TempEval 2010 TLINK Guidelines

TimeML Working Group

1 Introduction

One of the most important tags in a TimeML annotation is the Temporal Link tag, or `TLINK`. A `TLINK` represents the temporal relationship holding between events, times, or between an event and a time. For TempEval 2010, there are four distinct `TLINK` tasks:

1. **Intrasentential Event-Time Relation:** Determine the temporal relation between an event and a time expression in the same sentence. This task is further restricted by requiring that either the event syntactically dominates the time expression or the event and time expression occur in the same noun phrase.

2. **Event-DCT Relation:** For each event extent, determine the temporal relation between the event and the document creation time.

3. **Consecutive Main Event Relation:** Determine the temporal relation between two main events in consecutive sentences.

4. **Intrasentential Event-event Relation:** Determine the temporal relation between two events where one event syntactically dominates the other event. This refers to examples like "she *heard* an *explosion*", "he *said* they *postponed* the meeting", and "John *fainted* after the *concert*".

For each of these tasks, the annotator will be presented with the relevant events and time expressions already highlighted. For those tasks that involve the main event, this event will be preselected.

Each task will use the same set of relations: BEFORE, BEFORE-OR-OVERLAP, OVERLAP, OVERLAP-OR-AFTER, AFTER, and VAGUE. Each of these relations are described in the next section. Following that, we discuss each of the four tasks in more detail and provide examples.

2 TLINK Relations

1. A TLINK is marked as BEFORE if the following conditions hold: One **before** the other:

   As in the following example between the events *slayings* and *arrested*:

   > *The police looked into the* **slayings** *of 14 women. In six of the cases suspects have already been* **arrested**.

2. A TLINK is marked as AFTER if the following conditions hold: One **after** the other. This is just the inverse of the preceding relation. So the two events of the previous example can alternatively be annotated as expressing an **after** relation, if the directionality is changed.

3. A TLINK is marked as OVERLAP if one of the following conditions hold:

   (a) **Simultaneous**
   Two event instances are judged simultaneous if they happen at the same time, or are temporally indistinguishable in context, i.e. occur close enough to the same time that further distinguishing their times makes no difference to the temporal interpretation of the text.

   (b) One **including** the other:
   As is the case between the temporal expression and the event in the following example:

   > *John* **arrived** *in Boston* **last Thursday**.

   (c) One **being included** in the other:
   The inverse relation to the preceding one.

   (d) One holds **during** the other:
   Specifically applicable to states or events that persist throughout a duration, for example:

   > *James was* **CTO** *for* **two years**.
   > *John* **taught** *for* **20 minutes** *on Monday.*

   (e) One is being held **during** the other:
   The inverse relation to the proceding one.

4. A TLINK is marked as BEFORE-OR-OVERLAP if the following conditions hold:

(a) One **immediately before** the other:
As in the following sentence between *crash* and *died*.

All passengers **died** *when the plane* **crashed** *into the mountain*

(b) One being the **beginning** of the other:
As holds between the first of the temporal expressions and the event in the following example:

John was **in the gym** *between* **6:00 p.m.** *and 7:00 p.m.*

(c) One being **begun by** the other:
The inverse relation to the one just introduced.

5. A TLINK is marked as AFTER-OR-OVERLAP if the following conditions hold:

(a) One **immediately after** the other:
This is the inverse of the preceding relation.

(b) One being the **ending** of the other:

John was **in the gym** *between 6:00 p.m. and* **7:00 p.m.**.

(c) One being **ended by** the other:
The inverse relation to the one just introduced.

6. A TLINK is marked as VAGUE if there is a TLINK but you cannot determine what the relation is.

3 TLINK Tasks

3.1 Intrasentential Event-Time Relation

Determine the temporal relation between an event and a time expression in the same sentence. This task is further restricted by requiring that either the event syntactically dominates the time expression or the event and time expression occur in the same noun phrase. This can happen in two ways:

1. Clause-level relation: the temporal expression is an adverbial modifying the matrix (main) predicate. For example:

(a) *Mary* **left** *town* **last week**.

(b) **At midnight**, *Bill* **ate** *dinner.*

2. NP-internal relation: the temporal expression is contained within a Noun Phrase, where the head Noun is an event expression.

   (a) *John attended the* **lecture on Monday**.

   (b) *The* **October festival** *was fun.*

3.2 Event-DCT Relation

Determine the temporal relation between each event in the sentence and the document creation time.

(1) a. **July 14, 2009**
The Senator **reported** *today that he will be stepping down.*
b. **March 22, 2008**
Three people **died** *yesterday after a tanker exploded.*

In these examples, *reported* and *died* (along with any other events present) would be given a TLINK relation that describes their order relative to the DCT. Note that, for this task, the TIMEX3s *today* and *yesterday* are ignored. Note additionally that an event like *exploded* will also be ordered relative to the matrix event in its sentence in the Event-Event Relation task.

3.3 Consecutive Main Event Relation

Determine the temporal relation between two main events in consecutive sentences.

(2) a. Mary **moved** to Boston last spring. She had **lived** in New York for 10 years.
b. John **fainted** at the concert. He was **rushed** to the hospital.

As with the example above, only the matrix events are considered for the ordering relation in this task.

3.4 Intrasentential Event-event Relation

Determine the temporal relation between two events where one event syntactically dominates the other event.

(3) a. *The Senator* **reported** *today that he will be* **stepping** *down.*
b. *Three people* **died** *yesterday after a tanker* **exploded**.
c. *John* **fainted** *at the* **concert**.