

# **DEFT Rich ERE Annotation Guidelines: Events V2.9**

**Linguistic Data Consortium  
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**Changes from V2.8:**

- Section 3 and Section 4.4: Updated descriptions of realis types for clarity, and to be in sync with EAL guidelines.
- Section 5.2: Updated for clarity regarding means of transport.
- Sections 5.2.1 and 5.2.2: Updated for clarity regarding subtype definitions.
- Section 5.2.2: Updated to clarify transport artifact events, including the note that the artifact and the instrument/vehicle cannot be the same.

**Changes from V2.7:**

- Introduction: Argument fillers do not need to fall within the event mention scope to be annotated as event participants.
- Section 4: Added a note that restricts event participants from being annotated as more than one argument slot per event (with Life.Die “suicide” events and specific Movement events as exceptions).
- 5.1.5., 5.6.1.: Changed ‘Patient’ to ‘Victim’ ARG in an accompanying note and table
- 5.2.2: Added a note that states the following: Movement.Transport-Person events will not be annotated if the Artifact and Instrument refer to the same thing.
- 5.8: Added an example and a note to show that undesirable Transaction events, such as paying a parking ticket, will still be marked as Voluntary.

**Changes from V2.6:**

- 5.2: Added an example that shows double tagging for Movement.Transport-Person and Movement.Transport-Artifact events
- 5.2.1: Included Facility entities in the Movement.Transport-Person description
- Section 5.3: Business events description updated
- 5.3.3: Business.Declare-Bankruptcy events may have PER and GPE entities as ARGs (need PER, GPE examples)

**Changes from V2.51:**

- 5.2: Origin or Destination ARGs are not necessary for Movement.Transport-Person or Movement.Transport-Artifact events.
- Clarified final note in 2.3.5 about Event ARGs and non-tagable entities and argument fillers.

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## 1. Introduction

The purpose of this annotation project is to mark up texts for entities, coreference, events and relations. The primary purpose is for the annotations to describe the meaning of the text, as opposed to its syntactic or lexical aspects. The annotation is carried out level by level. This document describes the level of event annotation, event coreference, and event hoppers.

A taggable event is an explicit occurrence of an event with or without participants. The goal at the Event level of annotation is to detect and characterize events that tagged entities and argument fillers participate in.

We will not be tagging all events, but only examples of a particular set of types and subtypes. Specifically, we will be interested in annotating *Life*, *Movement*, *Transaction*, *Business*, *Conflict*, *Manufacture*, *Contact*, *Personnel* and *Justice* Events. Even among events of these types, we will only be interested in annotating examples of particular sets of subtypes. The types and subtypes will be more thoroughly discussed in Section 5 below.

- “Life” includes important events in a person’s life: BE-BORN, MARRY, DIVORCE, INJURE, and DIE
- “Movement” includes two subtypes: TRANSPORT-PERSON, and TRANSPORT-ARTIFACT.
- “Business” includes important events in an organization’s life-cycle: START, MERGE, DECLARE BANKRUPTCY, END
- “Conflict” includes: ATTACK and DEMONSTRATE
- “Contact” includes certain interpersonal communication events: MEET, CORRESPONDENCE, BROADCAST, CONTACT
- “Manufacture” presently only includes one subtype: ARTIFACT
- “Personnel” includes events related to holding a job or other formal position: START, END, NOMINATE, ELECT
- “Transaction” includes three subtypes: TRANSFER-OWNERSHIP, TRANSFER-MONEY and TRANSACTION
- “Justice” includes important law-enforcement and judicial events and decisions: ARREST-JAIL, RELEASE-PAROLE, TRIAL-HEARING, CHARGE-INDICT, SUE, CONVICT, SENTENCE, FINE, EXECUTE, EXTRADITE, ACQUIT, APPEAL, and PARDON

For each event, we will label the event type and subtype, its realis attribute, any of its arguments or participants that are within the event mention scope, and a required textual “trigger”<sup>1</sup>.

When identifying events, we are looking for the string of text in a document that most clearly expresses the occurrence of event, which we call the “event trigger”.

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<sup>1</sup> Note that though triggers are optional for relations, they are required for events.

The specific rules for identifying the extents and triggers of events are described in Section 2 below.

We will exhaustively annotate taggable events whether they are asserted, irrealis, or “generic” events. We will label the event’s realis attribute by making a three-way distinction: ACTUAL, GENERIC or OTHER. For a more thorough discussion of event realis attributes, see Section 3 below.

In addition to the description of the event itself, we will also be identifying all of the participants of each event. An event’s participants are the entities and argument fillers that are involved in that event. The specific types of participants that can be involved will vary from event type to event type. We will only be annotating entities as participants when they are mentioned explicitly within the **event mention scope**. However, argument fillers can be annotated from anywhere within the document as long as they are associated with the event. For a more thorough discussion of event participants see Section 4 below.

Tagged event mentions that refer to the same event occurrence will be grouped into Event Hoppers. Within event hoppers, identity coreference will also be marked<sup>2</sup>. For discussion of event hoppers and identity coreference of events, see Section 6 below.

## 2. Annotating Event Triggers

An event trigger is the smallest extent of text (usually a word or short phrase) that expresses the occurrence of an event. In many cases, this will just be a main verb in the sentence that describes the event. Note that the following examples mark in **bold** only those triggers that are verbs:

- The explosion **killed** 7 and **injured** 20.
- He **died** yesterday of renal failure.
- In 1927 she **married** William Gresser, a New York lawyer and musicologist.

Sometimes, however, the trigger will be in the form of an adjective or a past-participle.

- Milosovic was **indicted** yesterday for war crimes.
- Shenson, who was **born** in San Francisco, was working in London at the time.
- The ship and 17 **dead** sailors were found Saturday.
- He had had a relationship with a **married** woman for four years.
- He'd been **married** before and had a child.
- Fifteen Palestinians were **injured** this morning in the town of Rafah

When the event trigger is used in a modifier position, either in the form of a participle or an adjective, the modifier is annotated as the trigger for the event:

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<sup>2</sup> Strict identity coreference of events will be added for full production data, but it is not yet included in the sample data release.

- Look, I've slated electors before. You know? [My past **deceased** mother and my brother-- my mother when she was alive, I should make that point].
- The Egyptian-**born** Palestinian told judges that he deserted the Egyptian army in the mid-1970s.
- He said security officials had found documents on the **arrested** opposition leaders, .....
- The **rioting** crowd approached the Capitol.

We will also see cases where the event is triggered by a noun or pronoun:

- The **attack** by insurgents killed 7 and injured 20.
- Protestors interrupted their **meeting**.
- The **talks** between the Koreas were largely unsuccessful. **They** ended without agreement on Monday.
- In accepting the **nomination** he spoke of his immigrant ancestors.
- Maternal **mortality** rates fell.

**NOTE:** In a change from Light ERE, note that event triggers **may** be the same string of text as an entity or the same string of the head of a NOM entity mention. Event triggers that are nested within an entity mention are also acceptable.

- Situation escalated and [**murderer**] fled the scene. (This is an event trigger, even though “murderer” would already be a nominal PER entity.)
- The mayor agreed to meet with [anygry **protestors**]. (This is a trigger, even though “protesters” would already be the head of a nominal PER entity.)
- [The one who **divorced** me] only thinks of himself. (“divorce” can be a trigger for a Life.DIVORCE event, even though it is nested within a longer PER String and it is not the head).

## 2.1. Resultatives and ongoing events

Canonically we think of events as actions or processes, but we will also tag the states that result from taggable events. These “resultative” events are annotated the same way as their corresponding “action” events. Resultatives and in-progress events can be expressed in a number of different constructions:

**NOTE:** You do not need to memorize the linguistic terms for the constructions below. They are just given to illustrate some of the ways event triggers can be expressed.

1. As predicate adjectives:

- All her grandparents are **dead**.
- They have been **married** for three years.
- Her father is **retired**.
- The firm is **bankrupt**.



2. As an adjective or past-participle in the nominal pre-modifier position:

- The newly **merged** companies
- The **bankrupt** firm
- The **dead** civilians' families
- The happily **married** couple

3. As a present-participle in the nominal pre-modifier position:

- The **rioting** crowd
- The **arresting** officer
- The **dying** man

Interpreted as states, the examples in (2) can be paraphrased as 'the state of having been merged', 'the state of having gone bankrupt', 'the state of having married', etc. The examples in (3) are slightly different. For these examples, the modifier is more directly describing an Event (rather than its *resulting* state), but that event is being described as 'still in progress'. A paraphrase of the first example might be 'the crowd that is participating in the riot event that has not yet ended.'

We will use the broader term *resultative* for all such examples in this document. Basically, if a word describes or makes reference to an event of a taggable type (regardless of whether the event is described as in progress or as its resulting state), then we will tag that event.

## 2.2. Event Nominalizations and Pronominalizations

As noted in below, events can be triggered by verbs, nouns, and occasionally adjectives like 'dead' or 'bankrupt'. It is worth noting that nominal events can also occur as premodifiers:

- Quaker Oats rejected PepsiCo's **takeover** offer as too low
- In April of last year, the CR Company began **bankruptcy** procedures

Anaphors of events (such as pronouns and definite descriptions of previously mentioned events) are taggable as mentions (see below, 4.3 Basic Rules for Event Argument Taggability). Example:

- The **wedding** took place on July 20. The **ceremony** was performed at St.Paul's. **It** was a splendid **affair**.

In this example, 'wedding', 'ceremony', 'It' and 'affair' all refer to the same event, and may thus be tagged as event mentions. Note that it is no longer necessary to find an event argument for each event mention, so 'it' and 'affair' are tagged as argumentless triggers.

### 2.3. Annotating Complex Triggers

Most of the rules for identifying event triggers discussed so far work fairly well for the more simple examples. But the real challenge is to use these rules consistently for the complex cases as well.

There are two major potential sources of event trigger complexity in a typical sentence:

1. There is an event that is mentioned by multiple words within the same scope, in a way that makes it difficult to identify a single word as the trigger. A good example of this is:

- The leaders *held a meeting* in Beijing.

2. There are a number of distinct events mentioned within the same scope (either all taggable events or a mix of taggable and non-taggable events). A good example of this is:

- The *attack killed seven and injured twenty*.

Distinguishing between examples of these two cases is discussed in much greater detail in the sections below.

There will be a number of cases where the choice of the appropriate trigger word is ambiguous. The following subsections describe the rules for choosing between the various options.

#### 2.3.1. Verb+Noun

While many events anchor on a single verb or noun, there are some problematic cases where multiple words could reasonably be called the trigger:

- Foo Corp. had previously *filed Chapter 11* in 2001.
- The leaders *held a meeting* in Beijing.
- The company had to *pay a fine* of \$300,000.

In each of these examples, we could reasonably select either of the indicated words to act as the trigger. Indeed, most people would argue that the two words ‘work together’ in a way that is not quite compositional. In other words, the event in the first example might be understood as having been triggered not by *filed*, not by *Chapter 11* but by *filed Chapter 11*.

**NOTE:** For the remaining examples in this section, underlining will be used to indicate words which may mistakenly be identified as the trigger (or part of the trigger) of the event mention in question and **bold face** will be used to indicate the actual trigger of the event mention.

**Stand-Alone Noun Rule:** In cases where more than one trigger is possible, we will simply select the noun whenever that noun can be used *by itself* to refer to the event.

Sometimes when a noun is used with a verb to mention some event we will be looking at two possible triggers for a single event:

- Hamas launched an **attack**.
- Foo Corp. had previously filed **Chapter 11** in 2001.
- The leaders held their **meeting** in Boston.
- He carried out the **assassination**.
- The presidents met for a working **lunch** of around 75 minutes.
- Brentwood Academy responded with a **lawsuit**.

Other times the two items will actually be triggers for two separate events (even if sometimes the second ‘event’ is not itself of a taggable type):

- Protestors interrupted their **meeting**.
- An officer witnessed the **attack**.
- The union began its **strike** on Monday.

Basically, for both of the cases described above, we will annotate the noun as the trigger if it can stand alone to express the occurrence of the event.

### 2.3.2. Verb+X+Adjective

Often, when an event is expressed with a resultative, it is expressed using both a main (support) verb and an adjective describing the resulting state. These constructions have some properties in common with the *main verb* cases in which the ‘main verb’ is actually a participle or an adjective.

Verb+X+Adjective constructions are being described separately here, because they are often difficult to recognize as directly analogous to the main verb cases, since they will have some extra material (usually the direct object of the verb, but sometimes other material as well) intervening between the tensed verb and the resultative adjective (or participle). An example of this phenomenon is:

- The explosion left at least 30 **dead** and dozens **injured**.

For all such cases, we will annotate the adjective (or participle) whenever it can describe the resulting state by itself. This is largely analogous to the rule for Verb+Noun.

**Stand-Alone Adjective Rule:** Whenever a verb and an adjective are used together to express the occurrence of an event, the adjective will be chosen as the trigger whenever it can *stand alone* in expressing the resulting state brought about by the event.

### 2.3.3. Multiple Verbs

There are cases where several verbs are used together to express an event, but we will annotate only the main verb as the event trigger.

**NOTE:** In the examples that follow, underlining is used to indicate the verb string and **bold face** will be used to indicate the verb to be chosen as the trigger of a taggable event.

- Men in civilian clothes in the crowd began **firing** with AK-47 assault rifles.
- John had been being **attacked** on a regular basis.
- In a disclosure earlier this month, government-controlled creditor banks named 52 financially weak companies that had been **shut down or merged** for sale. (note that 2 event triggers are tagged here, 'shut down' and 'merged')
- 79 million people have been **born** since the war ended.
- More than 200 people have **died**.

In such cases, the main verb will be annotated as the trigger for the event. The main verb is typically the last verb in a string of verbs. It expresses the type of event most clearly. Non-main verbs are normally supporting verbs such as *modals* ('would'), *aspectual verbs* ('have') and the verb 'be'. Some other verbs such as 'promise', 'try' and 'claim' will also play a non-main verb role in complex verbal constructions.

- U.S. forces continued to **bomb** Fallujah.
- John Wilkes Booth was successful when he attempted to **assassinate** Abraham Lincoln.
- Tropicana Juices recently completed **purchasing** South Beach Beverage CO.

### 2.3.4. Verb+Particle and Verb+Adverb

In verb+particle and verb+adverb constructions, we will tag the main verb and the particle together. If the words occur contiguously, then there will be one multi-word trigger:

- Jane was **laid off** by XYZ Corp.
- John D. Idol will **take over** as Chief Executive.

If the words occur non-contiguously, then we will only annotate the verb:

- XYZ Corp **laid** Jane off.
- John D. Idol had **taken** the company over.

### 2.3.5. Multiple Events within a Single Sentence

Cases where there are multiple possible *triggers* for the same event within the same

sentence should not be confused with cases where there are multiple events expressed within the same sentence.

For example, ATTACK events are often mentioned in conjunction with other events. In the following examples, each bold-faced word is a trigger to an independent event and therefore should be tagged as such:

- The **attack killed** seven and **injured** twenty.
- The **explosion claimed** at least 30 lives.
- The **explosion** left at least 30 **dead**.

Sometimes, multiple events will be triggered by multiple resultative adjectives sharing a single support verb (the resultative adjective triggers are indicated in **bold** and the support verb with underlining):

- The explosion left at least 30 **dead** and dozens **injured**.

Frequently, the other ‘events’ in the same scope as some event trigger are not of a taggable type. In the following examples, triggers of taggable events are indicated in **bold** and triggers for non-taggable events are indicated with underlining:

- An officer witnessed the **attack**.
- Protestors interrupted their **meeting**.
- He heard about the **assassination**.

Intuitively, these verbs signal separate events because, for example, the ‘witnessed’ event is not part of the ATTACK event. In any case, ‘witness’ wouldn’t be taggable here, as it is not an example of a taggable event type under the current task specifications.

**NOTE:** Only taggable entities and argument fillers can act as arguments of events. Despite the surface reading of intuitions about the relationship between ‘attack’ and ‘killed’ in the following example, ‘attack’ cannot be the Agent of the Life.Die event triggered by ‘killed’.

- The **attack killed** seven and **injured** twenty.

### 2.3.6. Distinguishing Multiple Possible Triggers from Multiple Events

Sentences containing multiple events should be distinguished from sentences containing multiple possible triggers for the same event.

Sometimes, the tests are unnecessary and the decision can be made using only the stand-alone-noun rule or the stand-alone-adjective rule (described in Sections 2.3.1 and 2.3.2, above):

- An officer witnessed the **attack**.
- The explosion left at least 30 **dead**.

There are plenty of cases where it is unclear whether the main verb is (a) an additional potential trigger for the event picked out by the noun (or adjective); or (b) a trigger for a separate, taggable event (an event which is an example of a taggable event type). For example,

- A Palestinian worker was **shot dead** in the Gaza Strip (2 events)

There are a number of simple tests that can provide guidance in deciding whether the two potential triggers refer to the same event or to different events.

1. One test is to ask whether the entity doing one 'possible event' is the same as the entity doing the other. If not the same, then we annotate two separate events.
2. A second test is to ask whether the one 'possible event' is a component part of the other. If so, then we annotate two separate events.
3. A third test is to ask whether one event caused another event. If so, we annotate two separate events.

**RULE:** Overall, when in doubt, assume that there are two separate events.

**Multiple Triggers / Multiple Events Case Study** ('leave dead' and 'shoot dead'):  
Here are two examples that exhibit the problem described in the preceding section quite clearly.

- Kennedy was **shot dead** by Oswald.
- The hurricane left 20 **dead**.

The first example will have two separate events tagged ('shot' = Conflict.ATTACK; 'dead' = Life.DIE) because the second trigger actually expresses the occurrence of a separate taggable event; whereas the second example will only have a single event tagged because *left* and *dead* are being used together to express the same event ('dead' = Life.DIE). Care should be taken in annotating examples such as these.

### 2.3.7. One trigger for multiple events

In some contexts, we annotate a single trigger multiple times.

This can be when a single event trigger indicates multiple events of the same type, as in

- the **murder** of John on Tuesday and Bill on Wednesday
  - trigger = **murder**, argument = John, time = Tuesday
  - trigger = **murder**, argument = Bill, time = Wednesday

In this case, the trigger is annotated with the same event type and subtype multiple times because the indication of two separate times allows the separating out the coordination of John and Bill as two different murder events. If only arguments other than time or place are coordinated (and there is no indication of separate times or places), the trigger is annotated only once, and the mention is treated as a single event mention with multiple arguments. See section 2.3.8 below for more discussion of event coordination.

- the **murder** of John and Bill
  - trigger = **murder**, argument = John, argument = Bill

In addition, a single trigger can also be annotated multiple times with different event types and subtypes. For example, *kill*, *assassinate*, *murder* could all be annotated both as Life.Die and as Conflict.Attack. The association of a single trigger with multiple event types/subtypes is a lexical property of the trigger word.

- the **murder** of John on Tuesday and Bill on Wednesday
  - Conflict.Attack: trigger = **murder**, argument = John, time = Tuesday
  - Conflict.Attack: trigger = **murder**, argument = Bill, time = Wednesday
  - Life.Die: trigger = **murder**, argument = John, time = Tuesday
  - Life.Die: trigger = **murder**, argument = Bill, time = Wednesday
- the **murder** of John and Bill
  - Conflict.Attack: trigger = **murder**, argument = John, argument = Bill
  - Life.Die: trigger = **murder**, argument = John, argument = Bill

The triggers that can be annotated this way are restricted to triggers that clearly indicate more than one event type. Examples are given in the list below:

- Conflict.Attack and either Life.Injure or Life.Die: murder, victim, shooting, decapitate, killing, shooting
- Transaction.Transfer-Money and Transaction.Transfer-Ownership (any money being exchanged for an item): bought, purchased, picked up
- Life.Die and Personnel.End: die
  - John Doe, editor at Rolling Stone, died at age 45.
- Legal language that might trigger multiple Justice Events or other Event Types: guilty pleas, executions (Life.Die / Justice. Execute), death penalties, testimony (Justice.Trial-Hearing, Contact.Meet)

### 2.3.8. Event coordination and plural events

The coordination of events can be indicated linguistically in a variety of ways. The ERE annotation of coordinated events varies by category, as below.

### *Coordinated triggers:*

In cases where two verbs with equal weight are coordinated (but referring to a single event AND with the same type and subtype), the full coordinated verb construction is annotated as the trigger:

- Insurgents **burned or bombed** several buildings.

However, if the type or subtype of the events referred to is different, the triggers must be annotated as separate events.

### *Plural triggers:*

In cases where the event trigger itself is plural, whether it is tagged multiple times for the multiple events depends on whether other arguments of the events are present. In this example, “murders” is tagged as a single Conflict.Attack event that involved more than one murder (note that “murders” is also tagged as a single Life.Die event, because “murder” is on the lexical list above). Since no other arguments of the multiple murder events are present in the event mention scope of “murders”, it is not possible to tag multiple attack events in this case.

- A former militant of the French far-left group Action Directe, Georges Cipriani, left prison on parole on Wednesday after 23 years behind bars for two high-profile **murders**.

This event mention “murders” will be put into an event hopper for the combined plural event, separate from the event hopper for each individual murder (if the individual murders are also mentioned in the text). At a later stage of annotation, the relationship between the event hopper for “murders” and the event hoppers for the individual murder events will be shown by linking the event hoppers in a narrative container.

### *Coordinated arguments:*

In cases where multiple events are indicated through coordination of arguments, the argument role that is coordinated determines whether a single event mention or multiple event mentions are tagged.

- If the TIME or PLACE role is coordinated or if there are separate times and places indicated, then tag multiple events.
- If any other argument role is coordinated, tag a single event. In this case, each of the coordinated arguments will be tagged separately as an argument of the event, and the result will be a single event with multiple arguments tagged for the coordinated argument role.

If the situation, the context, or the language is too complicated to sort out the number of events, annotators should default to annotating a single event with multiple arguments.

In this example, because the PLACE role is part of the coordination, there are two Conflict.Attack events and two Life.Injure events:



- The gunmen **shot** Smith in Philadelphia and his son in Wilmington
  - Conflict.Attack: trigger = shot, agent = the gunmen, attackee = Smith, place = Philadelphia
  - Conflict.Attack: trigger = shot, agent = the gunmen, attackee = his son, place = Wilmington
  - Life.Injure: trigger = shot, agent = the gunmen, victim = Smith, place = Philadelphia
  - Life.Injure: trigger = shot, agent = the gunmen, victim = his son, place = Wilmington

In this example, because only the VICTIM role is part of the coordination (and there is no indication of separate times or places), there is only one Conflict.Attack event and one Life.Injure event:

- The gunmen **shot** Smith and his son
  - Conflict.Attack: trigger = shot, agent = the gunmen, attackee = Smith, attackee = his son
  - Life.Injure: trigger = shot, agent = the gunmen, victim = Smith, victim = his son

In this example, there are two Conflict.Attack events, and two Life.Die events, because the TIME argument is different:

- Cipriani was sentenced to life in prison for the **murder** of Renault chief George Besse in 1986 and the head of government arms sales Rene Audran a year earlier
  - Conflict.Attack:
    - Trigger = murder, agent = Cipriani, victim = Renault chief George Besse, time = 1986
    - Trigger = murder, agent = Cipriani, victim = the head of government arms sales Rene Audran, time = a year earlier
  - Life.Die:
    - Trigger = murder, argument = Renault chief George Besse, agent = Cipriani, time = 1986
    - Trigger = murder, argument = the head of government arms sales Rene Audran, agent = Cipriani, time = a year earlier

In the following examples, tag only one event (with multiple arguments):

- John and Bill **killed** Mary
- John and Bill **killed** Mary and George
- China and the US are the biggest **lenders** to Brazil and India
- John and Mary **bought** a house

### 3. Realis Attributes

All tagged events will be assigned a REALIS attribute relating to whether or not the event occurred. REALIS has three values: ACTUAL, GENERIC or OTHER. (Note that the realis of the relationship between each argument and the event mention will also be tagged, separately from the realis of the event itself. See Section 4.4 below for more discussion of event argument realis annotation.)

The REALIS of ACTUAL will be used when the event actually happened, i.e., instances of asserted events that happen at a particular place and time, involving specific entities. Both ongoing events and events that have ended will be tagged ACTUAL. ACTUAL will also include events that are reported/attributed to some source (e.g., “Some sources said...”, “Joe claimed that...”).

- The troops are **attacking** the city. [Conflict.Attack, ACTUAL]
- He **emailed** her about their plans. [Contact.Communicate, ACTUAL]

The REALIS of GENERIC will be used for events that are referred to in general and not as a specific instance. Generic, typed or categorical agent arguments of events are an important indicator that an event is GENERIC.

- Weapon **sales** to terrorists are a problem. [Transaction.Transfer-Ownership, GENERIC]
- One core role of inter-provincial enterprises is to implement **mergers**. [Business.Merge, GENERIC]
- Salat Hassen called on countries that **give** aid. [Transaction.Transfer-Ownership, GENERIC]
- Israel says, it has lifted the internal restrictions that barred Palestinians from **moving** among West Bank towns and villages. [Movement.Transport-Person, GENERIC]

Events of habitual occurrence are also considered as Generic, even though its participants are specific entities. For example,

- The terrorist group **bombs** the market every Tuesday. [Conflict.Attack, GENERIC]
- We **meet** on the first Tuesday of month. [Contact.Meet, GENERIC]
- The council **communicates** its recommendations on the economy to the prime minister every week. [Contact.Communicate, GENERIC]

The REALIS of OTHER will be used for events that did not actually occur. These events are neither ACTUAL nor GENERIC. This will include failed events, future events, uncertain events, and conditional/hypothetical statements.

Future events – predicted or expected to occur:

- She will be **nominated** next week. [Personnel.Nominate, OTHER]

- Russian and U.S. trade officials will **meet** in London on May 17. [Contact.Meet, OTHER]
- He plans to **meet** with lawmakers from both parties. [Contact.Meet, OTHER]
- ... with the **merger** likely to be completed later this year. [Business.Merge, OTHER]
- When he's **born**, he'll be named after his father. [Life.Be-Born, OTHER]

Conditional (hypothetical) events – could occur under certain conditions:

- If they find the gun, Smith's definitely getting **indicted**. [Justice.Charge-Indict, OTHER]
- A demonstration of how he would behave if he were to **become** President. [Personnel.Start-Position, OTHER]
- Should he not **pay** the money, they would **kill** him.  
     **pay** [Transaction.Transfer-Money, OTHER]  
     **kill** [Life.Die, OTHER]
- There have been concerns the **clashes** in southern Serbia could explode into **violence** similar to the 1999 **conflict** in Kosovo.  
     **clashes** [Conflict.Attack, ACTUAL]  
     **violence** [Conflict.Attack, OTHER]  
     **conflict** [Conflict.Attack, ACTUAL]
- Fueling speculation that John Paul II might **retire** at the end of this year, a Belgian cardinal says ... [Personnel.End-Position, OTHER]
- Chapman would be concerned for his safety if **released**. [Justice.Release-Parole, OTHER]

Uncertain events – status of occurrence unclear:

- We are supposed to **fly** to Atlanta. [Movement.Transport-Person, OTHER]
- Rumors of **arrests** circulated in Vancouver. [Justice.Arrest-Jail, OTHER]
- The charity was suspected of **funding** al Qaeda.  
     **funding** [Transaction.Transfer-Money, OTHER]

Negated events – did not occur:

There are three ways in which NEGATIVE polarity may be expressed: (1) with the help of a negative word such as *not* or *never*; (2) with the help of negative affixes such as *un-* or *dis-*; or (3) by embedding in a negative lexical context such *deny*, *refuse* or *disobey*.

- They did not **sell** their company. [Transaction.Transfer-Ownership, OTHER]
- His wife was sitting on the backseat and was not **hurt**. [Life.Injure, OTHER]
- Kimes' main demand was that his mother not be **extradited** to California. [Justice.Extradite, OTHER]
- The companies have **unmerged**. [Business.Merge, OTHER]
- Yeltsin ordered Skuratov's suspension, but parliament repeatedly refused to **sack** him. [Personnel.End-Position, OTHER]

- They backed out of the **purchase** at the last minute. [Transaction.Transfer-Ownership, OTHER]
- The **merger** between the two companies has been postponed indefinitely. [Business.Merge, OTHER]

If either GENERIC or OTHER could apply to an event (e.g., a negated generic), GENERIC should be used.

### 3.1. Some rules to note about REALIS

1. In the case of GENERIC events which also qualify as OTHER (e.g. negated generic) or ACTUAL (e.g. past generic, habitual generic), GENERIC will be used, not OTHER or ACTUAL.
  - The groceries don't **buy** themselves. (negated generic) [Transaction.Transfer-Ownership, GENERIC]
  - After the war, a burgeoning middle class **purchased** homes in the suburbs. (past generic) [Transaction.Transfer-Ownership, GENERIC]
  - At summer's end mothers **buy** children's school supplies. (habitual generic) [Transaction.Transfer-Ownership, GENERIC]

All generic events will be marked GENERIC, even when another REALIS could also apply.

2. For this task, events that are reported/attribution to some source will maintain their same REALIS as if the report/attribution were not included. In other words, reporting a taggable event with locutionary reporting words (such as "said", "report", "tell", "mention", etc.) will not change the taggable event's REALIS from ACTUAL to OTHER. For example,
  - Insurgents were **bombing** the capital. [Conflict.Attack, ACTUAL]
  - Some sources said that insurgents were **bombing** the capital. [Conflict.Attack, ACTUAL]

However, if a source's report/attribution of a taggable event also brings into question the REALIS of the taggable event, its REALIS will be changed accordingly. In other words, reporting a taggable event with illocutionary reporting words (such as "claim", "accuse", "allege", "deny", "suspect", "promise", etc.) will change the taggable event's REALIS from ACTUAL to OTHER. For example,

- Erika **died** in August. [Life.Die, ACTUAL]
- Joe claimed that Erika **died** in August. [Life.Die, OTHER]

In the first sentence, Erika actually died. In the second sentence, Joe claiming that Erika died lends uncertainty to the occurrence of her death, so the REALIS is OTHER. Another example:

- The defendant **met** the accused on the street corner. [Contact.Meet, ACTUAL]
- The defendant denied **meeting** the accused on the street corner.  
[Contact.Meet, OTHER]

In the first sentence, the defendant actually met the accused. In the second sentence, the defendant denied the Meet event, which negates it, so the REALIS is OTHER.

### 3.2. Steps to Determine REALIS

Once an event trigger is determined to meet a definition of a type/subtype, annotators can follow these steps to determine REALIS.

1. Is the event ACTUAL?
  - a. Are the agents specific individuals or groups (not types or categories)?
  - b. Did the event actually happen? It can be over (past); it can still be going on (ongoing).
  - c. Is there otherwise no negation, condition (hypothetical), or future occurrence?
2. Is the event GENERIC?
  - a. Are the agents types or categories (not specific individuals or groups)?
  - b. Any kind of occurrence is OK – actually happened (past), still ongoing (present), predicted to occur (future), occurrence dependent on some condition (conditional/hypothetical), occurring regularly in the past, present, or future (habitual).
3. Is the event OTHER?
  - a. Are the agents specific individuals or groups (not types or categories)?
  - b. Is there negation, is the occurrence dependent on some condition (conditional/hypothetical), or is the occurrence predicted to occur (future)?

## 4. Event Arguments

One change from light ERE is that event triggers without explicit arguments are taggable as well. We expect event triggers with no arguments to be rare, but it may occur in two contexts:

1. The event mention is generic and no arguments are expected. For example,  
*The reported maternal **mortality** ratio has declined.*
2. Identifying of arguments is blocked because violation of the Event Mention Scope.  
*The bombing killed 6 people. The **attack** was widely condemned.*

There is a checkbox in the tool “No Argument” if you decide that the annotated event mention doesn’t have any arguments. You must check this box before you can add it to an event hopper.

We begin with a brief discussion of two different kinds of things involved with an event annotation entry which we will call **event arguments**. These include **existing entities** and **argument fillers** as event participants.

**NOTE:** Event participants should not be used for more than one argument slot per event. For example, if a document states that there were “attacks on Europe”, you should not annotate “Europe” as both the Place and the Target argument. We will choose the most salient argument type, which would be Target in this case. There are two exceptions to this rule. Life.Die events that refer to suicides will have the same PER entity annotated as the Agent and Victim arguments. Also, Movement events may have the same Origin and Destination arguments if movement occurs through or within one LOC, GPE, or FAC entity.

#### 4.1. Entity as Event Participants

These are tagged entity mentions that are involved in the event. For each type/subtype of event, there will be a specific set of participant roles that can be filled. Section 5 introduces what each of the possible participant roles are for each event subtype and how to interpret them.

#### 4.2. Event Argument Filler

Some event arguments are not annotated as entities and they need to be annotated as event **Argument Fillers** during event argument annotation (refer to Argument Filler guidelines for details). The following table lists the allowable argument fillers for certain event types and subtypes:

<b><i>Event Argument Fillers:</i></b> Only tagged when used as an argument in an Event		
Filler Type	Argument Role	Event types and subtypes
MONEY (MON)	Money	Movement Transaction Justice.Fine
WEAPON (WEA) VEHICLE (VEH) COMMODITY (COM)	Target Instrument	Conflict.Attack
	Artifact	Manufacture.Artifact
	Instrument	Movement.TransportPerson
	Artifact Instrument	Movement.TransportArtifact
	Instrument	Life.Injure
	Instrument	Life.Die
	Thing	Transaction.TransferOwnship

TITLE (TTL)	Title	all Personnel type events
SENTENCE (SEN)	Sentence	Justice.Sentence
CRIME (CRM)	Crime	all Justice type events
TIME (TME)	Time	all event types.subtypes

### 4.3. Event Mention Scope and Argument Taggability

The present section describes the basic rules to be used in making decisions about Argument taggability for events.

**Primary rule of event argument annotation:** We will only tag those entities as arguments that occur within the **event mention scope** for an event trigger. The **event mention scope** is defined as the span of a document from first trigger you see for a particular event to the next trigger you see for the same event.

This rule doesn't apply to Argument Fillers. Argument fillers can be pulled out from anywhere in the document as long as it is associated with the tagged event mention. However, the closest full NP mention of the argument filler should be tagged. Argument fillers are unlike Entity arguments in this respect – even if there is a closer pronominal mention, the full NP mention will still be tagged instead for argument fillers.

We want to tag arguments closest to event triggers. Event mention scopes do not begin and end at the trigger words themselves, however, but at sentence boundaries—specifically, the sentence boundary before a sentence containing the next mention of that event. In this example, bold indicates taggable event triggers and underlines indicate the relevant argument entities and argument fillers:

1

23

A car bomb was **detonated** at a checkpoint Thursday, killing dozens and wounding more than 200, opposition groups said.

"Most of the casualties appear to be civilians," said the director of the Britain-based Syrian Observatory for Human Rights, a watchdog group that monitors the violence. The director uses the pseudonym Rami Abdulrahman. The official Syrian Arab News Agency (SANA) reported the **bombing** in the Mazraa neighborhood of the capital.

A spokesman for the Free Syrian Army denied reports it was responsible for the **attack**.

2

There are three event mention scopes for the same bombing event in the above article. Scope 1 spans start of sentence 1 to the end of sentence 3, and contains a PLACE-ARG ‘a checkpoint’ and a TIME argument filler ‘Thursday’ for the bombing event. Scope 2 spans the start of sentence 4 to the end of sentence 4, and contains another PLACE-ARG ‘the Mazraa neighborhood of the capital’ for the bombing event. Scope 3 spans the start of sentence 5 to the end of sentence 5, and contains an AGENT-ARG ‘Free Syrian Army’ for the bombing event.

**Shared arguments rule:** In the case where an Entity is clearly an argument to one event, but is also quite reasonably a participant in another, different (non-correlatable) event, and occurs within the corresponding event mention scope, it can be annotated as an argument of both event mentions.

In these examples, the argument underlined should attach to both mentions in **bold**:

- The **explosion** in Lahore caused a fire that burned makeshift stalls and **wounded** 36 people.
- Bombs **went off** in three Pakistani cities Monday, **injuring** 45 people.
- Carruth, 26, was **executed** after being **convicted** of being the mastermind behind the shooting.

#### 4.4. Event Argument Realis

The link between each event argument and its event trigger will also be labeled with a realis attribute. Realis is marked independently on the event trigger and its arguments. The realis attribute on the argument will be specifically labeling the realis of the relationship between the argument and the event; it is separate and in addition to the realis attribute of the event itself.

The default value is ACTUAL, which is not marked. Annotators only need to mark the value of “IRREALIS” when the argument is not asserted as a participant in the event mention.

In the following example, ‘*Maddux*’ is the asserted (ACTUAL) participant in the expressed DIE event, but ‘*Einhorn*’ is an argument that is not asserted (IRREALIS, AGENT-ARG) in the DIE event.



- Einhorn may have **killed** Maddux.
  - **kill**: realis depends on context (ACTUAL, if the context makes it clear that Maddux actually died; OTHER if in the context it is not clear whether Maddux died or not)
  - link between *kill* and *Maddux*: ACTUAL
  - link between *kill* and *Einhorn*: IRREALIS

Contrast the following example, where although the Entity mention '*Islamic militants*' is not necessarily asserted by the author, it is asserted by '*India*' here, and is thus taggable as an ACTUAL argument in the ATTACK event mention here:

- India blamed Islamic militants for the **attack**.
  - **attack**: ACTUAL
  - link between *attack* and *Islamic militants*: ACTUAL

The taggable event below (the killing of three American tourists) is a positive, asserted event – although the involvement of the agent argument in the above event (the Abu Sayyaf rebel) is not asserted to be true.

- ...caught an Abu Sayyaf rebel who may have been involved in the **killing** of three American tourists.
  - **killing**: ACTUAL
  - link between *killing* and *three American tourists*: ACTUAL
  - link between *killing* and *an Abu Sayyaf rebel*: OTHER

#### 4.5. Event Arguments and Sub-events

Sometimes, an event will be mentioned along with a number of its sub-events:

- Six **murders** occurred in France, including the **assassination** of Bob and the **killing** of Joe.
- Six men were **murdered**, including Bob, in Paris, and Joe, in Reims.

In cases where an event is mentioned in the same scope as some of its taggable sub-events, we will annotate all possible valid arguments with the large, “umbrella” event mention except when those arguments are understood as more directly applicable to any of the sub-events.

In accordance with this guideline, we make the follow event argument annotations for the events and sub-events in the examples above:

- Six **murders** occurred in France, including the **assassination** of Bob and the **killing** of Joe.

Trigger	Arguments
Ev1: <i>murders</i>	<i>France</i>

<b>Ev2:</b> <i>assassination</i>	<i>Bob France</i>
<b>Ev3:</b> <i>killing</i>	<i>Joe France</i>

- Six men were **murdered**, including Bob, in Paris, and Joe, in Reims.

<b>Ev1:</b> <i>murdered</i>	<i>six men</i>
<b>Ev2:</b> <i>murdered</i>	<i>Bob Paris</i>
<b>Ev3:</b> <i>murdered</i>	<i>Joe Reims</i>

Note that the text string ‘murdered’ must be used as the trigger for three different events in the second example.

See also section 6.7 “Aggregate events and subevents” in the Event Hopper section.

## 5. Event Types and Subtypes

Event annotation will be limited to the types and subtypes defined below. Note that each event type and subtype has its own set of potential arguments.

The table below lists the complete set of event types and subtypes we will annotate. Each type/subtype is described more fully in the sections that follow.

Type	Subtype	Type	Subtype
<b>Business</b>	Start Org	<b>Movement</b>	Transport.Person
<b>Business</b>	End Org	<b>Movement</b>	Transport.Artifact
<b>Business</b>	Declare Bankruptcy	<b>Personnel</b>	Start Position
<b>Business</b>	Merge Org	<b>Personnel</b>	End Position
<b>Conflict</b>	Attack	<b>Personnel</b>	Nominate
<b>Conflict</b>	Demonstrate	<b>Personnel</b>	Elect
<b>Contact</b>	Meet	<b>Justice</b>	Arrest-Jail
<b>Contact</b>	Correspondence	<b>Justice</b>	Release-Parole
<b>Contact</b>	Broadcast	<b>Justice</b>	Trial-Hearing
<b>Contact</b>	Contact	<b>Justice</b>	Sentence
<b>Manufacture</b>	Artifact	<b>Justice</b>	Fine
<b>Life</b>	Be Born	<b>Justice</b>	Charge-Indict
<b>Life</b>	Marry	<b>Justice</b>	Sue
<b>Life</b>	Divorce	<b>Justice</b>	Extradite
<b>Life</b>	Injure	<b>Justice</b>	Acquit
<b>Life</b>	Die	<b>Justice</b>	Convict

<b>Transaction</b>	Transfer Ownership	<b>Justice</b>	Appeal
<b>Transaction</b>	Transfer Money	<b>Justice</b>	Execute
<b>Transaction</b>	Transaction	<b>Justice</b>	Pardon

**NOTE:** For all event subtype argument examples presented below, please remember that both the TIME-ARG and PLACE-ARG are also annotatable for all events even when not mentioned in the tables, and for many events additional argument fillers are annotatable even when not mentioned in the tables (see the Argument Filler guidelines for more details).

## 5.1. Life Events

### 5.1.1. Life.BE-BORN

A BE-BORN event occurs whenever a PERSON Entity is given birth to.

Allowable arguments for Life.Be-Born

Person-Arg	Place-ARG	Time-ARG
PER	GPE, LOC, FAC	TME

We do not include the birth of other entities – for the starting up of organizations, see Business.START-ORG.

Person-Arg	PER	The person who is born	<i><b>[Jane Doe] was born in Casper, Wyoming on March 18, 1964</b></i>
Place-Arg	GPE LOC	Where the birth takes place	<i><b>Casper, Wyoming</b></i>
Time-Arg	TME	When the birth takes place	<i><b>March 18, 1964</b></i>

#### Examples of Life.BE-BORN events:

- Jane Doe was **born** in Casper, Wyoming on March 18, 1964.
- Ali Mohammed, a native of Egypt, has admitted to five charges of conspiring with a Saudi-**born** dissident Osama bin Laden to attack US targets in the Middle-East.
- He calculated that Jesus' **birth** had occurred 532 years earlier.
- For me, it's not difficult, because I was **born** without my hand, and I've never known any different.

### 5.1.2. Life.MARRY

MARRY events are official events where two people are married under the legal definition.

#### Allowable arguments for Life.Marry

Person-Arg	Person-Arg	Place-Arg	Time-Arg
PER	PER	GPE, LOC, FAC	TME

Person-Arg	PER	The people who are married	<i><b>[James]</b> recruited her as an informant in 1983, then <b>married [her]</b> two years later in Spain.</i>
Place-Arg	GPE LOC FAC	Where the marriage takes place	<i><b>Spain</b></i>
Time-Arg	TME	When the marriage takes place	<i><b>two years later</b></i>

#### Examples of Life.MARRY events:

- Jane and John are **married**. (resultative)
- In 1927 she **wedded** William Gresser, a New York lawyer and musicologist.
- He'd been **married** before and had a child.
- Their **wedding** last week attracted worldwide media attention.
- Residents were able to register their **marriages**.

#### 5.1.3. Life.DIVORCE

A DIVORCE event occurs whenever two people are officially divorced under the legal definition of divorce. We do not include separations or church annulments.

#### Allowable arguments for Life.Divorce

Person-Arg	Person-Arg	Place-Arg	Time-Arg
PER	PER	GPE, LOC, FAC	TME

Person-Arg	PER	The people who are divorced	<i>the Princess confided in him a great deal, especially in the years preceding <b>[her]</b> <b>divorce</b> from the <b>[heir]</b> to the throne in 1996.</i>
Time-Arg	TME	Time the divorce took place	<i><b>1996</b></i>

#### Examples of Life.DIVORCE events:

- The couple **divorced** four years later.
- John is a **divorced** father of three. (resultative)

- But the Simpson trial and the jury's findings marked a turning point in the career of the twice-**divorced** mother of two.
- Their marriage didn't last long. The two **broke** it off without much warning. (NOTE: not **broke it off** per section 3.4)

#### 5.1.4. Life.INJURE

An INJURE event occurs whenever a PERSON Entity experiences physical harm. INJURE events can be accidental, intentional or self-inflicted.

Allowable arguments for Life.Injure:

Agent-Arg	Victim-Arg	Instrument-Arg	Place-ARG	Time-ARG
PER, ORG, GPE	PER	WEA, VEH, COM	GPE, LOC, FAC	TME

Agent-Arg	PER ORG GPE	The attacking agent / The one that enacts the harm	<b><i>[Two Palestinians] were killed as they staged a drive-by ambush on an Israeli jeep in the Gaza Strip near the Israeli settlement of Gush Katif Saturday afternoon, and two Israeli soldiers were <b>wounded</b>, one critically.</i></b>
Victim-Arg	PER	The harmed person(s)	<b><i>two Israeli soldiers</i></b>
Place-Arg	GPE LOC FAC	Where the injuring takes place	<b><i>the Gaza Strip near the Israeli settlement of Gush Katif</i></b>
Time-Arg		Time the injuring takes place	<b><i>Saturday afternoon</i></b>

**NOTE:** For events where a single common trigger indicates both types, or is ambiguous between the types *LIFE* (i.e. *INJURE* and *DIE*) and *CONFLICT* (i.e. *ATTACK*), we will annotate both event types using the same trigger. See section 2.3.7 on multiple events with a single trigger. This rule will not apply when there are independent triggers.

For example in

- *Three Palestinians were shot dead.*

there are two events:

Ev1: *shot* (CONFLICT.ATTACK)

Ev2: *dead* (LIFE.DIE)

**NOTE:** Injury events are **not** annotated for medical conditions that develop over time (e.g. “a brain tumor”).

#### Examples of Life.INJURE events:

- Two soldiers were **wounded** in the attack.
- The **injured** soldier... (resultative)
- She was badly **hurt** in an automobile accident.
- Witnesses said the soldiers responded by firing tear gas and rubber bullets, which led to ten demonstrators being **injured**.
- Tornadoes destroyed homes and overturned cars in several areas of Alabama on Saturday and more than two dozen people were reported **injured**.
- A fire in a bangladeshi garment factory has left at least 37 people dead and 100 **hospitalized**.
- It was so bad, she nearly **took** his arm off! (**NOTE:** not ~~took his arm off~~ per section 3.4)

#### 5.1.5. Life.DIE

A DIE event occurs whenever the life of a PERSON Entity ends. DIE events can be accidental, intentional or self-inflicted.

Allowable arguments for Life.Die

Agent-Arg	Victim-Arg	Instrument-Arg	Place-ARG	Time-ARG
PER, ORG, GPE	PER	WEA, VEH, COM	GPE, LOC, FAC	TME

Agent-Arg	PER ORG GPE	The attacking agent / The killer	<i>Canadian authorities arrested <b>[two Vancouver-area men]</b> on Friday and charged them in the <b>deaths</b> of 329 passengers and crew members of an Air-India Boeing 747 that blew up over the Irish Sea in 1985, en route from Canada to London.</i>
Victim-Arg	PER	The person(s) who died	<i><b>329 passengers and crew members of an Air-India Boeing 747 that blew up over the Irish Sea in 1985, en route from Canada to London</b></i>
Place-Arg	GPE LOC FAC	Where the death takes place	<i><b>the Irish Sea</b></i>

Time-Arg		Time the death takes place	<b>1985</b>
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**NOTE:** For events where a single common trigger indicates both types, or is ambiguous between the types *LIFE* (i.e. *INJURE* and *DIE*) and *CONFLICT* (i.e. *ATTACK*), we will annotate both event types using the same trigger. See section 2.3.7 on multiple events with a single trigger. This rule will not apply when there are independent triggers.

For example in

- Three Palestinians were **shot dead**.

there are two events:

Ev1: *shot* (*CONFLICT.ATTACK*)

Ev2: *dead* (*LIFE.DIE*)

**NOTE:** When a PER commits suicide, the Agent and Victim ARGs should be identical for Life.Die events. For example, from the text, “Alex killed himself last night,” both the Agent and Victim ARG should be [Alex].

#### Examples of Life.DIE events:

- The **slain** leader...
- She was **killed** in an automobile accident.
- The commander of Israeli troops in the West Bank said there was a simple goal to the helicopter **assassination** on Thursday of a gun-wielding local Palestinian leader.
- The **assassination** of the once-relatively obscure Fatah leader Obaiyat, ...
- The **late** Pope John Paul II ...
- In other violence, a Palestinian worker was shot **dead** in the Gaza Strip and in the West Bank, another Palestinian, a teenager, was shot by Israeli soldiers during clashes.
- Authorities in New Mexico say actor Richard Farnsworth has **died** of a self-inflicted gunshot wound.
- The **fatal** accident ...
- All four live in the southern port city of Aden, where the two suspected **suicide** bombers blew up a small boat filled with explosives alongside the Cole on Oct. 12 as it prepared to refuel.

## 5.2. Movement Events

There are two subtypes of Movement event: TRANSPORT-PERSON and TRANSPORT-ARTIFACT. If both a person and an artifact are transported at the same time, an event trigger can be double tagged as a TRANSPORT-PERSON and a TRANSPORT-ARTIFACT event. For example,

- John **drove** his car filled with drugs to Mexico (TRANSPORT-PERSON, TRANSPORT-ARTIFACT)
  - TRANSPORT-PERSON Arguments
    - Agent: John
    - Instrument (VEH): his car filled with drugs
    - Destination: Mexico
  - TRANSPORT-ARTIFACT Arguments
    - Agent: John
    - Instrument (VEH): his car filled with drugs
    - Artifact (COM): drugs
    - Destination: Mexico

Transport events require that someone or something is transporting a person or an artifact. Person entities can transport themselves (Bob walked into the building) or artifacts (Bob carried the package of drugs into the building). If a person entity is not doing the transporting, transport events require at least implicitly an instrument that in principle is a vehicle, noting that some vehicles by definition are tagged as weapons (see Argument Fillers, end of section 2.7). Vehicles (and vehicles tagged as weapons) are taggable as instruments for transport events. Person entities transporting themselves, horses, or other non-vehicles are not taggable as the instrument argument.

### 5.2.1. Movement.TRANSPORT-PERSON

A TRANSPORT-PERSON event occurs whenever a PERSON moves or is moved from one PLACE (GPE, LOCATION, FACILITY) to another. The movement may also occur through or within one LOC, GPE, or FAC entity (i.e., tag the Origin-ARG and Destination-ARG are the same). A TRANSPORT-PERSON event is tagged whenever a person moves from A to B (via vehicle, via unclear means, or via their own effort) as long as there is explicit mention of the movement.

For the arguments of TRANSPORT-PERSON events, we will adopt the following conventions:

- Any passenger on a vehicle will be annotated as PERSON-ARG;
- Any person moving about by some unspecified means will be annotated as AGENT-ARG (e.g. *He fled the state*);
- Any Entity explicitly directing the movement of another Entity will be annotated as AGENT-ARG, including pilots and drivers;
- Any person moving of his/her own volition will be annotated as AGENT-ARG when there is not a second Entity explicitly acting as agent of the movement **and** no means of transport is specified.

**NOTE:** Tagging an event as under Justice.EXTRADITE need to be double tagged as a Movement.TRANSPORT-PERSON event.

Allowable arguments for Movement.Transport-Person

Agent-Arg	Person-	Instrument-	Origin-ARG	Destination-	Time-ARG
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	Arg	Arg		Arg	
PER, ORG, GPE	PER	WEA, VEH	GPE, LOC, FAC	GPE, LOC, FAC	TME

Agent-Arg	PER ORG GPE	The agent responsible for the transport event.	<i><b>[Israel]</b> had to <b>remove</b> its soldiers from the outskirts of Palestinian cities.</i>
Person-Arg	PER	The person doing the traveling	<i><b>its soldiers</b></i>
Origin-Arg	GPE LOC FAC	Where the transporting originated	<i><b>the outskirts of Palestinian cities</b></i>

The following are important characteristics of TRANSPORT-PERSON events:

- Only mark movements through space between physical locations. Do not mark metaphorical or virtual movements such as moving a person from one team to another.
- We will annotate TRANSPORT-PERSON events even if the Origin or Destination argument is not stated.
- We will only tag TRANSPORT-PERSON events when the movement is explicitly indicated.
- EXTRADITE and MEET events are treated independently as their own type. EXTRADITE examples should be clear from context (see Section 3.8.10, below). When the object/destination of a “visit” event is a LOC/GPE entity, it is tagged as a TRANSPORT-PERSON event; when the object of a “visit” event is a PER entity, it is tagged as a MEET event (and **not** as a TRANSPORT- PERSON event):
  - Fred **visited** [New York] on Friday. (TRANSPORT-PERSON)
  - Fred **visited** [Harry] in New York on Friday. (MEET)

#### Examples of Movement.TRANSPORT-PERSON events:

- The aid was aimed at repairing houses damaged by Israeli bombing and buying additional ambulances" to **transport** the rising number of wounded.
- Zone escaped the incident with minor injuries, and Kimes was **moved** to the prison's disciplinary housing unit, the authorities said.
- Mr. Erekat is due to **travel** to Washington to meet with US Secretary of State Madeleine Albright and other US officials attempting to win a ceasefire.

### 5.2.2 Movement.TRANSPORT-ARTIFACT

A TRANSPORT-ARTIFACT event occurs whenever an ARTIFACT moves or is moved from one PLACE (GPE, LOC, FAC) to another by an AGENT (PER, ORG, GPE) or an INSTRUMENT (WEA, VEH). The movement may also occur through or within one FAC, LOC or GPE entity (i.e., tag the Origin-ARG and Destination-ARG are the same). TRANSPORT-ARTIFACT events only happen when either a person transports an artifact or an instrument transports an artifact, and the instrument used to perform the movement is some type of vehicle (whether the vehicle is implicit or explicit, and whether the vehicle, if taggable, is tagged as VEHICLE or WEAPON).

**NOTE:** The Artifact argument and the Instrument argument cannot be the same things. If an Artifact and Instrument ARG refer to the same thing, we will not annotate a Movement.Transport-Artifact event. For example, in the text, “rockets were fired over the border”, we will not annotate “fired” as a Transport-Artifact event because “rockets” refers to the Instrument and the Artifact. Instead, “fired” points to a Conflict.Attack event.

For the arguments of Transport-Artifact events, we will adopt the following conventions:

- Any Artifact in or on a vehicle will be annotated as Artifact -ARG;
- Any Entity explicitly directing the movement of an Artifact will be annotated as Agent-ARG, including pilots and drivers

Allowable arguments for Movement.Transport-Artifact:

Agent-Arg	Artifact- Arg	Instru- ment-	Origin-ARG	Destination- Arg	Time-ARG
PER, ORG, GPE	WEA, VEH, COM, FAC	WEA, VEH	GPE, LOC, FAC	GPE, LOC, FAC	TME

Agent-Arg	PER ORG GPE	The agent responsible for the transport event	<b><i>[Drug traffickers] moved 20 kilos of cocaine from Mexico to Texas</i></b>
Artifact -Arg	WEA VEH COM FAC	The artifact that is being transported	<b><i>20 kilos of cocaine</i></b>
Origin-Arg	GPE LOC FAC	Where the transporting originated	<b><i>Mexico</i></b>
Destination-Arg	GPE LOC FAC	Where the transporting is directed	<b><i>Texas</i></b>

The following are important characteristics of TRANSPORT-ARTIFACT events:

- Only mark movements through space between physical locations. Do not mark metaphorical or virtual movements.
- We will annotate TRANSPORT-ARTIFACT events even if the Origin or Destination argument is not stated.
- We will only tag TRANSPORT-ARTIFACT events when the movement is explicitly indicated.

### 5.3. Business Events

Most Business Event subtypes are limited to events affecting ORG entities, but GPE and PER entities may also be considered as arguments for Declare-Bankruptcy Business Events.

#### 5.3.1. Business.START

A Business.START event occurs whenever a new ORGANIZATION is created.

Allowable arguments for Business.Start

Agent-Arg	Org-Arg	Place-Arg	Time-ARG
PER, ORG, GPE	ORG	GPE, LOC, FAC	TME

Agent-Arg	PER ORG GPE	The agent responsible for the <i>START</i> event	<i>[British Airways PLC] plans to sell Go, its profitable cut-price subsidiary <b>launched</b> two years ago, the company said Monday.</i>
Entity-Arg	ORG	The ORG that is started	<b>Go</b>
Time-Arg		Date the event takes place	<b>two years ago</b>

**NOTE:** When an ORG opens new branch office, or when there is a spin-off of a subsidiary ORG, this will be annotated as a *START* event.

#### Examples of Business.*START* events:

- Joseph Conrad Parkhurst, who **founded** the motorcycle magazine Cycle World in 1962, has died.
- Workers have **organized** this union.
- Our business was **started** in our basement 6 years ago.

#### 5.3.2. Business.*MERGE*

A *MERGE* event occurs whenever two or more ORGANIZATION Entities come together to form a new ORGANIZATION Entity. This event applies to any kind of ORG, including government agencies. It also includes joint ventures.

##### Allowable arguments for Business.Merge

Agent-Arg	Org-Arg	Place-Arg	Time-ARG
PER, ORG, GPE	ORG	GPE, LOC, FAC	TME

Entity-Arg	ORG	The ORGs that are merged	<i><b>[Parkhurst] later merged with [another company that owned Road &amp; Track] to become Bond/Parkhurst Publishing.</b></i>
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#### Examples of Business.*MERGE* events:

- The drug companies passed the final regulatory hurdle to their \$72 billion **merger**, and created the world's largest pharmaceutical company.

- The Homeland Security Act **consolidated** US executive branch organizations related to protecting US territory from attacks, accidents, and disasters into the Department of Homeland Security.

### 5.3.3. Business.DECLARE-BANKRUPTCY

A DECLARE-BANKRUPTCY event will occur whenever a PER, ORG, or GPE Entity officially requests legal protection from debt collection due to a negative balance sheet.

Allowable arguments for Business.Declare-Bankruptcy

Entity-Arg	Place-Arg	Time-ARG
PER, ORG, GPE	GPE, LOC, FAC	TME

Bankrupt-Arg	ORG	The ORG declaring bankruptcy	<i>[Southern California Edison] says it may have to file for <b>bankruptcy</b> unless government officials can offer some relief.</i>
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#### Examples of Business.DECLARE-BANKRUPTCY events:

- The **bankrupt** MCI-Worldcom... (resultative)
- Southern California Edison says it may have to file for **bankruptcy** unless government officials can offer some relief.
- In April of last year, the CR Company began **bankruptcy** procedures and the debt compensation rate of all its assets was only 5%.

### 5.3.4. Business.END

An END event occurs whenever an ORG entity is explicitly stated to have ceased to exist (e.g., 'goes out of business').

Allowable arguments for Business.End

Org-Arg	Place-Arg	Time-ARG
ORG	GPE, LOC, FAC	TME

Org-Arg	ORG	The ORGANIZATION that is ended	<i>[The Serb Parliament] has agreed to <b>dissolve</b>.</i>
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**NOTE:** A temporary closure of an Organization or their facilities **will not** be annotated as END events. Annotators will need to use their judgment when determining whether the closure is intended to be permanent or not.

#### Examples of Business.END events:

- The company **folded** in 2002.
- Telecommunication giant AT&T was **broken up** in the 1980s.

- The Warsaw Treaty Organization, or “Warsaw Pact”, was declared **disbanded** in 1991.

## 5.4. Conflict Events

### 5.4.1. Conflict.ATTACK

An ATTACK event is defined as a violent physical act causing harm or damage, including events where there is no stated agent. The ATTACK event type includes less specific violence-related nouns such as ‘*conflict*’, ‘*clashes*’, and ‘*fighting*’. A ‘*coup*’ is considered kind of ATTACK (and so is a ‘*war*’).

Allowable arguments for Conflict.Attack

Agent-Arg	Target- Arg	Instrument- Arg	Place-Arg	Time-ARG
PER, ORG, GPE	PER, GPE, ORG, FAC, WEA, VEH, COM	WEA, VEH, COM	GPE, LOC, FAC	TME

Attacker-Arg	PER ORG GPE	The attacking/instigating agent	<i>A number of [demonstrators] <b>threw</b> stones and empty bottles at Israeli soldiers positioned near a Jewish holy site at the town's entrance.</i>
Target-Arg	PER, GPE, ORG, FAC, WEA, VEH, COM	The target of the attack (including unintended targets)	<b>Israeli soldiers</b>
Place-Arg	GPE LOC FAC	Where the attack takes place	<b><i>a Jewish holy site at the town's entrance</i></b>

### Decision Rule: Distinguishing **PLACE-ARG** from **TARGET-ARG**

LOCs are not considered taggable as TARGET-ARGs, but we enter them in the PLACE-ARG position for the Event.

**NOTE:** For events where a single common trigger indicates both types, or is ambiguous between the types *LIFE* (i.e. *INJURE* and *DIE*) and *CONFLICT* (i.e. *ATTACK*), we will annotate both event types using the same trigger. See section 2.3.7 on multiple events with a single trigger.

The above rule will not apply when there are independent triggers. For example in

- Three Palestinians were shot dead.

there are two events:

Ev1: *shot* (CONFLICT.ATTACK)  
Ev2: *dead* (LIFE.DIE)

**NOTE:** The generic concepts typically represented by the strings '*terrorism*' and '*terrorist activities*' will be taggable as ATTACK events. However, those represented by the string '*military operations*' **will not**.

**NOTE:** The resulting damage caused by an ATTACK event is not itself taggable as an ATTACK event.

**NOTE:** Cyberattacks, such as hacking, are not taggable as Conflict.ATTACK events in the present task.

#### Examples of Conflict.ATTACK events:

- U.S. forces continued to **bomb** Fallujah.
- A car bomb **exploded** in central Baghdad.
- Another exchange of **gunfire** in Gilo...
- Sunday night's **clashes**...
- Israel retaliated with rocket **attacks** and terrorists **blew** a hole in a United States warship in Yemen.
- She was **raped** by her kidnappers
- Men in civilian clothes in the crowd began **firing** with AK-47 assault rifles and a 45-minute gun **battle** broke out.
- ...the **murder** of John and Bill
- She was **robbed** by the gunman

#### 5.4.2. Conflict.DEMONSTRATE

A DEMONSTRATE event occurs whenever a large number of people come together in a public area to protest, strike, or demand some sort of official action.

Allowable arguments for Conflict.Demonstrate:

Entity-Arg	Place-Arg	Time-ARG
PER, ORG	GPE, LOC, FAC	TME

Entity-Arg	PER ORG	The demonstrating agent	<b>[Protesters]</b> rallied on the White House lawn.
Place-Arg	LOC GPE FAC	Where the demonstration takes place	<b>the White House lawn</b>

#### Examples of Conflict.DEMONSTRATE events:

- Thousands of people **rioted** in Port-au-Prince, Haiti over the weekend.
- The union began its **strike** on Monday.
- The **rioting** crowd broke windows and overturned cars.
- More than 40,000 workers were back at their jobs Thursday following a 1-day **walkout** that closed social welfare offices and crippled public medical services.
- A crowd of 1 million **demonstrated** Saturday in the capital, San'a,
- **protesting** against Israel, the United States and Arab leaders regarded as too soft on Israel.
- In Ramallah, around 500 people **took to the town's streets** chanting slogans denouncing the summit ....
- For weeks Italian Jewish groups, World War II veterans and leftist political parties have staged **protests** against a meeting between the pope and Haider, arguing that a papal encounter would lend the Austrian politician legitimacy.
- During the work **stoppage** Wednesday, local residents were unable to register marriages or get documents for real estate transactions.

### 5.5. Contact Events

Subtypes of contact event sometimes are hard to define. Instead of manually annotating the subtypes for contact, you are asked to judge four attributes of each contact event: formality, scheduling, medium and audience. The subtype then will be populated automatically based on the attributes you pick.

**Formality:** A contact event has one of the following formality attributes:

- **Formal:** A formal contact event has an agenda, is for business , political or religious purposes. Eg.,  
*India, US agree to restart **talks** on bilateral investment*  
*Merkel expects Greek funding **talks** to drag on*  
*I have a **telecon** with collaborators this afternoon*  
*The priest gave a good **sermon** this morning*
- **Informal:** An informal contact event doesn't have an agenda, is for casual social or family purposes. Eg.,  
*Jane and Jill **met** for coffee last Saturday*  
*I got an **email** from my brother, ...*



- **Can't Tell:** If the context within a document doesn't contain explicit evidence or information on this attribute, choose "Can't Tell".

**Scheduling:** A contact event has one of the following scheduling attributes:

- **Planned:** A planned contact event is scheduled, expected by the participants. Eg.,  
*India and the US agreed to restart **talks** on bilateral investment*
- **Spontaneous:** A spontaneous contact event is unscheduled, may not be expected by the participants. Eg.,  
*He bumped into John in the hallway and started **talking** about his vision of the company*
- **Can't Tell:** If the context within a document doesn't contain explicit evidence or information on this attribute, choose "Can't Tell".

**Medium:** A contact event has one of the following medium attributes:

- **In-person:** An in-person contact event is face-to-face, with participants physically in the same location. Eg.,  
*Jane and Jill **met** for coffee last Saturday*
- **Not-in-person:** An not-in-person contact event is not face-to-face, with participant in different locations. Eg.,  
*I got an **email** from my brother, ...*
- **Can't Tell:** If the context within a document doesn't contain explicit evidence or information on this attribute, choose "Can't Tell"

**Audience:** A contact event has one of the following audience attributes:

- **One-way:** A one-way contact event means the agent has no expectation of direct response, such as announcements, orders, blog postings, commands, lectures, speeches, all news media - related communication - interviews, publicizing, comments to reporters, etc. Eg.,  
*Obama **announced** he would veto the Keystone bill*  
*ISIS **tweeted** they have a new video on YouTube*
- **Two-way:** A two-way contact event means participants are directly communicating with each other. Eg.,  
*I got an **email** from my brother, ...*  
*Jane and Jill **met** for coffee last Saturday*
- **Can't Tell:** If the context within a document doesn't contain explicit evidence or information on this attribute, choose "Can't Tell"

Below is the table indicating the mapping between subtypes and attributes.

Attributes		Meet	Correspondence	Broadcast	Contact
Formality	Formal	any	any	any	any
	Informal	any	any	any	any
	Can't tell	any	any	any	any
Scheduling	Planned	any	any	any	any
	Spontaneous	any	any	any	any
	Can't tell	any	any	any	any
Medium	Not-in-person	NO	MUST	any	any
	In-person	MUST	NO	any	any
	Can't tell	NO	NO	any	YES
Audience	Two-way	MUST	MUST	NO	any
	One-way	NO	NO	MUST	any
	Can't tell	NO	NO	NO	YES

The Contact.MEET and Contact.CORRESPONDENCE event subtypes cover two-way communications, both done in-person face-to-face and done through communication media and other messaging methods. Contact.BROADCAST covers fundamentally one-way communication methods, with no expectation of direct response, such as announcements, orders, blog postings, commands, lectures, speeches, all news media-related communication – interviews, publicizing, comments to reporters, etc. Contact.CONTACT covers communication which you can't tell whether it is one-way or two-way, or in-person or not-in-person.

**NOTE:** Affairs and long-term relationships do **not** count as contact events, and will be tagged in Relations under the appropriate Social subtype.

**NOTE:** Contact.CONTACT mentions can be added to an Event Hopper with mentions of any Contact subtype. See section 6 on Event Hoppers.

### 5.5.1. Contact.MEET

A MEET event occurs whenever two or more Entities come together at a single location and interact with one another face-to-face. MEET events include talks, summits, conferences, meetings, visits, and any other event where two or more parties get together personally and communicate directly with each other, whether formally or informally, planned or spontaneous, at an explicitly understood location. When a MEET event occurs, we should tag the initial trigger, but avoid tagging speech verbs that occur while the meeting takes place.

Allowable arguments for Contact.Meet

Entity-Arg	Entity- Arg	Place-Arg	Time-ARG
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PER, ORG, GPE	PER, ORG, GPE	GPE, LOC, FAC	TME
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Entity-Arg	PER ORG GPE	The agents who are meeting	<i><b>[Mr. Erekat]</b> traveled to Washington and <b>met</b> with US Secretary of State <b>[Madeleine Albright]</b> and <b>[other US officials]</b> to bring about a ceasefire.</i>
Place-Arg	GPE LOC FAC	Where the meeting takes place	<b>Washington</b>

#### Examples of Contact.MEET events:

- Bush and Putin **met** earlier this week to discuss Chechnya.
- Seven Lebanese Druze representatives out of eight who **met** under the leadership of representative Walid Jumblatt called on "youths in our Islamic Arab faction to actively join the heroic Palestinian Intifada against Israeli occupation and its agents, and to expose its means and methods."
- After attending the **meeting**, the senator expressed his hope for a resolution.
- Owens complained to Defense Secretary William Cohen, prompting a **meeting** Friday between the governor and Gen. John Coburn, commander of the Army Material Command.
- Egypt hosted a **summit** with the Palestinians and Israelis.

#### 5.5.2. Contact.CORRESPONDENCE

Contact.CORRESPONDENCE events are the default subtype to cover all Contact events where a ‘face-to-face’ meeting between sender and receiver is not explicitly stated. This includes written, phone, or electronic communication. Communication that is explicitly stated to take place in person should be considered a MEET event. This type of event also includes communication via internet channels such as Skype or WebEx.

In general, we do not want to tag all verbs of speech like “said” or “told.” When a CORRESPONDENCE event occurs, we should tag the initial trigger, but avoid tagging additional mentions of the same communication when the medium is not explicit. In the following sentences, “called” would be the only Contact.CORRESPONDENCE event trigger: “She **called** me yesterday. When she **said** she couldn’t make it, we had to change our plans. I **asked** her what worked best for her.”

Allowable arguments for Contact.CORRESPONDENCE:

Entity-Arg	Entity- Arg	Place-Arg	Time-ARG
PER, ORG, GPE	PER, ORG, GPE	GPE, LOC, FAC	TME

Entity-Arg	PER ORG GPE	The communicating agents	<i>[I] communicate with [international friends] without the hefty phone bills.</i>
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#### Examples of Contact.CORRESPONDENCE events:

- John sent an **e-mail** to Jane.
- All three parties **discussed** the matter in a **teleconference** Thursday.
- Duane Roelands dashed off a few short instant text **messages** to co-workers and friends.
- He discreetly **interacted** with his girlfriend.
- John and Jane **skyped** last night.
- John and Jane had a **teleconference** yesterday.
- Her secretaries made his office **aware** of the upcoming conference. (**NOTE:** not ~~made his office aware~~ per section 3.4 – “made aware” would be the trigger, but “his office” is in the way)

#### 5.5.3. Contact.BROADCAST

Contact with the media and other publicity or announcement events will not be considered Contact.CORRESPONDENCE events. The common ‘(PERSON) told reporters’ is a contact.BROADCAST event, as is ‘issued a statement’.

#### Allowable arguments for Contact. BROADCAST:

Entity-Arg	Audience- Arg	Place-Arg	Time-ARG
PER, ORG, GPE	PER, ORG, GPE	GPE, LOC, FAC	TME

Entity-Arg	PER ORG GPE	The communicating agents	<i>where [Gadhafi] was <b>addressing</b> a group of few hundred students</i>
Audience-Arg	PER, ORG, GPE	The targetted audience of broadcast	<i><b>a group of few hundred students</b></i>
Place-Arg	GPE, LOC, FAC	The place where it happens	<i><b>Where</b></i>

#### Examples:

- Smith **told** reporters...
- Hamas **issued a statement** that...
- The group **announced**...
- The foreign minister **ordered** all diplomatic personnel out of the war zone.

#### 5.5.4. Contact.CONTACT

**NOTE:** Cases where either the means of contact are not stated or there is no explicit mention of face-to-face contact are by default tagged as Contact.CONTACT events.

If you can't tell whether a communication is face-to-face, it is tagged as CONTACT. If you can't tell whether a communication is one-way or two way, it is tagged as CONTACT. This subtype will be populated automatically when the Medium attribute is Can't Tell.

Allowable arguments for Contact.CONTACT:

Entity-Arg	Entity- Arg	Place-Arg	Time-ARG
PER, ORG, GPE	PER, ORG, GPE	GPE, LOC, FAC	TME

So in the following example, without any further context indicating location of the Contact event, they have "Can't Tell" for either medium or audience attributes, hence fall into the Contact.CONTACT subtype:

- GM is in **talks** with Chrysler to Purchase Jeep. (CONTACT)
- **Talks** are at a standstill, but 4,000 striking drivers have promised to respond to the latest management offer, Thursday. (CONTACT)
- Bush and Rice **conferred** closely on the evolving situation. (CONTACT)

**NOTE:** Contact.CONTACT mentions can be added to an Event Hopper with mentions of any Contact subtype. See section 6 on Event Hoppers.

#### 5.6. Manufacture Events

There is only one subtype for Manufacture events: Manufacture.ARTIFACT.

##### 5.6.1. Manufacture.ARTIFACT

A MANUFACTURE.ARTIFACT event occurs whenever one Entity builds or manufactures a FAC in Entity or a WEA, VEH, COM in Argument Filler.

Allowable arguments for Manufacture.Artifact:

Agent-Arg	Artifact- Arg	Instrument-Arg	Place-Arg	Time-ARG
PER, ORG, GPE	WEA, VEH, FAC, COM	WEA, VEH, COM	GPE, LOC, FAC	TME

Agent-Arg	PER ORG GPE	The agent responsible for the Manufacture.Manufacture event	<b>[Bruce Campbell]</b> <b>converted</b> a Boeing 727-200 into a home in Oregon.
Artifact-Arg	VEH WEA COM FAC	The material or artifact that is being constructed or manufactured	<b>a home</b>
Instrument- Arg	WEA VEH COM	The material or artifact that is used for constructing or manufacturing	<b>a Boeing 727-200</b>
Place-Arg	GPE LOC FAC	The GPE or LOC in which the Artifact-Arg is being constructed or manufactured	<b>Oregon</b>

## 5.7. Personnel Events

All PERSONNEL events can have a POSITION attribute. The object populating the POSITION-ARG slot in a PERSONNEL event will be an entity of type TTL or PER.

For example,

- Mary Smith **joined** Foo Corp. as CEO in June 1998

The POSITION-ARG of the event is the JOB-TITLE Value populated by the string 'CEO'.

A complete description of the role that a POSITION-ARG plays in a PERSONNEL event is provided the sections below.

**NOTE:** While layoffs will be annotated as END-POSITION events, in general we **will not** annotate large-scale economic trends in employment such as *a loss of jobs* or *job creation*.

### 5.7.1. Personnel.START-POSITION

A START-POSITION event occurs whenever a PERSON Entity begins working for (or changes offices within) an ORGANIZATION or GPE. This includes government officials starting their terms, whether elected or appointed.

Allowable arguments for Personnel.Start-Position

Entity-Arg	Person- Arg	Postion-Arg	Place-Arg	Time-Arg
ORG, GPE	PER	TTL	GPE, LOC, FAC	TME

Person-Arg	PER	the employee	<i>In 1997, the company <b>hired</b> [John D. Idol] to take over as chief executive.</i>
Entity-Arg	ORG GPE	the employer	<b>the company</b>
Position-Arg	TTL	The job title for the position being started	<b>chief executive</b>
Time-Arg	TME	Time the employment relationship begins	<b>1997</b>

**NOTE:** In general we **will not** annotate large-scale economic trends in employment such as ‘job creation’.

#### Examples of Personnel.START-POSITION events:

- Foo Corp. **hired** Mary Smith in June 1998.
- Mary Smith **joined** Foo Corp. in June 1998.
- Bill Clinton **started office** on January 20, 1993.
- The management **hired** more part-time drivers and limited overtime pay.

#### 5.7.2 Personnel.END-POSITION

An END-POSITION event occurs whenever a PERSON Entity stops working for (or changes offices within) an ORGANIZATION or GPE. This includes government officials ending terms, whether elected or appointed.

##### Allowable arguments for Personnel.End-Position

Entity-Arg	Person- Arg	Postion-Arg	Place-Arg	Time-ARG
ORG, GPE	PER	TTL	GPE, LOC, FAC	TME

Person-Arg	PER	the employee	<i>Georgia <b>fired</b> football coach [Jim Donnan] Monday after a disappointing 7-4 season that started with the Bulldogs ranked No. 10 and picked to win the SEC East, his players said.</i>
Entity-Arg	ORG GPE	the employer	<b>Georgia</b>
Position-Arg	TTL	The <i>JOB-TITLE</i> for the position being	<b>coach</b>

		ended	
Time-Arg	TME	Time employment in the position ended	<b>Monday</b>

**NOTE:** While layoffs will be annotated as END-POSITION events, in general we will not annotate large-scale economic trends in employment such as *a loss of jobs*.

#### Examples of Personnel.END-POSITION events:

- Georgia **fired** football coach Jim Donnan Monday after a disappointing 7-4 season that started with the Bulldogs ranked No. 10 and picked to win the SEC East, his players said.
- Richard Jr. had 14 months, before he was **laid off** in October.
- My older brother **lost** his job last weekend, because he showed up late (**NOTE:** not **lost his job** per section 3.4)
- Gov. George W. Bush was elected president and was **succeeded** by Lt. Gov. Rick Perry.

### 5.7.3 Personnel.NOMINATE

A NOMINATE event occurs whenever a person entity is proposed for employment in a formal position, through official channels, by the appropriate PER, ORG, or GPE.

Allowable arguments for Personnel.Nominate

Agent-Arg	Person- Arg	Postion-Arg	Place-Arg	Time-ARG
PER, ORG, GPE	PER	TTL	GPE, LOC, FAC	TME

Person-Arg	PER	the person(s) nominated	<i>One of those difficult-to-dislodge judges was <b>[John Marshall]</b>, <b>nominated</b> by Adams to be chief justice.</i>
Agent-Arg	PER ORG GPE	the nominating agent	<b>Adams</b>
Position-Arg	TTL	The <i>JOB-TITLE</i> for the position being nominated to	<b>chief justice</b>

#### Examples of Personnel.NOMINATE events:

- The president **nominated** Rep. Mark Foley (R-Fla.) to head the commission.
- The recently **nominated** Foley said... (resultative)



- Gore holds a degree from the university, and is one of about 500 people **nominated** for the job.

#### 5.7.4 Personnel.ELECT

An ELECT event occurs whenever a candidate wins an election designed to determine the PERSON argument of a START-POSITION event.

Allowable arguments for Personnel.Elect

Agent-Arg	Person-Arg	Position-Arg	Place-Arg	Time-ARG
PER, ORG, GPE	PER	TTL	GPE, LOC, FAC	TME

Person-Arg	PER	the person elected	<i><b>[Greg Lashutka] was elected mayor of Columbus in 1993.</b></i>
Position-Arg	TTL	The <i>JOB-TITLE</i> for the position being nominated to	<i><b>mayor</b></i>
Place-Arg	GPE LOC	Where the election takes place	<i><b>Columbus</b></i>
Time-Arg	TME	Time the election takes place	<i><b>1993</b></i>

#### Examples of Personnel.ELECT events:

- Shareholders **elected** Sheila Johnson to a second term on the Board of Directors.
- "We have a strong interest in supporting Yugoslavia's newly **elected** leaders as they work to build a truly democratic society," Clinton said.
- Many other Israelis have turned away from the man they **elected** just 18 months ago.

#### 5.8. Transaction Events

We restrict transaction events to transfer of commodity, asset or money. The subtypes are decided by what is transferred. If the thing transferred is commodity or asset, it is TRANSFER-OWNERSHIP; if the thing transferred is money, it is TRANSFER-MONEY. If both are transferred in the same event, it will then be double tagged, once as TRANSFER-OWNERSHIP and once as TRANSFER-MONEY. If the thing being transferred is either Money or Commodity and not distinguishable in the context of a document, we will default that mention to TRANSACTION. For example,

- I **paid** \$7 for the book (TRANSFER-OWNERSHIP, TRANSFER-MONEY)
- I **received** a gift (Transaction.TRANSACTION)

**NOTE:** Transaction.TRANSACTION mentions can be added to an Event Hopper with mentions of any Transaction subtype. See section 6 on Event Hoppers.

Besides subtypes for transaction, we are also adding the following attribute of transaction events:

**‘Way’ attribute types:**

- **Voluntary:** The transaction is voluntary.  
*She **donated** \$5000 to her alma mater*  
*Jane **got** the book for \$7*  
*We **paid** our parking ticket and left town*
- **Involuntary-no-force:** The transaction is involuntary, but with no physical force involved.  
*Someone broke into our house while we were away and **took** all the jewelry*
- **Involuntary-by-force:** The transaction is involuntary, with physical force involved.  
*He pointed a gun at me and **took** all my money*
- **Can’t Tell:** If the context within a document doesn’t contain explicit evidence or information on this attribute, choose “Can’t Tell”.

**NOTE:** If the transaction has the attribute of Involuntary-by-force, it needs to be double tagged as both a transaction event and also a Conflict.ATTACK event if it is same trigger. For example,

- The man **robbed** her of \$20. (Transaction.TRANSFER-MONEY, Conflict.ATTACK)

**NOTE:** An undesirable payment, such as paying for a parking ticket, will still be marked as Voluntary, because the payment is ultimately intended. Involuntary-no-force Transaction events should be reserved for unintended transactions such as being pickpocketed.

### 5.8.1. Transaction.TRANSFER-OWNERSHIP

TRANSFER-OWNERSHIP events refer to the buying, selling, loaning, borrowing, giving, receiving, bartering, stealing, or renting of physical items, tangible assets, intangible assets, or organizations. The ownership of assets and organizations can be fully transferred by selling, giving, bartering, or stealing; ownership can be partially transferred by loaning or renting. Tangible assets include physical objects (artifacts), property, real estate, etc. Intangible assets include financial instruments, stock, intellectual property rights, copyrights, patents, insurance policies, etc.

**NOTE:** When the thing transferred is an ORGANIZATION, the SELLER-ARG will be filled only rarely; it exists for cases like X Inc. sold its Y division to Z Corp. In the more usual case of A Corp. purchased B Corp., A Corp. is the BUYER-ARG, B Corp. is the ORG-ARG, and there is no SELLER-ARG.

**NOTE:** ‘Seizing a facility’ will count as a TRANSFER-OWNERSHIP event, but ‘securing a facility’ will not.

**NOTE:** Default to Transfer-Ownership when donations are given or received, unless you can reasonably tell that money is the only thing being donated.

#### Decision rule for Distinguishing Movement events from Transaction events:

Is there a change in ownership?

- If so, then the event is a TRANSFER-OWNERSHIP event.
- If not, and the entity in transfer is a person, the event is a TRANSPORT-PERSON event.
- If not, and the entity in transfer is an artifact, the event is a TRANSPORT-ARTIFACT event.

**NOTE:** An event mention could be both TRANSFER-OWNERSHIP and TRANSPORT-ARTIFACT. In that case, the mention should be tagged twice, once for each event type.

#### Allowable arguments for Transaction.Transfer-Ownership

Given- Arg	Recipient- Arg	Beneficiary- Arg	Thing- Arg	Place-Arg	Time- ARG
PER, ORG, GPE	PER, ORG, GPE	PER, ORG, GPE	VEH, WEA, FAC, COM, ORG	GPE, LOC, FAC	TME

Giver-Arg	PER GPE ORG	The person/org/country selling	<i>China has <b>purchased</b> two nuclear submarines from <b>[Russia]</b>.</i>
Recipient-Arg	PER ORG	The person/org/country	<i><b>China</b></i>

	GPE	buying	
Thing-Arg	VEH WEA FAC COM ORG	The item that is been transferred	<i><b>two nuclear submarines</b></i>

### Examples of Transaction.TRANSFER-OWNERSHIP events:

- This report concerns China's recently **acquired** submarines.
- If the man accused of killing seven people near Boston on Tuesday **got** his guns in Massachusetts, he was able to skirt some of the strictest regulations in the country, people familiar with the state's laws said Wednesday.
- Cuba **imported** 10 tons of rice last year.
- The Snyder family gave **donations** to the Lancaster Soup Kitchen, which has **received aid** from three other organizations in the county this week.
- The head of the agency's coordination program in Amman, Maher Nasser, said in a press conference that the aid was aimed at "**providing** food and medical aid to Palestinian refugees in the West Bank and Gaza suffering as a result of the Israeli blockade of the Palestinian Territories....

### 5.8.2 Transaction.TRANSFER-MONEY

TRANSFER-MONEY events refer to the giving, receiving, borrowing, lending, or stealing of money when it is not in the context of purchasing assets or organizations. Transfer-Money refers to the transfer of money in either physical or electronic form. Transfer-Money also is used in the context of payment for services. The canonical examples are (1) people depositing money into a bank account; (2) people donating money to organizations (and getting nothing tangible in return); (3) organizations lending money to people or other orgs; (4) people or organizations paying for services provided by other people or orgs (such as employee labor, contract services, volunteer services, entertainment, trade services, etc.).

**NOTE:** We will annotate 'extortion' as a TRANSFER-MONEY event only when the amount of money is explicitly specified.

**NOTE:** The transfer of stock is not taggable as a TRANSFER-MONEY event, even when it is expressed in terms of a monetary value. It is taggable as a TRANSFER-OWNERSHIP event.

#### Allowable arguments for Transaction.Transfer-Money

Giver- Arg	Recipient-Arg	Beneficiary-Arg	Money- Arg	Place-Arg	Time- ARG
PER, ORG,	PER, ORG,	PER, ORG,	MON	GPE, LOC,	TME

GPE	GPE	GPE		FAC	
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Recipient-Arg	PER ORG GPE	The recipient agent	<i>I'd like to see them accept his offer," said [Jean Dolan], 59, a retired singing instructor who <b>borrowed</b> about \$10,500 in July 1999.</i>
Time-Arg	TME	When the amount is transferred	<b>July 1999</b>
Money-Arg	MON	The amount of money being transferred	<b>about \$10,500</b>

#### Examples of Transaction.TRANSFER-MONEY events:

- The charity was discovered to have **given** money to Al Qaeda.
- The organization is living on **borrowed** funds. (resultative)
- Actors and singers also on the flight held a benefit concert in Baghdad Saturday evening, with most of the \$13 cover charge to be **donated** to support the Palestinian uprising.
- I'd like to see them accept his offer," said Jean Dolan, 59, a retired singing instructor who **borrowed** about \$10,500 to buy Eircom shares in the IPO in July 1999.
- She received **alimony** for several years after their split up
- I **paid** \$9 for the movie ticket.

#### 5.8.3 Transaction.TRANSACTION

Transaction.TRANSACTION events refer to the giving, receiving, borrowing, lending, or stealing of something when you can't tell whether it is money or an asset or a commodity in the context of the document.

Allowable arguments for Transaction.Transfer-Money

Giver- Arg	Recipient-Arg	Beneficiary- Arg	Place-Arg	Time- ARG
PER, ORG, GPE	PER, ORG, GPE	PER, ORG, GPE	GPE, LOC, FAC	TME

Recipient-Arg	PER ORG GPE	The recipient agent	<i><b>[John]</b> received the best birthday gift ever last week.</i>
Time-Arg	TME	When the amount is transferred	<b>last week</b>

**NOTE:** Transaction.TRANSACTION mentions can be added to an Event Hopper with mentions of any Transaction subtype. See section 6 on Event Hoppers.

## 5.9. Justice Events

We will only annotate as Justice events those occurrences that are indicated to be the result of the law enforcement and legal systems of a GPE-type Entity. Note that some JUSTICE event subtypes might seem to permit actions by non-state (extra-governmental) ORGANIZATION Entities. For example, one can imagine tagging the release of hostages by some paramilitary or terrorist group as a Justice.RELEASE-PAROLE event. However, in accordance with the above guideline, events like this will not be considered taggable.

### 5.9.1. Justice.ARREST-JAIL

An arrest event occurs whenever a state actor (GPE, ORGANIZATION subpart, or PERSON representative) takes official custody of a PERSON Entity for the purposes of evaluating legal liability in a criminal activity. A jail event occurs whenever the movement of a PERSON is constrained by a state actor (a GPE, its ORGANIZATION subparts, or its PERSON representatives).

Allowable arguments for Justice.Arrest-Jail:

Agent-Arg	Person- Arg	Crime- Arg	Place- Arg	Time- ARG
PER, ORG, GPE	PER	CRM	GPE, LOC, FAC	TME

Person-Arg	PER	the person who is jailed or arrested	<i>Florida police <b>arrested [James Harvey]</b> in Coral Springs on Friday.</i>
Agent-Arg	PER ORG GPE	the jailer or the arresting agent	<i><b>Florida police</b></i>
Place-Arg	GPE LOC	Where the person is arrested or where they are in jail	<i><b>Coral Springs</b></i>
Time-Arg	TME	Date(s) the person is arrested or in jail	<i><b>Friday</b></i>

**NOTE:** ‘Serving a sentence’ will be annotated as an ARREST-JAIL event.

**Examples of Justice.ARREST-JAIL events:**

- Since May, Russia has **detained** over 20 suspected terrorists without a trial.
- Asked what he had done to attract attention since he was **incarcerated**, Chapman recalled a 1987 interview with People

magazine, for which he received \$5,000, according to news reports at the time.

- Abu Talb, the last major prosecution witness, has been **jailed** in Sweden for attacks against Jewish and American targets in Europe.
- A court of appeals on Tuesday suspended Gen. Augusto Pinochet's house **arrest** while it studied a judge's explanation for indicting the former dictator on homicide and kidnapping charges.
- The **jailed** suspects demanded to speak to a lawyer. (resultative)
- ...where Pope is **imprisoned**. (resultative)

### 5.9.2. Justice.RELEASE-PAROLE

A RELEASE-PAROLE event occurs whenever a state actor (GPE, ORGANIZATION subpart, or PERSON representative) ends its custody of a PERSON Entity. This can be because the sentence has ended, because the charges are dropped, or because parole has been granted.

Allowable arguments for Justice.Release-Parole:

Agent-Arg	Person- Arg	Crime- Arg	Place- Arg	Time- ARG
PER, ORG, GPE	PER	CRM	GPE, LOC, FAC	TME

Person-Arg	PER	the person who is released	<i>Russian President Vladimir Putin has pardoned and <b>released</b> [American businessman Edmond Pope].</i>
Entity-Arg	PER ORG GPE	the former captor agent(s)	<i><b>Vladimir Putin</b></i>

**Examples of Justice.RELEASE-PAROLE events:**

- Harvey was **released** the following day.
- The newly **freed** prisoners... (resultative)
- He was put out on **parole** in 1986, ...

### 5.9.3. Justice.TRIAL-HEARING

A trial event occurs whenever a court proceeding has been initiated for the purposes of determining the guilt or innocence of a PERSON, ORGANIZATION or GPE accused of committing a crime. A hearing event occurs whenever a state actor (GPE, ORGANIZATION subpart, or PERSON representative) officially gathers to discuss some criminal legal matter.

#### Allowable arguments for Justice.Trial-Hearing:

Prosecutor-Arg	Adjudicator-Arg	Defendant-Arg	Crime-Arg	Place-Arg	Time-ARG
PER, ORG, GPE	PER, ORG, GPE	PER, ORG, GPE	CRM	GPE, LOC, FAC	TME

Defendant-Arg	PER ORG GPE	the agent on trial	<i><b>[Edmond Pope]</b> is being <b>tried</b> on charges of spying by government prosecutors in a closed court in Russia.</i>
Prosecutor-Arg	PER ORG GPE	The prosecuting agent	<i><b>government prosecutors</b></i>
Adjudicator-Arg	PER ORG GPE	the judge or court	<i><b>a closed court in Russia</b></i>
Crime-Arg	CRM	The crime that is charged for the trial or hearing	<i><b>spying</b></i>
Place-Arg	GPE LOC FAC	Where the trial takes place	<i><b>Russia</b></i>

#### Examples of Justice.TRIAL-HEARING events:

- Jenna Raleigh is being **tried** in a military court.
- Clinton also touched on the matter of American Edmond Pope who is being **tried** in a closed court in Russia on charges of spying.
- A Palestinian terrorist began his testimony Friday in the **trial** of two Libyans accused of bombing Pan Am Flight 103, describing his role in attacks against Israel in the 1970s.
- The **trial** resumed this week after a month of delays following the disclosure that new evidence surfaced on another group, the Damascus-based Palestinian Front for the Liberation of Palestine-General Command.
- Stewart's **hearing** was held on Monday in the superior court.
- The Senate Armed Services Subcommittee on Personnel held a **hearing** on sexual assault in the military this week.
- He gave his **testimony** on his first day in court.

**NOTE:** 'testimony' will be double tagged as a Justice.Trial-Hearing event as well as a Contact event with two-way and InPerson attributes.



#### 5.9.4. Justice.CHARGE-INDICT

A CHARGE event occurs whenever a PERSON, ORGANIZATION or GPE is accused of a crime by a state actor (GPE, an ORGANIZATION subpart of a GPE or a PERSON representing a GPE). An INDICT event occurs whenever a state actor (GPE, ORG subpart of a GPE or PERSON agent of a GPE) takes official legal action to follow up on an accusation.

Allowable arguments for Justice.Charge-Indict:

Prosecutor-Arg	Adjudicator-Arg	Defendant-Arg	Crime-Arg	Place-Arg	Time-ARG
PER, ORG, GPE	PER, ORG, GPE	PER, ORG, GPE	CRM	GPE, LOC, FAC	TME

Defendant-Arg	PER ORG GPE	the agent that is indicted	<i><b>[Joy Fenter] was indicted by a grand jury on eleven counts of mail fraud.</b></i>
Crime-Arg	CRM	The crime that is charged or indicted	<i><b>eleven counts of mail fraud</b></i>
Adjudicator-Arg	PER ORG GPE	the judge or court	<i><b>a grand jury</b></i>

**Examples of Justice.CHARGE-INDICT events:**

- Milosevic, who has been **indicted** by the international war crimes tribunal in The Hague, Netherlands, cannot leave Yugoslavia without risking arrest and extradition.
- Guzman **indicted** Pinochet, holding him responsible for the actions by the “Caravan of Death”, a military party that killed 73 political prisoners shortly after the 1973 coup in which Pinochet ousted Marxist President Salvador Allende.
- Ryan Mathers was **charged** with reckless endangerment.
- Appointed to the federal bench in 1979, he was **charged** two years later with conspiracy to accept a bribe in a case he presided over in Miami.

#### 5.9.5. Justice.SUE

A SUE event occurs whenever a court proceeding has been initiated for the purposes of determining the liability of a PERSON, ORGANIZATION or GPE accused of committing a crime or neglecting a commitment.

Allowable arguments for Justice.Sue:

Plaintiff-Arg	Adjudicator-Arg	Defendant-Arg	Crime-Arg	Place- Arg	Time-ARG
PER, ORG, GPE	PER, ORG, GPE	PER, ORG, GPE	CRM	GPE, LOC, FAC	TME

Plaintiff-Arg	PER ORG GPE	The suing agent	<i><b>[Donald Crutchfield]</b> filed <b>suit</b> against Toys 'R' Us in 1997.</i>
Defendant-Arg	PER ORG GPE	The agent being sued	<b>Toys 'R' Us</b>
Time-Arg	TME	Time of the suit	<b>1997</b>

**Examples of Justice.SUE events:**

- The **suit** against their company and the resulting bad publicity almost reduced it to bankruptcy.
- Brentwood Academy responded with a **lawsuit** that has made its way to the U.S. Supreme Court, where arguments will be made Wednesday.
- He is **suing** the news site for slander.

#### 5.9.6. Justice.CONVICT

A CONVICT event occurs whenever a TRIAL-HEARING event ends with a successful prosecution of the DEFENDANT-ARG. In other words, a PERSON, ORGANIZATION or GPE Entity is convicted whenever that Entity has been found guilty of a Crime.

Allowable arguments for Justice.Convict:

Adjudicator-Arg	Defendant-Arg	Crime-Arg	Place- Arg	Time-ARG
PER, ORG, GPE	PER, ORG, GPE	CRM	GPE, LOC, FAC	TME

Defendant-Arg	PER ORG GPE	The convicted agent(s)	<i>A Russian court <b>convicted [Pope]</b> Wednesday on espionage charges and sentenced him to 20 years in prison.</i>
Adjudicator-Arg	PER ORG GPE	The judge or court	<i><b>A Russian court</b></i>
Crime-Arg	CRM	The crime that is convicted for	<i><b>espionage</b></i>
Place-Arg	GPE LOC	Where the conviction takes place	<i><b>Russian</b></i>
Time-Arg	TME	Time the conviction takes place	<i><b>Wednesday</b></i>

#### Examples of Justice.CONVICT events:

- Martha Breckenridge was **convicted** of two counts of manslaughter.
- Tommy, a multimillionaire with a playboy image and love of fast cars, is the first member of Suharto's family to be **convicted** of graft.
- It found him **guilty** of enriching himself through a property deal with the state's main food supply agency.

**NOTE:** Pleading guilty to a crime does not constitute a CONVICT event.

#### 5.9.7 Justice.SENTENCE

A SENTENCE event takes place whenever the punishment (particularly incarceration) for the DEFENDANT-ARG of a TRIAL-HEARING event is issued by a state actor (a GPE, an ORGANIZATION subpart or a PERSON representing them).

Allowable arguments for Justice.Sentence:

Adjudicator-Arg	Defendant-Arg	Crime-Arg	Sentence-Arg	Place-Arg	Time-ARG
PER, ORG, GPE	PER, ORG, GPE	CRM	SEN	GPE, LOC, FAC	TME

Defendant-Arg	PER ORG GPE	The agent who is sentenced	<b>[46-year-old Abu Talib]</b> was <b>sentenced</b> to life imprisonment in 1990 in Sweden for terrorist acts in Amsterdam, Copenhagen and Stockholm between 1985 and 1986.
Crime-Arg	CRM	The crime	<b>terrorist acts in Amsterdam, Copenhagen and Stockholm between 1985 and 1986</b>
Sentence-Arg	SEN	The sentence	<b>life imprisonment</b>
Place-Arg	GPE LOC FAC	Where the sentencing takes place	<b>Sweden</b>
Time-Arg	TME	Time the sentencing takes place	<b>1990</b>

#### Examples of Justice.SENTENCE events:

- She was **given a sentence** of life without parole.
- Hutomo ``Tommy'' Mandala Putra, 37, was **sentenced** to 18 months in prison on Sept. 22 by the Supreme Court, which overturned an earlier acquittal by a lower court.
- A Russian court convicted Pope Wednesday on espionage charges and **sentenced** him to 20 years in prison.

**NOTE:** "Serving a sentence" will be annotated as an ARREST-JAIL event.

**NOTE:** Because sentencing to pay fines is covered under Justice.FINE, sentences to pay fines will **not** be annotated as Justice.SENTENCE. Eg.,

- The company was **ordered to pay** a fine of \$300,000. (= Justice.FINE)

Also be careful not to tag instances of *actual payment of* a court-ordered fine under SENTENCE or FINE, as they are annotated as Transaction.TRANSFER-MONEY events.

**NOTE:** Because sentencing to death and carrying out an execution are separate event subtypes under Justice, tag *death sentences* under the SENTENCE subtype and *the actual carrying out of* capital punishment as EXECUTE. Eg.,

- Two prisoners who had been **sentenced** to ~~death~~ have been exonerated. ('sentence' = Justice.SENTENCE)
- David Goran was **executed** by lethal injection in 1987. (= Justice.EXECUTE)

**NOTE:** Please see the Argument Filler guidelines for details on the use of the appropriate arguments fillers for Justice.SENTENCE events.

### 5.9.8 Justice.FINE

A FINE event takes place whenever a state actor issues a financial punishment to a GPE, PERSON or ORGANIZATION Entity, typically as a result of court proceedings. Note that this subtype trumps the Justice.SENTENCE event subtype in annotation.

Allowable arguments for Justice.Fine:

Adjudicator-Arg	Entity-Arg	Money-Arg	Crime-Arg	Place-Arg	Time-Arg
PER, ORG, GPE	PER, ORG, GPE	MON	CRM	GPE, LOC, FAC	TME

Entity-Arg	PER ORG GPE	the Entity that was fined	<i><b>[The company]</b> was ordered to pay a <b>fine</b> of \$300,000.</i>
Money-Arg	Mon	the monetary value that is be fined	<i><b>\$300,000</b></i>

**NOTE:** The Justice.Fine event will be double tagged as TRANSFER-MONEY event, however, settlements between two parties outside of court will **not** be annotated as FINE events, but rather as TRANSFER-MONEY events. This will be true even when the settlement is brought about by some other JUSTICE event (such as a SUE event).

#### Examples of Justice.FINE events:

- Ms. Brooks, who could go to prison and will certainly be heavily **fined** has agreed to turn state's evidence, turning against her boss.
- It **fined** the school \$3,000 and banned its football program.

### 5.9.9 Justice.EXECUTE

An EXECUTE event occurs whenever the life of a PERSON is taken by a state actor (a GPE, its ORGANIZATION subparts, or PERSON representatives).

**NOTE:** Sentencing to death is covered under the SENTENCE event subtype, while carrying out an execution is tagged under the EXECUTE subtype. It is also double tagged as Life.Die event.

Allowable arguments for Justice.Execute:

Agent- Arg	Person-Arg	Crime- Arg	Place- Arg	Time-Arg
PER, ORG, GPE	PER	CRM	GPE, LOC, FAC	TME

Person-Arg	PER	The person executed	<i><b>[David Goran] was executed by lethal injection in March 1987.</b></i>
Time-Arg	TME	Time the execution takes place	<i><b>March 1987</b></i>

**Examples of Justice.EXECUTE events:**

- David Goran was **executed** by lethal injection in March 1987.
- Smith waited 12 years on death row until his **death sentence was carried out** in 1987.
- Twelve **executed** prisoners have been posthumously exonerated.

#### 5.9.10 Justice.EXTRADITE

An EXTRADITE event occurs whenever a PERSON is sent by a state actor from one PLACE (normally the GPE associated with the state actor, but sometimes a LOC or FAC under its control) to another place (LOC, FAC, GPE) for the purposes of legal proceedings there.

**NOTE:** Tagging an event as under Justice.EXTRADITE need to be double tagged as a Movement.TRANSPORT-PERSON event.

Allowable arguments for Justice.Extradite:

Agent- Arg	Person-Arg	Crime -Arg	Origin-Arg	Destination -Arg	Time-Arg
PER, ORG, GPE	PER	CRM	GPE, LOC	GPE, LOC	TME

Person-Arg	PER	The person being extradited	<i>In the end, [Milosevic] preferred <b>extradition</b> to The Hague rather than stay here and face our justice," said opposition leader Zarko Korac.</i>
Destination-Arg	GPE LOC	Where the person is extradited to, the destination	<b>The Hague</b>
Origin-Arg	GPE LOC	The original location of the person being extradited (rare ... only when explicitly mentioned)	<b>Here</b>

#### Examples of Justice.EXTRADITE events:

- The former leader was **extradited** to Burkina Faso.
- "In the end, Milosevic preferred **extradition** to The Hague rather than stay here and face our justice," said opposition leader Zarko Korac.
- Kimes's mother was **extradited** to California, where the two face the death penalty on charges they killed a former business associate.

#### 5.9.11 Justice.AQCUIT

An ACQUIT event occurs whenever a trial ends but fails to produce a conviction. This will include cases where the charges are dropped by the PROSECUTOR-ARG.

Allowable arguments for Justice.Acquit:

Adjudicator-Arg	Defendant-Arg	Crime-Arg	Place-Arg	Time-Arg
PER, ORG, GPE	PER, ORG, GPE	CRM	GPE, LOC, FAC	TME

Defendant-Arg	PER ORG GPE	The agent being acquitted	<i><b>[He]</b> was <b>acquitted</b> by a jury in 1983, but a panel of judges reopened the case four years later, accusing him of both the original crime and lying about it under oath.</i>
Adjudicator-Arg	PER ORG GPE	the judge or court	<i><b>a jury</b></i>
Time-Arg	TME	Time of acquittal	<i><b>1983</b></i>

#### Examples of Justice.ACQUIT events:

- Chase was **acquitted** after a trial in the Senate.
- After her **acquittal**, she still had difficulties regaining her formerly powerful position in the company.
- All charges were **dropped** against him last year, and he went free.

#### 5.9.12 Justice.APPEAL

An APPEAL event occurs whenever the decision of a court is taken to a higher court for review.

Allowable arguments for Justice.Appeal:

Prosecutor-Arg	Adjudicator-Arg	Defendant-Arg	Crime-Arg	Place-Arg	Time-ARG
PER, ORG, GPE	PER, ORG, GPE	PER, ORG, GPE	CRM	GPE, LOC, FAC	TME

Defendant-Arg	PER ORG GPE	The defendant or defendant's agent	<i><b>[Defense attorneys]</b> <b>appealed</b> the case to a higher court.</i>
Adjudicator-Arg	PER ORG GPE	The judge or court	<i>Defense attorneys <b>appealed</b> the case to <b>[a higher court]</b>.</i>

#### Examples of Justice.APPEAL events:

- A new lawyer for O.J. Simpson **filed** a new attempt Tuesday to gain his release from Nevada state prison.
- The government lost the case when the defendant **appealed**.



### 5.9.13 Justice.PARDON

A PARDON event occurs whenever a head-of-state or their appointed representative lifts a sentence imposed by the judiciary.

Allowable arguments for Justice.Pardon:

Adjudicator-Arg	Defendant-Arg	Crime-Arg	Place-Arg	Time-ARG
PER, ORG, GPE	PER, ORG, GPE	CRM	GPE, LOC, FAC	TME

Defendant-Arg	PER ORG GPE	The agent being pardoned	<i><b>[Pope]</b> was released today after receiving a <b>pardon</b> from Russian President Vladimir Putin.</i>
Adjudicator-Arg	PER ORG GPE	the state official or ORG who does the pardoning	<i><b>Vladimir Putin</b></i>
Time-Arg	TME	Time of the pardoning	<i><b>Today</b></i>

**Examples of Justice.PARDON events:**

- Russian President Vladimir Putin has **pardoned** and released American businessman Edmond Pope.

## 6. Event Hopper and Strict Event Coreference

The purpose of Event Hopper annotation in Rich ERE (RERE) is to include more argument information for events that are intuitively the same referent. Limitations of strict Event Coreference in Light ERE (LERE) are addressed in Event Hopper annotation in a much more approachable and inclusive annotation process. By using Hoppers, annotators are able to examine Event granularity without the bounds of component judgments.

### 6.1. Strict Event Coreference

Light ERE used the following definition of Event Coreference:

*Through **holistic judgments**, we determine that mentions are coreferential because they clearly refer to the same event. Through **component judgments**, annotators determine that mentions are coreferential because they refer to events with the same agent(s), patient(s), time, and location.*

In Rich ERE, this type of coreference will be continued, but it will take place along with an additional expanded type of coreference, the Event Hopper level.

**NOTE:** The current tool and sample release of data includes only the Event Hopper level of coreference. We intend to add strict identity coreference to future versions, possibly via automatic population using the information in the manual annotation of Event Hoppers.

## 6.2 Event Hoppers: Expanding Light ERE Event Coreference

The Event Hopper level of annotation is a slightly relaxed standard of coreference compared to strict identity coreference. It is intended to avoid limitations caused by Event Argument variation, granularity and realis. By removing component judgments, annotators can more easily determine whether or not two Events should be grouped together in an Event Hopper. Take the following examples from one document:

- A separatist group called the Kurdistan Freedom Falcons (TAK) claimed responsibility for an **explosion (ev1)** late on Monday which **wounded (ev2)** six people, one of them seriously, in an Istanbul supermarket.

Istanbul governor Muammer Guler told Anatolia news agency the **explosion (ev3)** in the Bahcelievler district of Turkey's largest city **injured (ev4)** six people.

The agency said 15 other people had been **hurt (ev5)**.

"We consider the **explosion (ev6)** that took place tonight in an Istanbul supermarket to be a response to the barbaric policies against the Kurdish people."

- **ev1, ev3, and ev6** would all occupy the same Event Hopper
- **ev2, ev4, and ev5** would also all occupy the same Event Hopper

In strict Event Coreference, annotators do not group these Events together due to differing Event Arguments. The addition of Event Hoppers in Rich ERE will allow annotation teams to make more natural judgment calls while examining a document.

Additionally, any event mentions that meet the strict coreference criteria will be marked as such. Strict coreference will take place within the event hopper level, and will mark strictly coreferent events that are in the same event hopper.

### 6.3 Criteria for Event Hopper Annotation

Event mentions that meet the following criteria belong to the same hopper:

- Intuitively the same event
- Same attested scope, also same general temporal and location scope
- Same types and subtypes
  - Or the same types for `Contact.CONTACT` and `Transaction.TRANSACTION` event mentions
- Not necessarily the same trigger
- Not necessarily the same arguments
- Not necessarily the same realis

**NOTE:** Strict Event Coreference is still a part of Rich ERE. Events that are strictly coreferent will be additionally marked within Event Hoppers.

### 6.4 Event Argument Granularity

Perhaps the most common reason that event mentions are not strictly coreferenced is Event Argument granularity. Take the following two event mentions:

- **Attack** in Baghdad on Thursday  
VS
- **Bombing** in the Green Zone last week

The journalistic nature of newswire documents lends itself to repetitive language that varies in levels of specificity. Annotators generally agree that these two `Conflict.Attack` events are the coreferential when looking at the context of the document. With Event Hopper annotation, annotators are now able to group Events even when their Arguments are not identical, but intuitively the same.

### 6.5 Factually Conflicting Event Arguments

Event Hopper annotation also addresses factually conflicting Event Arguments. Discussion Forum data, because of its informal qualities, commonly contains misinformation or conflicting assertions. In the following example, a document contains an assertion, but it also relays information that others assert to be true:

- William Shatner was **born** in Canada.  
vs.
- Many fans believe that the actor was actually **born** in Iowa like Kirk.

These two event mentions would not be strictly coreferenced, but they both belong in the same Hopper, because “William Shatner” and “the actor” are synonymous.

## 6.6 Differing Realis States

Additionally, Event Hopper annotation will take into account the Rich ERE Event realis states. A future or hypothetical event mention would be marked “Other”, while a similar event mention that refers to an asserted event would be marked “Actual”. A document might discuss different temporal states of one Event. For instance:

- He will **travel** [OTHER] to Europe next week
- vs.
- Obama is on a 5-day **trip** [ACTUAL] in the EU

While the reader knows that these two event mentions refer to the same event, he or she cannot strictly coreference the two mentions due to their dissimilar realis states. When approaching the two mentions in Event Hopper annotation, however, the annotator can group both OTHER and ACTUAL event mentions in the same hopper.

## 6.7 Aggregate Events and Subevents

Events in the same hopper should be at the same level of granularity. Following this guideline, an aggregate event with its component events, or an event with its subevents will not be in the same hopper.

Example:

- The group has been blamed for **some of the country's worst terror attacks**, including **the firebombing of a passenger ferry** in Manila Bay that killed more than 100 people last year.

In the above example, ‘the firebombing of a passenger ferry’ is a component event of the aggregate event ‘some of the country's worst terror attacks’. Since they are at different levels of granularity with different scope, these two event mentions should not be coreferenced, and they also should not be in the same event hopper.

This type of relationship between events will be handled at a separate level of annotation in the future.

## 6.8 Events and Subsequent Events

Some events cause other events to occur, and it can sometimes be difficult to distinguish where one ends and the next begins. In general, you should attempt to distinguish between events as much as possible. More specifically, attacks and the deaths or injuries they cause should be coreferenced as separate events, and should be in separate event hoppers, even if they seem to have occurred at the same time:

- The group has been blamed for some of the country's worst terror attacks, including the firebombing of a passenger ferry in Manila Bay that killed more than 100 people last year.

In the above example, 'the firebombing of a passenger ferry' and 'killed more than 100 people' should be tagged as separate events and put in different event hoppers.

This and other types of relationship between events will be handled at a separate level of annotation in the future.

## 6.9 Event Hopper Examples

Below are a few examples from the data to show the application of Event Hoppers.

(Note that the examples below are not the exhaustive annotation of the documents.)

### Example 1: Movement.Transport-Person hopper

*French far-left killer leaves jail*

*A former militant of the French far-left group Action Directe, Georges Cipriani, left prison on parole on Wednesday after 23 years behind bars for two high-profile murders.*

*A policeman at the scene confirmed to AFP the identity of Cipriani, 59, who left the prison in Ensisheim in northeastern France wearing a leather jacket and with long white hair.*

*Cipriani left Ensisheim in a police vehicle bound for an open prison near Strasbourg where the police officer said he was due to do community service including working at a food bank as part of his parole.*

- Event Hopper 1: Movement.Transport-Person
  - Event Mention 1: Movement.Transport-Person
    - Trigger: *leaves*
    - Person: *French far-left killer*
    - Origin: *jail*
  - Event Mention 2: Movement.Transport-Person
    - Trigger: *left*
    - Person: *Georges Cipriani*
    - Origin: *prison*
    - Time: *Wednesday*
  - Event Mention 3: Movement.Transport-Person
    - Trigger: *left*
    - Person: *who*
    - Origin: *prison in Ensisheim in northeastern France*

- Event Mention 4: Movement.Transport-Person
  - Trigger: *left*
  - Person: *Cipriani*
  - Instrument: *police vehicle bound for an open prison near Strasbourg where the police officer said he was due to do community service including working at a food bank as part of his parole*
  - Origin: *Ensisheim*

The four event mentions above all go into the same Event Hopper because they all refer to the same event. The differences in the argument granularity and the differences in which arguments participate in each mention would prevent strict coreference of some of these mentions, but at the hopper level, they all belong together.

#### Example 2: Coordinated Conflict.Attack and Life.Die events

*A former militant of the French far-left group Action Directe, Georges Cipriani, left prison on parole on Wednesday after 23 years behind bars for two high-profile murders. ...*

*Cipriani was one of four members of Action Directe sentenced to life in prison for the murder of Renault chief George Besse in 1986 and the head of government arms sales Rene Audran a year earlier.*

*The four included two women, Joelle Aubron who died of lung cancer in 2006 and Nathalie Menignon, who was paroled in 2008. A fourth member, Jean-Marc Rouillan, remains behind bars.*

- Event Hopper 1: Conflict.Attack
  - Event Mention 1: Conflict.Attack
    - Trigger: *murders*
    - Agent: *Georges Cipriani*
- Event Hopper 2: Life.Die
  - Event Mention 1: Life.Die
    - Trigger: *murders*
    - Agent: *Georges Cipriani*
- Event Hopper 3: Conflict. Attack
  - Event Mention 1: Conflict.Attack
    - Trigger: *murder*
    - Agent: *one of four members of Action Directe sentenced to life in prison for the murder of Renault chief George Besse in 1986 and the head of government arms sales Rene Audran a year earlier*
    - Agent: *four members of Action Directe sentenced to life in prison for the murder of Renault chief George Besse in 1986 and the head of government arms sales Rene Audran a year earlier*
    - Agent: *Joelle Aubron*
    - Agent: *Nathalie Menignon*

- Agent: *Jean-Marc Rouillan*
  - Victim: *Renault chief George Besse*
  - Time: *1986*
- Event Hopper 4: Life.Die
  - Event Mention 1: Life.Die
    - Trigger: *murder*
    - Agent: *one of four members of Action Directe sentenced to life in prison for the murder of Renault chief George Besse in 1986 and the head of government arms sales Rene Audran a year earlier*
    - Agent: *four members of Action Directe sentenced to life in prison for the murder of Renault chief George Besse in 1986 and the head of government arms sales Rene Audran a year earlier*
    - Agent: *Joelle Aubron*
    - Agent: *Nathalie Menignon*
    - Agent: *Jean-Marc Rouillan*
    - Victim: *Renault chief George Besse*
    - Time: *1986*
- Event Hopper 5: Conflict.Attack
  - Event Mention 1: Conflict.Attack
    - Trigger: *murder*
    - Agent: *one of four members of Action Directe sentenced to life in prison for the murder of Renault chief George Besse in 1986 and the head of government arms sales Rene Audran a year earlier*
    - Agent: *four members of Action Directe sentenced to life in prison for the murder of Renault chief George Besse in 1986 and the head of government arms sales Rene Audran a year earlier*
    - Agent: *Joelle Aubron*
    - Agent: *Nathalie Menignon*
    - Agent: *Jean-Marc Rouillan*
    - Victim: *the head of government arms sales Rene Audran*
    - Time: *a year earlier*
- Event Hopper 6: Life.Die
  - Event Mention 1: Life.Die
    - Trigger: *murder*
    - Agent: *one of four members of Action Directe sentenced to life in prison for the murder of Renault chief George Besse in 1986 and the head of government arms sales Rene Audran a year earlier*
    - Agent: *four members of Action Directe sentenced to life in prison for the murder of Renault chief George Besse in 1986 and the head of government arms sales Rene Audran a year earlier*
    - Agent: *Joelle Aubron*
    - Agent: *Nathalie Menignon*
    - Agent: *Jean-Marc Rouillan*
    - Victim: *the head of government arms sales Rene Audran*
    - Time: *a year earlier*

Note that EH1 is separate from EH3 and EH5. Because the times are specified for the separate murders in EH3 and EH5, they cannot be put into the same hopper as each other, or into the same hopper as EH1. Because the times are not specified in EH1, that is tagged as a single event. The relationship between these events will be annotated at a separate level, perhaps Narrative Containers, in the future.

### Example 3: Plural place argument

*Demonstrators flooded streets in cities around US*

- Event Hopper 1: Conflict.Demonstrate
  - Event Mention 1: Conflict.Demonstrate
    - Trigger: *flooded*
    - Agent: *Demonstrators*
    - Place: *streets in cities around US*

Because the different cities are not specified, we cannot annotate multiple event mentions or event hoppers for this event.

### Example 4: Coordinated place arguments

*Angry crowds protested in Oakland, Philadelphia, New York and Chicago against the grand jury ruling on the Eric Garner case*

- Event Hopper 1: Conflict.Demonstrate
  - Event Mention 1: Conflict.Demonstrate
    - Trigger: *protested*
    - Agent: *Angry crowds*
    - Place: *Oakland*
- Event Hopper 2: Conflict.Demonstrate
  - Event Mention 1: Conflict.Demonstrate
    - Trigger: *protested*
    - Agent: *Angry crowds*
    - Place: *Philadelphia*
- Event Hopper 3: Conflict.Demonstrate
  - Event Mention 1: Conflict.Demonstrate
    - Trigger: *protested*
    - Agent: *Angry crowds*
    - Place: *New York*
- Event Hopper 4: Conflict.Demonstrate
  - Event Mention 1: Conflict.Demonstrate
    - Trigger: *protested*
    - Agent: *Angry crowds*
    - Place: *Chicago*



Note that in the future, we will introduce Narrative Containers to capture Hopper-Hopper relations. So, when Narrative Containers are used to capture Hopper-Hopper relations such as Whole-Part, the relationship between the hoppers and events above will be captured.

## 7. Discussion Forums

When annotating discussion forum documents, you should expect to find more colloquial language, including spelling errors, interruptions, unclear expressions and missing punctuation. Annotate each document to the best of your understanding, trying to focus on the author's presumed intent.

### 7.1. Post Metadata

In ERE, xml post headings are considered taggable. Therefore, in the following example, the post author can be annotated as an argument in a Life.MARRY event mention:

```
<post author="pollywog" datetime="2009-03-24T11:34:00" id="p3">
Got married on Wednesday!
</post>
```

### 7.2 Misspellings and Incorrect Punctuation

Annotate misspellings according to the intended meaning, as far as that can be deciphered. In the example below, "bron" is a typo and we can assume that the author intended to write "born". We can therefore tag "bron" as the trigger of a Life.Be-Born event.

- Ron was bron in 1976

Similarly, incorrect punctuation should be ignored and the text marked according to the author's presumed intent. Therefore, "sentence'd" can be marked as the trigger of a Justice.Sentence event in the following example:

- She was sentence'd to 5 years in prison.

In the case of missing spaces, annotate the entire span even if it includes text that you would normally not annotate. For example, in the following, "becameCEO" would be marked as the trigger of a Personnel.Start-Position event.

- John becameCEO of the company in 2006

## 8. Bibliography

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