## Issue 294: E55 Type relations

The sig reviewed GB’s HW on the scope notes of relations linking instances of E55 Type to E4 Period. Specifically, properties:

#### restricted to

Domain: E55 Type  
Range: E4 Period  
Subproperty: appears in  
Quantification: many-to-one  
  
Scope Note:

This property connects a kind of object (documented as an instance of E55) to an instance of E4 Period to indicate that this kind of object is exclusively generated in contexts – archaeological, biological, geological –in this period.

This property makes a strong statement with regards to the distribution of the class of object in the archaeological record. The statement would support reasoning, ceteris paribus, that the discovery of an instance of this type of object in a context would be indicative of the extension of an instance of the related instance of E4 Period over the area of archaeological observation.

Weaker claims can be made using ‘typical for’ and ‘appears in’.

##### A summary of the discussion points made can be found below:

CEO was unhappy with the phrasing “[…] to indicate that this kind of object is \*exclusively\* generated in contexts – archaeological, biological, geological –in this period”. He thinks that adding “exclusive” in the definition creates problems when a certain type of object, known to belong to a specific archaeological context, is found in a different context than the one anticipated.

GB pointed out that that’s bound to happen in obstructed archaeological contexts –so ”restricted to” essentially corresponds to a falsifiable claim about a type of object.

GH said that this particular problem could be resolved by changing the phrase to “\*exclusively\* generated in **unobstructed** contexts – archaeological, biological, geological –in this period”.

SS pointed out that the purpose of this phrasing is not to blindly assign objects to a period based on the identity of the archaeological/geological context that they were found in –especially if it is extremely unlikely that they have been created over the said period. They should be assigned the type of period in the course of which they were actually produced/created –their embedding in an archaeological context that is incompatible with their production/creation period is irrelevant, and should not be taken into account. That is the purpose of the wording of the scope note for the purpose.

**DECISION**: The scope note was accepted as a working definition. HW assigned to MD to rephrase it a bit, going through a genesis event and assessing the period it forms part of.

#### typical for

Domain: E55 Type  
Range: E4 Period  
Subproperty: appears in  
Quantification: many-to-one

Scope Note:

This property connects a kind of object (documented as an instance of E55 Type) to an instance of E4 Period in order to indicate that this kind of object is regularly found in archaeological contexts related to this period.

This property makes a moderate statement with regards to the distribution of the class of object in the archaeological record. The statement would support reasoning, ceteris paribus, that the discovery of instances of this type of object in an archaeological context would be a possible indicator of the extension of an instance of the related instance of E4 Period over the area of archaeological observation.

A stronger claim can be made using ‘restricted to’ while a weaker claim is made using ‘appears in.

**DECISION**: The scope note was accepted as a working definition. The scope note should include some quantifying expression to measure the notion of \*enough objects belonging to a kind of period\*. This is something to put work on.

**HW**: MD will be redrafting the scope note.

**PROPOSAL**: MD suggested to send an invitation to Alison Wiley to participate in this discussion (and the sig activities), because she has shown an interest in building an ontology on archaeological excavation. Everyone present was in favor of this proposal. MD is to contact AW.