## P173 starts before or at the end of (ends after or with the start of)

Domain: E2 Temporal Entity

Range: E2 Temporal Entity

Superproperty of:

E2 Temporal Entity. P174 starts before the end of (ends after the start of) E2 Temporal Entity

Quantification: many to many (0,n:0,n)

Scope note:

This property specifies that the temporal extent of the domain instance A of E2 Temporal Entity starts before or simultaneously with the end of the temporal extent of the range instance B of E2 Temporal Entity.

In other words, if A = [As, Ae] and B = [Bs, Be], we mean As ≤ Be is true.

This property is part of the set of temporal primitives P173 – P176.

This property corresponds to the disjunction (logical OR) of the following Allen temporal relations [ Allen, 1983]: {before, meets, met-by, overlaps, starts, started-by, contains, finishes, finished-by, equals, during, overlapped by}



## P174 starts before the end of (ends after the start of)

Domain: E2 Temporal Entity

Range: E2 Temporal Entity

Subproperty of: E2 Temporal Entity. P173 starts before or at the end of (ends after or with the start of) E2 Temporal Entity

Superproperty of:E7 Activity. P134 continued by (was continued by): E7 Activity

E2 Temporal Entity. P115 finishes (is finished by): E2 Temporal Entity

E2 Temporal Entity. P117 occurs during (includes): E2 Temporal Entity

E2 Temporal Entity. P175 starts before or with (ends after or with the start of): E2 Temporal Entity

Quantification: many to many (0,n:0,n)

Scope note:

This property specifies that the temporal extent of the domain instance A of E2 Temporal Entity starts definitely before the end of the temporal extent of the range instance B of E2 Temporal Entity. In other words, if A = [As, Ae] and B = [Bs, Be], we mean As < Be is true.

Typically, this property is a consequence of a known influence of some event on another event or activity, such as a novel written by someone is continued by someone else, or the knowledge of a defeat on a distant battlefield causes people end their ongoing activities.

This property corresponds to a disjunction (logical OR) of the following Allen temporal relations [ Allen, 1983] : {before, meets, overlaps, starts, started-by, contains, finishes, finished-by, equals, during, overlapped by}



## P175 starts before or with (starts after or with the start of)

Domain: E2 Temporal Entity

Range: E2 Temporal Entity

Subproperty of: E2 Temporal Entity. P174 starts before the end of (ends after the start of) E2 Temporal Entity

Superproperty of: E2 Temporal Entity. P176 starts before (starts after the start of): E2 Temporal Entity

E2 Temporal Entity. P116 starts (is started by): E2 Temporal Entity

E2 Temporal Entity. P114 is equal in time to: E2 Temporal Entity

Quantification: many to many (0,n:0,n)

Scope note:

This property specifies that the temporal extent of the domain instance A of E2 Temporal Entity starts before or simultaneously with the start of the temporal extent of the range instance B of E2 Temporal Entity.

In other words, if A = [As, Ae] and B = [Bs, Be], we mean As ≤ Bs is true.

This property corresponds to a disjunction (logical OR) of the following Allen temporal relations [ Allen, 1983]: {before, meets, overlaps, starts, started-by, contains, finished-by, equals}

## 

## P176 starts before (starts after the start of)

Domain: E2 Temporal Entity

Range: E2 Temporal Entity

Subproperty of: E2 Temporal Entity. P175 starts before or with (starts after or with the start of) E2 Temporal Entity

Superproperty of: E2 Temporal Entity. P120 occurs before (occurs after): E2 Temporal Entity

E2 Temporal Entity. P119 meets in time with (is met in time by): E2 Temporal Entity

E2 Temporal Entity. P118 overlaps in time with (is overlapped in time by): E2 Temporal Entity

Quantification: many to many (0,n:0,n)

Scope note:

This property specifies that the temporal extent of the domain instance A of E2 Temporal Entity starts definitely before the start of the temporal extent of the range instance B of E2 Temporal Entity.

In other words, if A = [As, Ae] and B = [Bs, Be], we mean As < Bs is true.

This property corresponds to a disjunction (logical OR) of the following Allen temporal relations [Allen, 1983]: {before, meets, overlaps, contains, finished-by}

