### OLD

|  |  |
| --- | --- |
| Transitivity | Transitivity is defined in the standard way found in mathematics or logic: A property P is transitive if the domain and range is the same class and for all instances x, y, z of this class the following is the case: If x is related by P to y and y is related byP to z, then x is related by P to z. The intention of a property as described in the scope note will decide whether a property is transitive. For example overlaps in time or in space are not transitive, while “occurs before” is transitive. Transitivity is especially useful when CIDOC CRM is implemented in a system with deduction. |

### NEW

|  |  |
| --- | --- |
| Transitivity | Transitivity is defined in the standard way found in mathematics or logic: A property P is transitive if the domain and range is the same class and for all instances x, y, z of this class the following is the case: If x is related by P to y and y is related byP to z, then x is related by P to z. The intention of a property as described in the scope note will decide whether a property is transitive. For example, the property *P121 overlaps with* between instances of E53 Place is not transitive, while the property *P89 falls within (contains)* between instances of E53 Place and the property *P46 is composed of (forms part of)* between instances of E18 Physical Thing are transitive. Transitivity is especially useful when CIDOC CRM is implemented in a system with deduction. |

### Note that P46,P165 has not been declared as transitive in the text, in contrast to P5, P86, P89,P106,P127,P73,P10,P9,P148

**P134, P122, P133,P152 is not transitive. P139,150 has been marked as “not transitive”**

**P69 has association with (is associated with) , P130 shows features of, P189 approximates should not be transitive**

**Temporal Primitives:**

**P173,174 are not transitive.**

**P175, P182,P184 are not transitive when a fuzzy boundary exists**

**P176,P183,P185 are transitive but not marked as such**