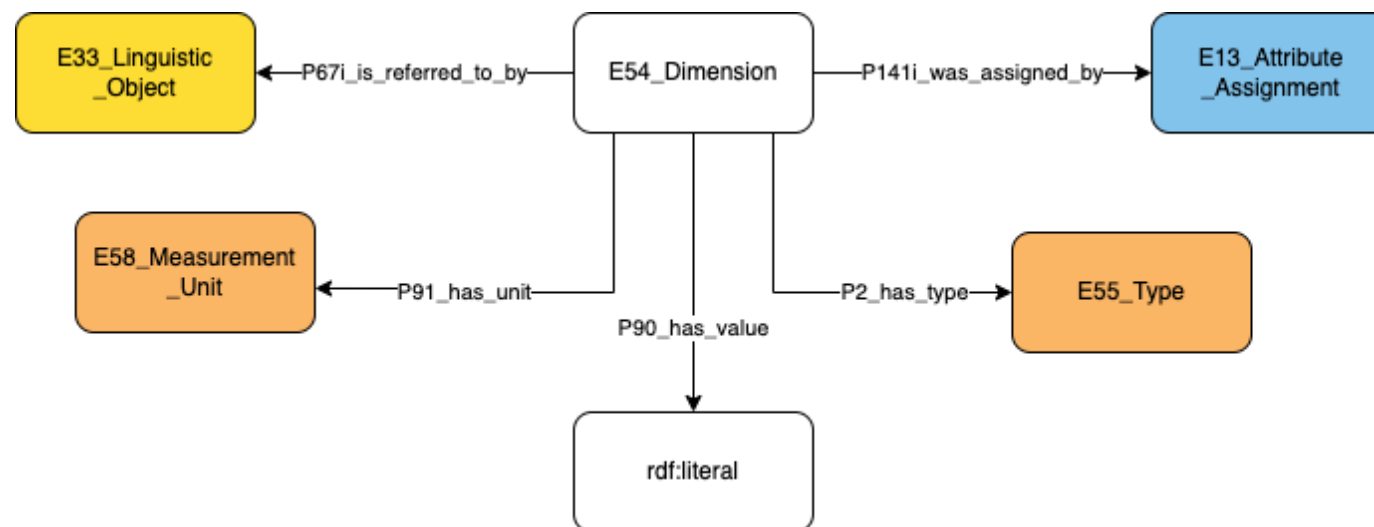
Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
	al			
Source Reference Work for Statement	->P67i_is_referred_to_by->E33_Linguistic_Object]->P67i_is_referred_to_by->E33_Linguistic_Object	This field is used to document any textual reference related to the free text statement made about the archaeological project.	Reference Model	E33_Linguistic_Object

- How does one model measurements (of a trench, context, feature, find, etc.)

Collection Dimension:

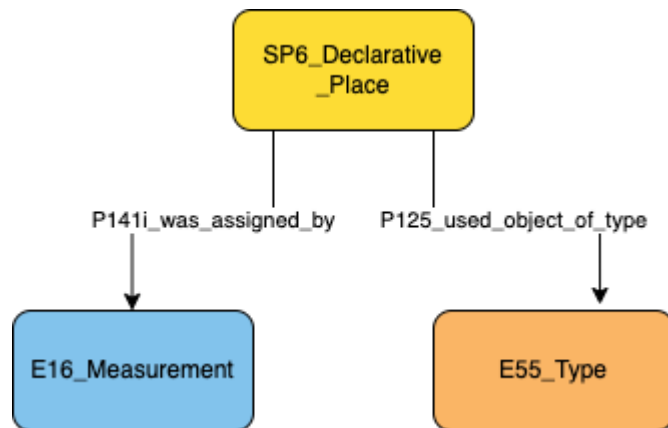
Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: E70_Thing (Anything that has a dimension)				
Dimension Unit	->P43_has_dimension->E54_Dimension[98_1]->P91_has_unit->E58_Measurement_Unit	This field is used to document the chosen measurement unit of a dimension relevant to the excavation unit.	Concept	
Dimension Value	->P43_has_dimension->E54_Dimension->P90_has_value:rdf:literal	This field is used to document the single value of a dimension relevant to the excavation unit.	Integer	
Source Reference Work for Dimension	->P43_has_dimension->E54_Dimension->P67i_is_referred_to_by->E33_Linguistic_Object	This field is used to document any textual reference associated with a dimension relevant to the excavation unit.	Reference Model	E33_Linguistic_Object
Dimension Type	->P43_has_dimension->E54_Dimension->P2_has_type->E55_Type	This field is used to document the type of dimension relevant to the excavation unit.	Concept	

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Dimension Data Assignment	->P43_has_dimension->E54_Dimension[98_1]->P141i->E13_Attribute_Assignment	This field is used to document any attributes associated with the assignment of dimension, such as the person or institution responsible for the measurement, the timespan, the specific purpose etc. This field points at a collection of fields equipped to accommodate these attributes.	Collection	Data_Assignment
Statement about Dimension	->P43_has_dimension->E54_Dimension[98_1]->P67i_is_referred_to_by->E33_Linguistic_Object	This field is used to document any free text value, such as comments, notes, etc., associated with a dimension relevant to the excavation unit.	Collection	<i>Statement</i>



- How does one model spatial data recording using specific instruments such as total station, dgps, etc.

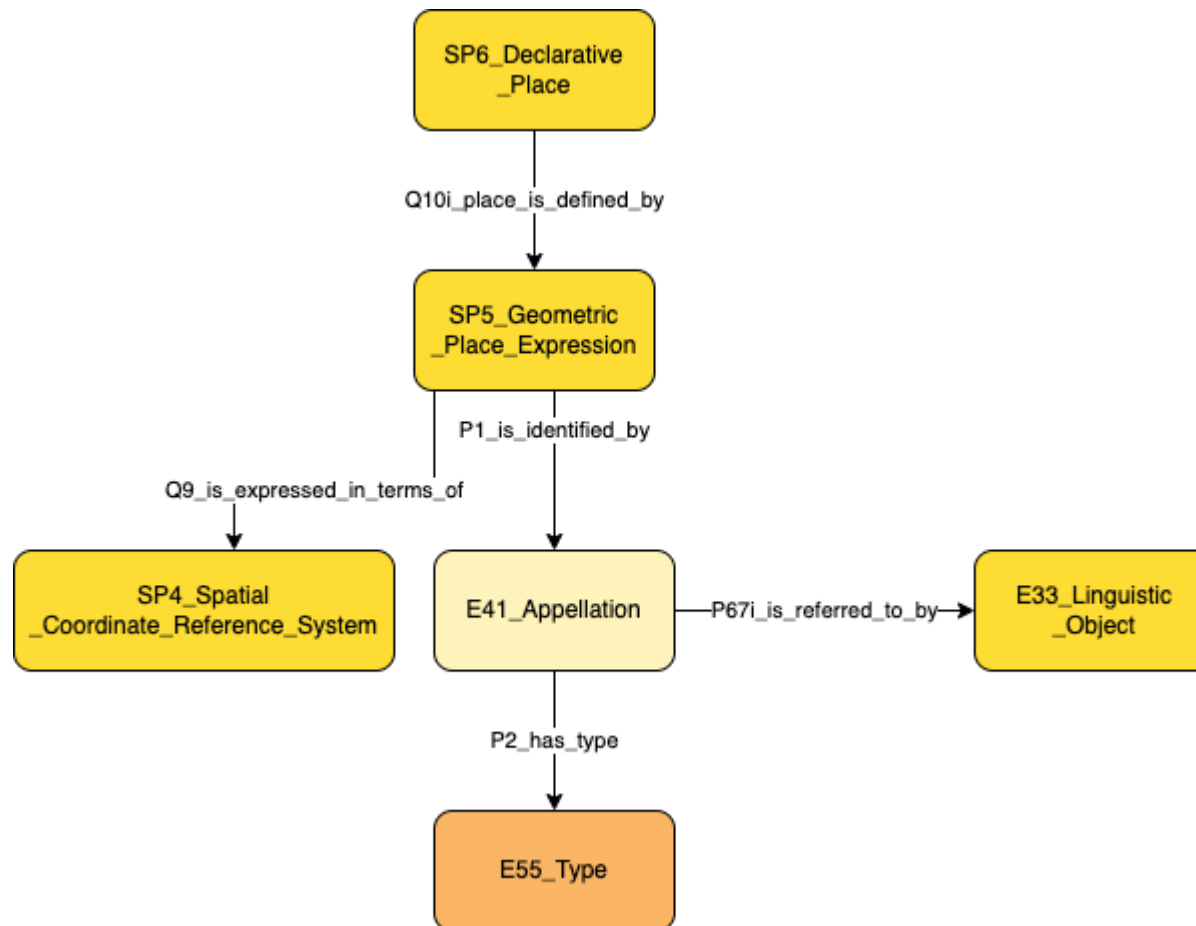
Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: SP6_Declarative_Place (Anything with applicable spatial coordinates)				
Instrument Used	->p141i_was_assigned_by->E16_Measurement->p125_used_object_of_type->E55_Type	This field is used to document the instrument used to record the spatial extent of the documented declarative place.	Concept	



- How does one model geospatial data such as coordinates, coordinate systems, projections, etc.?

Collection Coordinates:

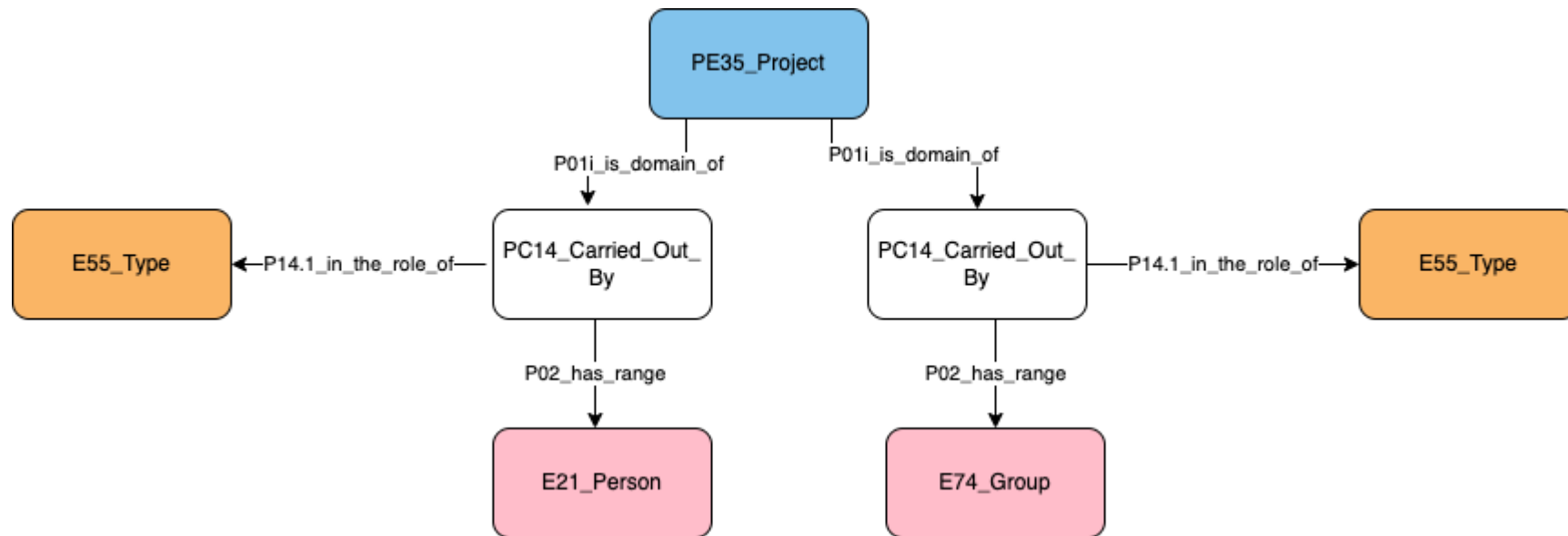
Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: SP6_Declarative_Place (Anything with applicable spatial coordinates)				
Coordinate System	->Q10i_is_place_defined_by->SP5_Geometric_Place_Expression->Q9_is_expressed_in_terms_of->SP4_Spatial_Coordinate_Reference_System	This field is used to document the spatial coordinate system used for the recording of the spatial coordinates of the documented entity.	Concept	
Spatial coordinate	->Q10i_is_place_defined_by->SP5_Geometric_Place_Expression->p1_is_identified_by->E41_Appellation	This field is used to document a spatial coordinate defining the location of the documented entity.	String	
Spatial coordinate	->Q10i_is_place_defined_by->SP5_Geometric_Place_Expression->p1_is_identified_by->E41_Appellation->p2_has_type->E55_Type	This field is used to document the type of the spatial coordinate (x, y, or z, etc.) defining the location of the documented entity.	Concept	
Spatial Extent Statement	->Q10i_is_place_defined_by->SP5_Geometric_Place_Expression->p67i_is_referred_to_by->E33_Linguistic_Object	This field is used to record a free text statement about the spatial extent of the entity.	Collection	<i>Statement</i>



Modelling Actors

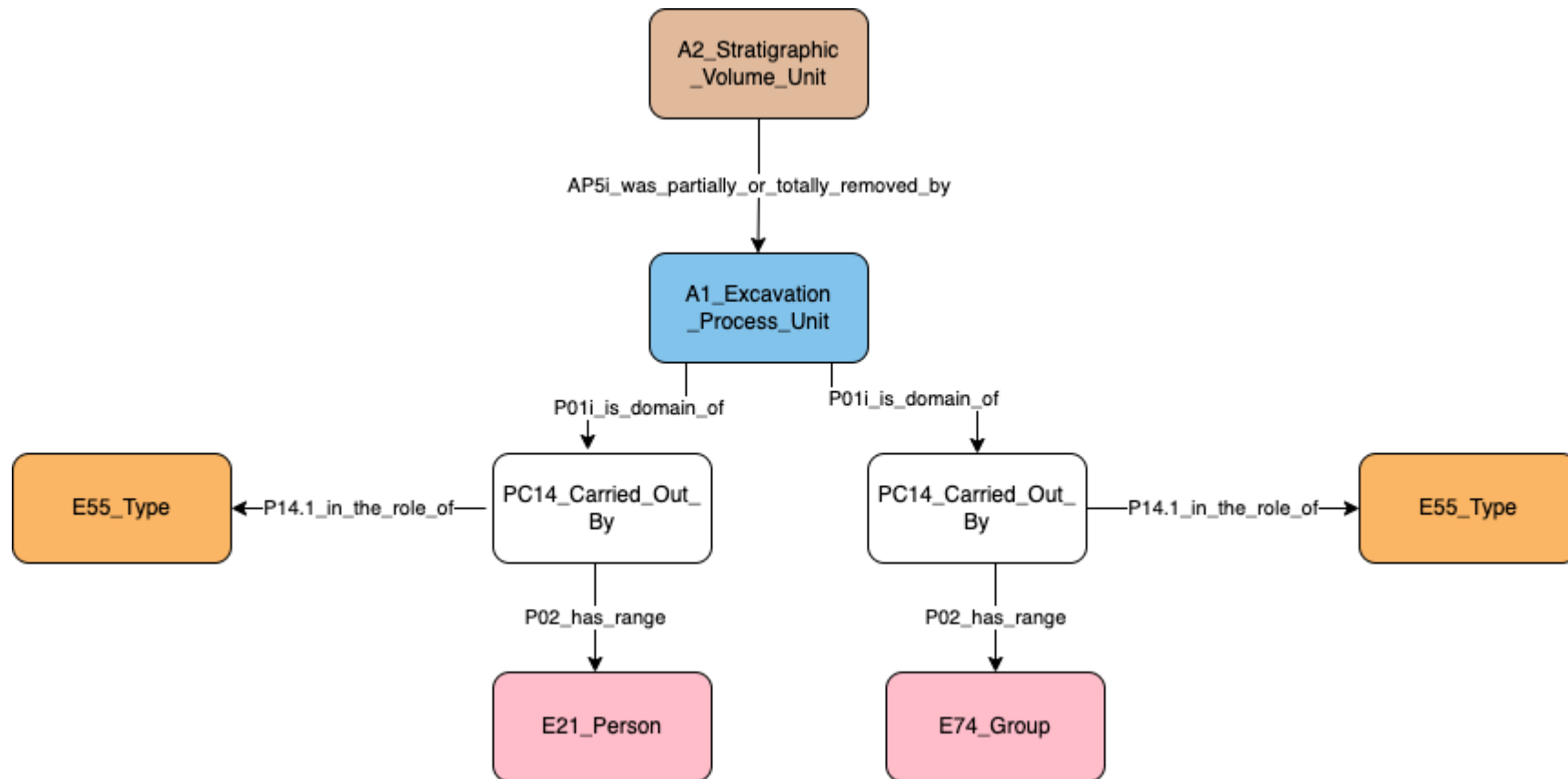
- How does one model the excavation team?

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: PE35_Project (Archaeological Project)				
Activity Person	->p01i_is_domain_of->PC14_carried_out_by->p02_has_range->E21_Person	This field is used to relate the archaeological project to a person associated with it.	Reference Model	E21_Person
Activity Group	->p01i_is_domain_of->PC14_carried_out_by->p02_has_range->E74_Group	This field is used to relate the archaeological project to a group associated with it.	Reference Model	E74_Group
Activity Person Role	->p01i_is_domain_of->PC14_carried_out_by->p14.1_in_the_role_of->E55_Type	This field is used to document the role of a person associated with an archaeological project (i.e. project director, conservator, illustrator, etc.).	Concept	
Activity Group Role	->p01i_is_domain_of->PC14_carried_out_by->p14.1_in_the_role_of->E55_Type	This field is used to document the role of a group/institution associated with the archaeological project (i.e. sponsor, permit provider, etc.).	Concept	



Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: A2_Stratigraphic_Volume_Unit (Excavation Unit/Context)				
Excavation Participant	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p01i_is_domain_of->PC14_carried_out_by->p02_has_range->E21_Person	This field is used to relate the excavation unit to a person participating in its excavation process.	Reference Model	E21_Person
Excavation Participant Role	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p01i_is_domain_of->PC14_carried_out_by->p14.1_in_the_role_of->E55_Type	This field is used to document the specific role of a person (trench supervisor, excavator, etc.) participating in the excavation process of the excavation unit.	Concept	

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Excavation Participant Group	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p01i_is_domain_of->PC14_carried_out_by->p02_has_range->E74_Group	This field is used to relate the excavation unit to a group or institution participating in its excavation process. Such groups can be museums, funding bodies, etc.	Reference Model	E74_Group
Excavation Participant Group Role	->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p01i_is_domain_of->PC14_carried_out_by->p14.1_in_the_role_of->E55_Type	This field is used to document the type of group associated with the excavation unit.	Concept	



Modelling Finds

- How does one model finds from an excavation context?

Concept	Origin	Path to Target	Target	Reference
Find	S19 Encounter Event	O19 has found object	E22 Human Made Object	Marlet et al 2019
Find	A8 Stratigraphic Unit	AP21 contains	E22 Human Made Object	Marlet et al 2019
Find	A2 Stratigraphic Volume Unit	AP21 contains	E18 Physical Thing	Giagkoudi et al 2018

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: S13_Sample (Finds Collection - Bag or similar)				
Identifier Type	->P1_is_identified_by->E42_Identifier->P2_has_type->E55_Type	This field is used to document the type of unique identifier the collection of finds is referred to by.	Concept	
Identifier Data Assignment	->P1_is_identified_by->E42_Identifier->P141i-->E13_Attribute_Assignment	This field is used to document the unique identifier the collection of finds is referred to by	Collection	<i>Data Assignment</i>
Source Reference Work for Identifier	->P1_is_identified_by->E42_Identifier->P67i_is_referred_to_by->E33_Linguistic_Object	This field is used to document the textual source the collection of finds identifier may have been found in	Reference Model	E33_Linguistic_Object
Identifier	->P1_is_identified_by->E42_Identifier->P190_has_symbolic_content->rdf:literal	This field is used to document any attributes associated with the assignment of the identifier, such as the person or institution responsible for the creation of the identifier, the timespan, the specific use, etc. This field points at a collection of fields equipped to accommodate these attributes.	String	

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Collection Dimension	->P43_has_dimension->E54_Dimension	This field is used to document any dimension of collection of finds.	Integer	
Type	->P2_has_type->E55_Type	This field is used to document the type of collection of finds (i.e. pottery, bones, mixed material, etc.).	Concept	
Statement Type	->P67i_is_referred_to_by->E33_Linguistic_Object->P2_has_type->E55_Type	This field is used to document the type of free text statement (such as comments, notes, etc.) made about the finds collection.	Concept	
Statement	->P67i_is_referred_to_by->E33_Linguistic_Object->P190_has_symbolic_content->rdf:literal	This field is used to document the content of free text statement made about the finds collection.	String	
Depicted by Image		This field is used to relate the collection of finds to an image depicting it.	Reference Model	E36_Visual_Item
Source Reference Work for Statement	->P67i_is_referred_to_by->E33_Linguistic_Object->P67i_is_referred_to_by->E33_Linguistic_Object	This field is used to document any textual reference related to the free text statement made about the finds collection.	Reference Model	E33_Linguistic_Object
Statement Language	->P67i_is_referred_to_by->E33_Linguistic_Object->P72_has_language->E56_Language	This field is used to document the language of the free text statement made about the finds collection.	Concept	
Production Event Period	->P108i_was_produced_by->E12->P117_occurs_during->E4_Period	This field is used to link the documented production of the finds within the collection to the period during which it occurred.	Reference Model	E4_Period
Part of Stratigraphic Unit	->p46i_forms_part_of->A8_Stratigraphic_Unit	This field is used to relate the documented finds collection to the general stratigraphic unit it belongs to.	Reference Model	A8_Stratigraphic_Unit

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Object Task	->p128_carries->E29_Design_or_Procedure	This field is used to record different tasks associated with the documented finds collection. The field point at a collection allowing to record types of task, assigned to, assigned by and other relevant attributes.	Collection	<i>Tasks</i>
Object General Type	->p130_shows_features_of->E55_Type	This field is used to record the generic type of the documented finds collection such as shape, body part, etc.	Concept	
Object Function	->p130_shows_features_of->E55_Type->p101_had_as_general_use->E55_Type	This field is used to record the generic function of the documented finds in the collection such as storage, drinking, warfare, domestic, etc.	Concept	
Object Part of Site	->p46i_forms_part_of->E27-Site	This field is used to relate the documented finds collection to the archaeological site they belong to.	Reference Model	E27_Site
Part of Stratigraphic Volume Unit	->p46i_forms_part_of->A2_Stratigraphic_Volume_Unit	This field is used to relate the documented finds collection to the excavation unit it was collected from.	Reference Model	A2_Stratigraphic_Volume_Unit
Object Part Of Sample	->p46i_forms_part_of->S13_Sample	This field is used to relate to a higher level of a finds collection, such as a collection of pottery (bag of pottery) is a part of a larger collection (bag of mixed finds).	Reference Model	
Object General Subtype	->p130_shows_features_of->E55_Type->p2_has_type->E55_Type	This field is used to record the generic subtype of the documented finds collection directly associated with the generic type (i.e. jug, bowl (if shape is generic type), rim, base (if body part is generic type)).	Concept	

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Permanent Location	->P55_has_current_location->E53_Place[247_1]	This field is used to link the documented collection of finds with the instance of place that stands as its current storage location.	Reference Model	
Sample Timespan	->O5_was_removed_by->S2_Sample_Taking->O4_was_sampled_at->A2_Stratigraphic_Volume_Unit->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p4_has_time-span->E52_Time-span	This field is used to document the collection time of the finds collection in case the sample is not associated with an excavation unit of sorts.	Collection	
Sample Collected By	->O5_was_removed_by->S2_Sample_Taking->O4_was_sampled_at->A2_Stratigraphic_Volume_Unit->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p01i_is_domain_of->PC14_Carried_Out_By->p02_has_range->E21_Person	This field is used to document the person who collected the finds collection.	Reference Model	
Sample Collected By Role	->O5_was_removed_by->S2_Sample_Taking->O4_was_sampled_at->A2_Stratigraphic_Volume_Unit->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p01i_is_domain_of->PC14_Carried_Out_By->p14.1_in_the_role_of->E55_Type	This field is used to document the specific role of the person who collected the finds collection.	Collection	
Source Reference	->P67i_is_referred_to_by->E33_Linguistic_Object[173_1]	This field is used to document any relevant bibliographic reference to the finds collection.	Reference Model	E33_Linguistic_Object
Permanent Location	->P55_has_current_location->E53_Place	This field is used to link the documented bone with the instance of place that stands as its current storage location.	Reference Model	E53_Place
Spatial Extent	->p39i_was_measured_by->E16_Measurement->p141_assigned->SP6_Declarative_Place	This field is used to document the spatial extent of the finds collection.	Collection	<i>Coordinates</i>

Drawio diagram:

<https://drive.google.com/file/d/138pxt2Vcbtrg3J9G1OISWVguL00IXMyQ/view?usp=sharing>

- How does one model special finds / bones / pottery?

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: E22_Human-Made_Object (Artefacts)				
Identifier Type	->P1_is_identified_by->E42_Identifier->P2_has_type->E55_Type	This field is used to record the type of the identifier attributed to the documented artefact.	Concept	
Identifier Data Assignment	->P1_is_identified_by->E42_Identifier->P141i-->E13_Attribute_Assignment	This field is used to indicate the details of the data assignment of this identifier to the documented artefact.	Collection	<i>Data Assignment</i>
Dimension Type	->P43_has_dimension->E54_Dimension->P2_has_type->E55_Type	This field is used to record the formal type of the documented dimension of the artefact, such as width, length, height, etc.	Concept	
Identifier	->P1_is_identified_by->E42_Identifier->P190_has_symbolic_content->rdf:literal	This field is used to record an identifier attributed to the documented artefact.	String	
Dimension	->P43_has_dimension->E54_Dimension	This field is used to record the dimensions of the documented artefact.	Collection	<i>Dimension</i>
Source Reference Work for Identifier	->P1_is_identified_by->E42_Identifier->P67i_is_referred_to_by->E33_Linguistic_Object	This field is used to link to a source text in which the identifier denoting the documented artefact is used.	Reference Model	E33_Linguistic_Object
Type	->P2_has_type->E55_Type	This field is used to record the formal type of the documented artefact such as pottery, lithics etc.	Concept	

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Statement Type	->P67i_is_referred_to_by->E33_Linguistic_Object->P2_has_type->E55_Type	This field is used to record the formal type of the statement made about the documented artefact.	Concept	
Object Task	->p128_carries->E29_Design_or_Procedure	This field is used to record different tasks associated with the documented artefact (such as 'to be drawn', to be 'sampled', etc). The field point at a collection of fields allowing to record types of task, assigned to, assigned by and other relevant attributes.	Collection	
Creation Event Period	->P94i_was_created_by->E65_Creation->P117_occurs_during->E4_Period	This field is used to link the documented artefact creation activity to the period during which it occurred.	Reference Model	E4_Period
Object Function	->p130_shows_features_of->E55_Type->p101_had_a_s_general_use->E55_Type	This field is used to record the generic function of the documented artefact such as storage, drinking, warfare, domestic, etc.	Concept	
Object Part Of Sample	->p46i_forms_part_of->S13_Sample	This field is used to relate to a finds collection, from which the individual artefact was extracted.	Reference Model	S13_Sample
Statement Language	->P67i_is_referred_to_by->E33_Linguistic_Object->P72_has_language->E56_Language	This field is used to record the language of the statement describing the documented artefact.	Concept	
Source Reference Work for Statement	->P67i_is_referred_to_by->E33_Linguistic_Object->P67i_is_referred_to_by->E33_Linguistic_Object[55_1]	This field is used to link to a source text from which the statement describing the documented artefact is derived.	Reference Model	E33_Linguistic_Object
Object General Type	->p130_shows_features_of->E55_Type	This field is used to record the generic type of the documented artefact such as shape, body part, etc.	Concept	
Statement	->P67i_is_referred_to_by->E33_Linguistic_Object->P	This field is used to record the actual textual content	String	

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
	190_has_symbolic_content->rdf:literal	of the statement describing the documented artefact.		
Depicted by Image	->p62i_depicted_by->E36_Visual_Item	This field is used to relate the artefact to an image depicting it.	Reference Model	E36_Image
Object Parallel	->zp43i_is_similarity_subject_of->ZE14_Similarity_Status->zp44_has_similarity_target->E22_Human-Made_Object	This field is used to relate the artefact to another artefact closely resembling it.	Reference Model	E22_Human-Made_Object
Object Parallel Type	->zp43i_is_similarity_subject_of->ZE14_Similarity_Status->zp44_has_similarity_target->E55_Type	This field is used to define a generic established type, which the documented artefact closely resembles (i.e. Dragendorf 44).	Concept	
Object Parallel Source	->zp43i_is_similarity_subject_of->ZE14_Similarity_Status->zp44_has_similarity_target->E22_Human-Made_Object->p67i_referred_by->E33_Linguistic_Object	This field is used to refer to a bibliographic reference, containing information about an artefact resembling the documented artefact, without having a specific type defined.	Reference Model	E33_Linguistic_Object
Collection Part	->p46i_forms_part_of->E78_Collection	This field is used to relate the artefact to a museum collection, to which it belongs.	Reference Model	E78_Collection
Material	->P45_consists_of->E57_Material	This field is used to record the material of which the documented artefact consists.	Concept	
Spatial Extent	->p39i_was_measured_by->E16_Measurement->p141_assigned->SP6_Declarative_Place	This field is used to document the spatial extent of the finds of the artefact.	Collection	<i>Coordinates</i>
Permanent Location	->P55_has_current_location->E53_Place	This field is used to link the documented artefact with the instance of place that stands as its current storage location.	Reference Model	E53_Place

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: E20_Biological_Object (Bones - non-worked)				
Identifier Type	->P1_is_identified_by->E42_Identifier->P2_has_type->E55_Type	This field is used to record the type of the identifier attributed to the documented bone.	Concept	
Identifier Data Assignment	->P1_is_identified_by->E42_Identifier->P141i-->E13_Attribute_Assignment	This field is used to indicate the details of the data assignment of this identifier to the documented bone.	Collection	<i>Data Assignment</i>
Dimension Type	->P43_has_dimension->E54_Dimension->P2_has_type->E55_Type	This field is used to record the formal type of the documented dimension of the bone, such as width, length, height, etc.	Concept	
Identifier	->P1_is_identified_by->E42_Identifier->P190_has_symbolic_content->rdf:literal	This field is used to record an identifier attributed to the documented bone.	String	
Dimension	->P43_has_dimension->E54_Dimension	This field is used to record the dimensions of the documented bone.	Collection	<i>Dimension</i>
Source Reference Work for Identifier	->P1_is_identified_by->E42_Identifier->P67i_is_referred_to_by->E33_Linguistic_Object	This field is used to link to a source text in which the identifier denoting the documented bone is used.	Reference Model	E33_Linguistic_Object
Type	->P2_has_type->E55_Type	This field is used to record the formal type of the documented bone.	Concept	
Statement Type	->P67i_is_referred_to_by->E33_Linguistic_Object->P2_has_type->E55_Type	This field is used to record the formal type of the statement made about the documented bone.	Concept	
Object Task	->p128_carries->E29_Design_or_Procedure	This field is used to record different tasks associated with the documented bone (such as 'to be drawn', to be 'sampled', etc). The field points at a collection of fields allowing to record types of task, assigned to, assigned by and other relevant attributes.	Collection	

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Object Part Of Sample	->p46i_forms_part_of->S13_Sample	This field is used to relate to a finds collection, from which the individual bone was extracted.	Reference Model	S13_Sample
Statement Language	->P67i_is_referred_to_by->E33_Linguistic_Object->P72_has_language->E56_Language	This field is used to record the language of the statement describing the documented bone.	Concept	
Source Reference Work for Statement	->P67i_is_referred_to_by->E33_Linguistic_Object->P67i_is_referred_to_by->E33_Linguistic_Object[55_1]	This field is used to link to a source text from which the statement describing the documented bone is derived.	Reference Model	E33_Linguistic_Object
Object General Type	->p130_shows_features_of->E55_Type	This field is used to record the generic type of the documented bone such as shape, body part, etc.	Concept	
Statement	->P67i_is_referred_to_by->E33_Linguistic_Object->P190_has_symbolic_content->rdf:literal	This field is used to record the actual textual content of the statement describing the documented bone.	String	
Depicted by Image	->p62i_depicted_by->E36_Visual_Item	This field is used to relate the bone to an image depicting it.	Reference Model	E36_Image
Collection Part	->p46i_forms_part_of->E78_Collection	This field is used to relate the bone to a museum collection, to which it belongs.	Reference Model	E78_Collection
Spatial Extent	->O19i_was_object_encountered_at->S19_Encounter_Event->p7_took_place->E35_Place->q11i_approximated_by->SP6_Declarative_Place	This field is used to document the spatial location of the collection of the bone.		<i>Coordinates</i>
Permanent Location	->P55_has_current_location->E53_Place	This field is used to link the documented bone with the instance of place that stands as its current storage location.	Reference Model	E53_Place
Part of Object	->p46i_forms_part_of->E20_Biological_Object	This field is used to relate a bone or a number of bones to a specimen or a fragment of bone to the whole.	Reference Model	E20_Biological_Object

- How does one model archaeological samples?

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: S13_Sample (radiocarbon, micromorphology, etc.)				
Identifier Type	->P1_is_identified_by->E42_Identifier->P2_has_type->E55_Type	This field is used to document the type of unique identifier the sample is referred to by.	Concept	
Identifier Data Assignment	->P1_is_identified_by->E42_Identifier->P141i->E13_Attribute_Assignment	This field is used to document the unique identifier the sample is referred to by	Collection	<i>Data Assignment</i>
Source Reference Work for Identifier	->P1_is_identified_by->E42_Identifier->P67i_is_referred_to_by->E33_Linguistic_Object	This field is used to document the textual source the sample identifier may have been found in	Reference Model	E33_Linguistic_Object
Identifier	->P1_is_identified_by->E42_Identifier->P190_has_symbolic_content->rdf:literal	This field is used to document any attributes associated with the assignment of the identifier, such as the person or institution responsible for the creation of the identifier, the timespan, the specific use, etc. This field points at a sample equipped to accommodate these attributes.	String	
Sample Dimension	->P43_has_dimension->E54_Dimension	This field is used to document any dimension of sample.	Collection	<i>Dimension</i>
Type	->P2_has_type->E55_Type	This field is used to document the type of sample (i.e. pottery, bones, mixed material, etc.).	Concept	
Statement Type	->P67i_is_referred_to_by->E33_Linguistic_Object->P2_has_type->E55_Type	This field is used to document the type of free text statement (such as comments, notes, etc.) made about the sample.	Concept	
Statement	->P67i_is_referred_to_by->E33_Linguistic_Object->P190_has_symbolic_content->rdf:literal	This field is used to document the content of free text statement made about the sample.	String	

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Depicted by Image	->p138i_is_represented_by->E36_Visual_Item	This field is used to relate the sample to an image depicting it.	Reference Model	E36_Visual_Item
Source Reference Work for Statement	->P67i_is_referred_to_by->E33_Linguistic_Object->P67i_is_referred_to_by->E33_Linguistic_Object	This field is used to document any textual reference related to the free text statement made about the sample.	Reference Model	E33_Linguistic_Object
Part of Stratigraphic Unit	->p46i_forms_part_of->A8_Stratigraphic_Unit	This field is used to relate the documented sample to the general stratigraphic unit it belongs to.	Reference Model	A8_Stratigraphic_Unit
Object Task	->p128_carries->E29_Design_or_Procedure	This field is used to record different tasks associated with the documented sample. The field point at a collection allowing to record types of task, assigned to, assigned by and other relevant attributes.	Collection	
Part of Stratigraphic Volume Unit	->p46i_forms_part_of->A2_Stratigraphic_Volume_Unit	This field is used to relate the documented sample to the excavation unit it was sampled from.	Reference Model	A2_Stratigraphic_Volume_Unit
Object Part Of Sample	->p46i_forms_part_of->S13_Sample	This field is used to relate to a higher level of a sample, such as a collection of pottery (bag of pottery) is a part of a larger collection (bag of mixed finds).	Reference Model	
Sample Timespan	->O5_was_removed_by->S2_Sample_Taking->O4_was_sampled_at->A2_Stratigraphic_Volume_Unit->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p4_has_time-span->E52_Time-span	This field is used to document the collection time of the sample in case the sample is not associated with an excavation unit of sorts.	Collection	

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Sample Collected By	->O5_was_removed_by->S2_Sample_Taking->O4_was_sampled_at->A2_Stratigraphic_Volume_Unit->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p01i_is_domain_of->PC14_Carried_Out_By->p02_has_range->E21_Person	This field is used to document the person who collected the sample.	Reference Model	
Sample Collected By Role	->O5_was_removed_by->S2_Sample_Taking->O4_was_sampled_at->A2_Stratigraphic_Volume_Unit->ap5i_was_partially_or_totally_removed_by->A1_Excavation_Process_Unit->p01i_is_domain_of->PC14_Carried_Out_By->p14.1_in_the_role_of->E55_Type	This field is used to document the specific role of the person who collected the sample.	Collection	
Source Reference	->P67i_is_referred_to_by->E33_Linguistic_Object[173_1]	This field is used to document any relevant bibliographic reference to the sample.	Reference Model	E33_Linguistic_Object
Spatial Extent	->O19i_was_object_encountered_at->S19_Encounter_Event->p7_took_place->E35_Place->q11i_approximated_by->SP6_Declarative_Place	This field is used to document the spatial extent of the sample.		<i>Coordinates</i>

Drawio diagram:

<https://drive.google.com/file/d/1clQhQHrwkzeTq8fbEgV0CKihlErLtox-/view?usp=sharing>

Modelling Outputs / Documentation / Apparati

- How does one model excavation photos and drawings?

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: E36_Visual Item				
Identifier Type	->P1_is_identified_by->E42_Identifier->P2_has_type->E55_Type	This field is used to document the type of unique identifier the image is referred to by.	Concept	
Identifier Data Assignment	->P1_is_identified_by->E42_Identifier->P141i-->E13_Attribute_Assignment	This field is used to document the unique identifier the image is referred to by	Collection	<i>Data Assignment</i>
Source Reference Work for Identifier	->P1_is_identified_by->E42_Identifier->P67i_is_referred_to_by->E33_Linguistic_Object	This field is used to document the textual source the image identifier may have been found in	Reference Model	E33_Linguistic_Object
Identifier	->P1_is_identified_by->E42_Identifier->P190_has_symbolic_content->rdf:literal	This field is used to document any attributes associated with the assignment of the identifier, such as the person or institution responsible for the creation of the identifier, the timespan, the specific use, etc. This field points at a sample equipped to accommodate these attributes.	String	
Type	->P2_has_type->E55_Type	This field is used to document the type of image (i.e. photo, drawing, plan, etc).	Concept	

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Statement Type	->P67i_is_referred_to_by->E33_Linguistic_Object->P2_has_type->E55_Type	This field is used to document the type of free text statement (such as comments, notes, etc.) made about the image.	Concept	
Statement	->P67i_is_referred_to_by->E33_Linguistic_Object->P190_has_symbolic_content->rdf:literal	This field is used to document the content of free text statement made about the image.	String	
Represents Entity	->p138_represents->E1_CRM_Entity	This field is used to relate the image to an entity it represents.	Reference Model	E22_Human-Made_Object, S13_Sample, U6_Material_Sample, E53_Place, A2_Stratigraphic_Volume_Unit, A8_Stratigraphic_Unit, E25_Human-Made_Feature
Digitally Visual Bearer	->la:digitally_shown_by->D1_Digital_Object	This field is used to relate the image to an instance of a digital object that shows it.	Reference Model	D1_Digital_Object
Conceptual Object Created By	->p94i_was_created_by->E65_Creation->p01i_is_domain_of->PC14_Carried_Out_By->p02_has_range-E21_Person	This field is used to relate the image to an instance of a person that has created it.	Reference Model	E21_Person
Creator Role	->p94i_was_created_by->E65_Creation->p01i_is_domain_of->PC14_Carried_Out_By->p14.1_in_the_role_of->E55_Type	This field is used to document the role in which the creator of the image has created it (photographer, artist, topographer, etc.)	Concept	
Creation Timespan	->P94i_was_created_by->E65_Creation->P4_has_time-span->E52_Time-Span	This field is used to document the time-span within which the image was created.	Collection	<i>Timespan</i>
Physical Carrier Dimensions	->P128i_is_carried_by->E22_Human-Made_Object->p43_has_dimension->E54_Dimension	This field is used to document the dimensions of the physical carrier of the image.	Collection	<i>Dimension</i>

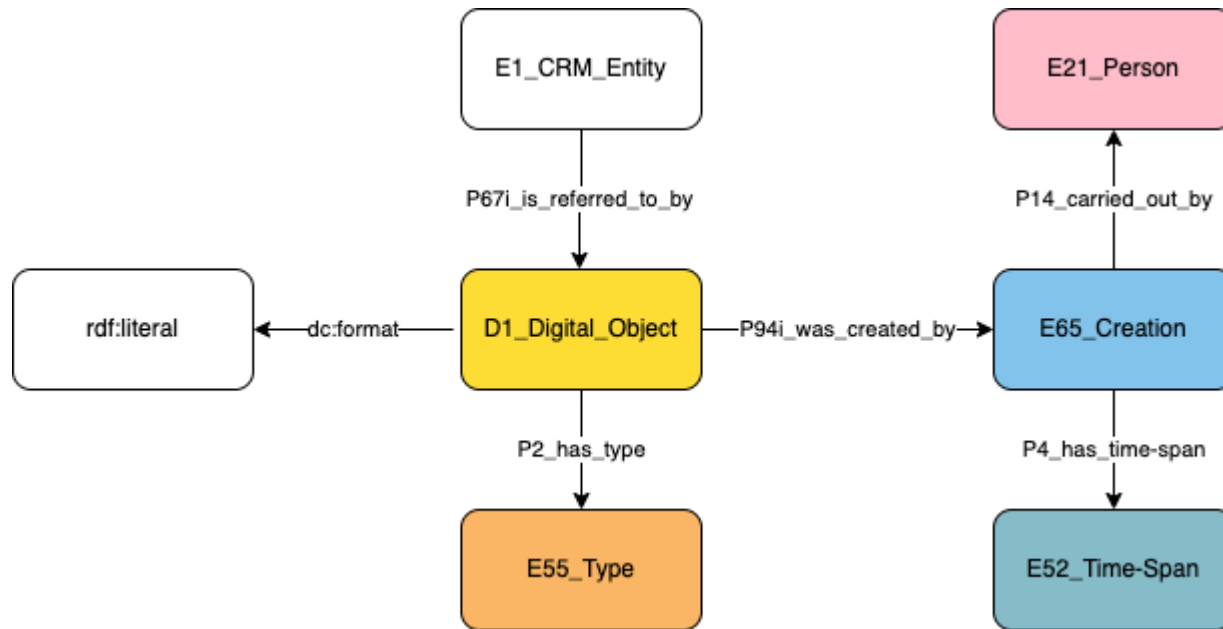
Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Physical Carrier Dimensions	->P128i_is_carried_by->E22_Human-Made_Object->p2_has_type->E55_Type	This field is used to document the type of the physical carrier of the image (graph paper, tracing paper, photo paper, etc)	Concept	
Physical Carrier Location	->P128i_is_carried_by->E22_Human-Made_Object->p55_has_current_location->E53_Place	This field is used to relate the image to an instance of a place where the physical carrier of the image is currently being kept.	Reference Model	E53_Place

Drawio diagram:

<https://drive.google.com/file/d/1xvt3P1T9OQE940URcxrIRKD7S1xzL9HL/view?usp=sharing>

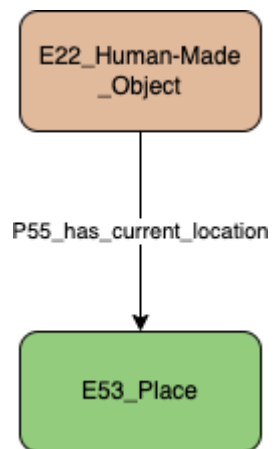
- How does one model spatial data files such as cad or shp?

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: E1_CRM_Entity (refers to any of the main entities - A2, A8, A1, E22, S13, etc.)				
Digital Object Reference	->P67i_is_referred_to_by->D1->Digital_Object	This field is used to link the documented entity to a digital object that represents it such as spatial files or digital images.	Reference Model	D1_Digital_Object
Digital Object Type	->P67i_is_referred_to_by->D1->Digital_Object-p2_has_type->E55_Type	This field is used to document the general type of the linked to the documented entity digital object that represents it.	Concept	
Digital Object Created By	->P67i_is_referred_to_by->D1->Digital_Object->p94i_created_by->E65_Creation->p14_carried_out_by->E21_Person		Reference Model	E21_Person
Digital Object Creation Timespan	->P67i_is_referred_to_by->D1->Digital_Object->p94i_created_by->E65_Creation->p4_has_time-span->E52_Time-Span.		Collection	<i>Timespan</i>
Digital Object File Format	->P67i_is_referred_to_by->D1->Digital_Object->dc:format->rdf:literal		String	



- How does one model finds storage?

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: E18_Physical_Thing (refers to all samples and artefacts)				
Permanent Location	->P55_has_current_location->E53_Place	This field is used to link the documented bone with the instance of place that stands as its current storage location.	Reference Model	E53_Place



Modelling Interpretation

- How does one model chronology?

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: E22_Human-Made_Object				
Object Production Period	->p108i_was_produced_by->E12_Production->zp55i_is_dating_subject_of->ZE25_Dating_Status->zp54_ascribes_date->E4_Period	This field is used to relate the documented human-made object (artefact) to an instance of period that was ascribed to its production.	Reference Model	E4_Period
Object Production Period Data Assignment	->p108i_was_produced_by->E12_Production->zp55i_is_dating_subject_of->ZE25_Dating_Status->p141_was_assigned_by->E13_Attribute_Assignment	This field is used to record data attribution to the period assigned to the production of the artefact (i.e. person who assigned it, when and for what reason).	Collection	<i>Data Assignment</i>
Root Node: U6_Material_Sample				
Material Sample Ascribed Period	->p46i_forms_part_of->A8_Stratigraphic_Unit->ap7i_was_produced_by->A4_Stratigraphic_Genesis->zp55i_is_dating_subject_of->ZE25_Dating_Status->zp54_ascribes_date->E4_Period	This field is used to relate the documented material sample (finds collection) to an instance of period that was ascribed to its existence.	Reference Model	E4_Period
Material Sample Part Ascribed Period	->p46_is_composed_of->U6_Material_Sample->p46i_forms_part_of->A8_Stratigraphic_Unit->ap7i_was_produced_by->A4_Stratigraphic_Genesis->zp55i_is_dating_subject_of->ZE25_Dating_Status->zp54_ascribes_date->E4_Period	This field is used to relate a part of the documented material sample (finds collection) to an instance of period that was ascribed to its existence. This is particularly relevant when samples of mixed material or compromised stratigraphic units have been collected and described as a whole.	Reference Model	E4_Period

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Material Sample Ascribed Period Data Assignment	->p46i_forms_part_of->A8_Stratigraphic_Unit->ap7i_was_produced_by->A4_Stratigraphic_Genesis->zp55i_is_dating_subject_of->ZE25_Dating_Status->p141_was_assigned_by->E13_Attribute_Assignment	This field is used to record data attribution to the period assigned to the existence of the material sample (i.e. person who assigned it, when and for what reason).	Collection	<i>Data Assignment</i>
Material Sample Part Ascribed Period Data Assignment	->p46_is_composed_of->U6_Material_Sample->p46i_forms_part_of->A8_Stratigraphic_Unit->ap7i_was_produced_by->A4_Stratigraphic_Genesis->zp55i_is_dating_subject_of->ZE25_Dating_Status->p141_was_assigned_by->E13_Attribute_Assignment	This field is used to record data attribution to the period assigned to the existence of the material sample part (i.e. person who assigned it, when and for what reason).	Collection	<i>Data Assignment</i>
Root Node: A2_Stratigraphic_Volume_Unit				
Excavation Unit Period	->p46i_forms_part_of->A8_Stratigraphic_Unit->ap7i_was_produced_by->A4_Stratigraphic_Genesis->zp55i_is_dating_subject_of->ZE25_Dating_Status->zp54_ascribes_date->E4_Period	This field is used to relate the documented excavation unit to an instance of period that was ascribed to the genesis of its context.		E4_Period
Excavation Unit Period Data Assignment	->p46i_forms_part_of->A8_Stratigraphic_Unit->ap7i_was_produced_by->A4_Stratigraphic_Genesis->zp55i_is_dating_subject_of->ZE25_Dating_Status->p141_was_assigned_by->E13_Attribute_Assignment	This field is used to record data attribution to the period assigned to the genesis of the context of the excavation unit (i.e. person who assigned it, when and for what reason).	Collection	<i>Data Assignment</i>
Root Node: A8_Stratigraphic_Unit				
Stratigraphic Unit Period	->ap7i_was_produced_by->A4_Stratigraphic_Genesis->zp55i_is_dating_subject_of->ZE25_Dating_Status->zp54_ascribes_date->E4_Period	This field is used to relate the documented stratigraphic unit to an instance of period that was ascribed to its stratigraphic genesis.		E4_Period

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Stratigraphic Unit Period Data Assignment	->ap7i_was_produced_by->A4_Stratigraphic_Genesis->zp55i_is_dating_subject_of->ZE25_Dating_Status->p141_was_assigned_by->E13_Attribute_Assignment	This field is used to record data attribution to the period assigned to the genesis of the stratigraphic unit (i.e. person who assigned it, when and for what reason).	Collection	<i>Data Assignment</i>
Root Node: S13_Sample				
Sample Time-Span	->p8i_witnessed->E5_Event->p4_has_time-span->E52_Time-Span	This field is to document the time-span associated with an archaeological sample after scientific analysis.	Collection	Time-Span
Sample Time-Span Observation	->p8i_witnessed->E5_Event->p4_has_time-span->E52_Time-Span->zp54i_->ZE25_Dating_Status->zp42i_was_initially_initiated_by->ZE26_Dating_Declaration->p17_was_motivated_by_S4_Observation	This field is to link the documented sample with an instance of observation (scientific analysis) that has been performed to it to define time-span of the existence or death of the entity to which it is a part of.	Reference Model	S4_Observation

Drawio diagram:

https://drive.google.com/file/d/1PNrHg4iOC-QBCHESBu_yg_J5KmpZkNDY/view?usp=sharing

- How does one model an excavator/researcher's interpretation?

Statement Collection

Provisional Field Name	Ontology Path	Model Description	Field Value	Expected Target Node/Collection
Root Node: E1_CRM_Entity (can refer to any of the above entities)				
Statement Type	->P67i_is_referred_to_by->E33_Linguistic_Object[13_1]->P2_has_type->E55_Type[14_1]	This field is used to document the type of free text statement (such as comments, notes, unit interpretation) made about the excavation unit.	Concept	
Statement	->P67i_is_referred_to_by->E33_Linguistic_Object[13_1]->P190_has_symbolic_content->rdf:literal	This field is used to document the content of free text statement made about the excavation unit.	String	
Statement Language	->P67i_is_referred_to_by->E33_Linguistic_Object[13_1]->P72_has_language->E56_Language[16_1]	This field is used to document the language of free text statement made about the excavation unit.	Concept	
Statement Created By	->P67i_is_referred_to_by->E33_Linguistic_Object->p94i_created_by->E65_Creation->p14_carried_out_by->E21_Person			
Statement Timespan	->P67i_is_referred_to_by->E33_Linguistic_Object->p94i_created_by->E65_Creation->p4_has_timespan->E52_Time-Span			
Source Reference Work for Statement	->P67i_is_referred_to_by->E33_Linguistic_Object[13_1]->P67i_is_referred_to_by->E33_Linguistic_Object[55_1]	This field is used to document any textual reference related to the free text statement made about the excavation unit.	E33_Linguistic_Object	

