# DEFT Chinese Rich ERE Annotation Guidelines: Events V1.0

Linguistic Data Consortium February 12, 2014

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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, zero or more of the arguments within the event mention scope, and a required textual "trigger"1.

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".

<sup>&</sup>lt;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 as participants those entities or argument fillers which are mentioned explicitly within the **event mention scope**. 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. For discussion of event hoppers and identity coreference of events, see Section 6 below.

## 2. Annotating Event Triggers

## 1. Sentential Predicates

An event trigger is the smallest extent of text (usually a word or 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:

他于昨天因病去世。

1994年他与一个美国华侨结婚。

在这次袭击中,20人死亡,7人受伤。

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

首先发起攻击的是一群武装分子。

行凶的已经被拘捕。

受了伤的士兵

他**离婚**的事

## 1. The shi…de (是…的…) construction:

There is also structures like 是…的…, which consists of a subject followed by the copula verb 是 and then followed by a nominalization. Eg:

他是去年**退休**的。

他是被车撞死的。

## 1.1. Nominal Premodifier

Other times, verbs can function like adjectives and modifies nouns without having any aspect marker or the nominalization marker DE. Eg:

**离婚**女

退休干部

## 2. Event Nominalizations and Pronominalizations

Events can sometimes be triggered by nouns:

小儿子的出生给他们带来了希望

婚礼在当地的一个宾馆举行

Anaphors of events (such as pronouns and definite descriptions of previously mentioned events) are taggable as mentions if at least one argument mention is present (see below, 2.4.3 Basic Rules for Event Argument Taggability). Example:

他们两个在 7 月 20 号**结婚**。**婚礼**在当地的一个宾馆举行。那可真是一场豪华的仪式。

'婚礼' clearly refers back to the 结婚 event and is present with at least one argument within its event mention scope, and may thus be tagged as an event mention. '那' and '仪式' in the third sentence do not occur with any relevant arguments, and therefore should not be tagged.

# 2.1. 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.

#### 2.1.1. 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:

- 该公司在 2001 年曾申请破产。
- 双方领导人在北京举行了会谈
- 该公司被勒令缴纳 30 万美元罚款。

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 not by 缴纳, not by 罚款 but by 缴纳罚款.

**NOTE:** For the remaining examples in this section, <u>underlining</u> 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:

- 哈马斯对以色列军队发起了进攻.
- 该公司在 2001 年曾 申请破产
- 双方领导人在北京举行了会谈
- 工会于星期一早上正式开始罢工。
- 可口可乐公司最近完成了对这个公司的收购。

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):

- 示威者中断了他们的会议。
- 一名警官目击了他的被袭。
- 该公司被勒令缴纳30万美元罚款。

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.

#### 1.1.1. Serial verb construction

We will also see serial verb constructions, in which a sentence contains two or more main verb phases or clauses juxtaposed without any marker indicating any relationship between them. In Chinese, many sentences share the following form:

(NP) V (NP) (NP) V (NP)

The verb phrases in the serial verb construction always refer to events or states of affairs which are understood to be related as parts of one overall event or state of affairs. We need to annotate events in these structures with great care as each verb may be trigger for a taggable event.

**NOTE:** For the remaining examples in this section, <u>italic underline</u> 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 underline** will be used to indicate the actual trigger of the event mention.

- i. Two or more separate events, as in: 两家公司<u>合并</u>成立了一家跨国集团。
- ii. One verb phrase or clause serving as the subject or direct object of another verb.

两家公司**合并**可以产生更大利益。 狙击手成功地<u>执行</u>了**枪杀**游击队首领的任务。

iii. Pivotal constructions in which the second NP is the direct object of the first verb and the subject of the second verb.

济南市人民检察院<u>指控</u>被告人王某<u>行凶 杀人</u>。 此次空难导致 81 人**丧生**。

iv. Descriptive clauses: a transitive verb whose direct object is described by a following clause.

他有个妹妹最近生了个孩子。

# 2.1.2. 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:

武装袭击导致7人死亡,20人受伤。

爆炸夺走了至少30人的性命。

爆炸导致至少30人死亡。

## 2.1.3. 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-alonenoun 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:

行凶歹徒被当场击 毙

Justin Mott 5/14/15 2:00 PM Comment [1]:

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.
- 4. 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.

**行凶**歹徒被当场**违 毙** 这次地震导致 100 多人<u>伤</u> <u>亡</u> 这次地震导致 10 人<u>死亡</u> 最近脸书**并购**了好几个新科技公司为进军虚拟游戏市场做准备。

In the first example, there are three taggable events, each triggered by different words: 行凶=Conflict.ATTACK,  $\pm$ =Conflict.ATTACK and  $\pm$ =Life.DIE。行凶 and  $\pm$  are two separate Conflict.ATTACK events with different event arguments.

The second example will have two events tagged because =Life.INJURE and =Life.DIE.

The third example will only have a single event tagged because  $\frac{1}{2}$  and  $\frac{1}{2}$  are being used together to express the same event ('dead' = Life.DIE').

The fourth example will have two events tagged because 并(兼 并)=Business.MERGE.ORG and 购(购买)=Transaction.TRANSFER.OWNERSHIP. Care should be taken in annotating examples such as these.

## 2.1.4. 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 and Bill
  - trigger = murder, argument = John
  - trigger = murder, argument = Bill

Justin Mott 5/14/15 2:02 PM Comment [2]:

In this case, the trigger is annotated with the same event type and subtype multiple times because separating out the coordination of John and Bill gives evidence of two different murder events. See section 2.3.8 below for more discussion of event coordination.

However, 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 triggers that can be annotated this way are restricted to 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

## 2.1.5. 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.

Justin Mott 5/14/15 2:02 PM Comment [3]:

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Comment [4]:

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Comment [5]:

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Comment [6]:

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Comment [7]:

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Comment [8]:

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Comment [9]:

Justin Mott 5/14/15 2:02 PM

Comment [10]:

 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 highprofile 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, annotators must choose the number of events according to their interpretation of the events in context and their world knowledge. 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, there are two Conflict. Attack events:

- The gunmen **shot** Smith and his son
  - o Trigger = shot, attackee = Smith
  - Trigger = shot, attackee = his son

In this example, there are two Conflict. Attack events, and two Life. Die events:

- 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 = muder, agent = Cipriani, victim = the head of government arms sales Rene Audran, time = a year earlier
  - o Life.Die:
    - Trigger = murder, argument = Renault chief George Besse, agent = Cipriani, time = 1986
    - Trigger = muder, 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), if it is not possible to sort out the coordinations into multiple discrete events in context:

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

Justin Mott 5/14/15 2:03 PM

Comment [11]:

Justin Mott 5/14/15 2:03 PM

Comment [12]:

Justin Mott 5/14/15 2:03 PM

Comment [13]:

Justin Mott 5/14/15 2:03 PM

Comment [14]:

Justin Mott 5/14/15 2:03 PM

Comment [15]:

• 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.

- 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 refer to general events involving types or categories of entities. The 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]

该组织专门从事武器走私。

自 2008 年起总统将不再由公民直选, 而是由议会选举

阿巴斯还下令巴勒斯坦所有安全机构总动员,采取切实措施维护巴勒斯坦地

区的安全秩序,并防止巴武装人员继续袭击以色列目标、破坏巴以达成的停火协议。

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

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Comment [16]:

Justin Mott 5/14/15 2:14 PM

Comment [17]:

Justin Mott 5/14/15 2:15 PM

Comment [18]:

- 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 are neither ACTUAL nor GENERIC. For clarity we define the different types of OTHER events to include:

<u>Future events</u> – 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]
- 俄罗斯和美国的贸易官员将于5月17日在伦敦会晤。
- 朝鲜宣布将中止六方会谈。
- 欧盟计划开放对中国的武器出口。

Justin Mott 5/14/15 2:18 PM

Comment [19]:

<u>Conditional (hypothetical) events</u> – 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]
  - 他要是不及时交纳赎金,就会有杀生之祸。

Justin Mott 5/14/15 2:58 PM

Comment [20]:

<u>Uncertain events</u> – status of occurrence unclear:

• We are supposed to **fly** to Atlanta. [Movement.Transport-Person, OTHER]

15

- 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  $\mathcal{T}$  or  $\mathcal{U}$ ; (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]
  - 他太太坐在后座上,没有受伤。
  - 他再也不贩卖毒品了。
  - 他的唯一要求是他妈妈不被逐出加州。
  - NEGATIVE examples (using context):
  - 他们在最后一刻退出收购。
  - 嫌疑犯拒捕。
  - 警方又一次粉碎了对总统的暗杀企图。

## 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.

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- 2. For this task, events that are reported/attributed 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.\*

  \*\*The event mention is generic and no arguments are expected. For example:

  \*\*The reported maternal mortality ratio has declined.\*\*

  \*\*The event mention is generic and no arguments are expected. For example:

  \*\*The reported maternal mortality ratio has declined.\*\*

  \*\*The event mention is generic and no arguments are expected. For example:

  \*\*The reported maternal mortality ratio has declined.\*\*

  \*\*The reported maternal mortality
- 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 arguemnts. 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 as event participants** and **argument fillers**.

## 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 entity 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:

Event Argument Fillers: Only tagged when used as an argument in an Event				
Filler Type	Argument Role	Event types and subtypes		

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MONEY (MON)	money	Movement
		Transaction
		Justice.Fine
WEAPON (WEA)	Target	Conflict.Attack
VEHICLE (VEH)	instrument	
COMMODITY (COM)	Artifact	Manufacture.Artifact
	instrument	Movement.TransportPerson
	artifact	Movement.TransportArtifact
	instrument	
	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. An **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.

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:

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Comment [24]: TYPO



A car bomb was **detonated** at <u>a checkp</u> Thursday, killing dozens and wounding r 200, opposition groups said.

"Most of the casualties appear to be civi the director of the Britain-based Syrian for Human Rights, a watchdog group the the violence. The director uses the pseu Rami Abdulrahman. The official Syrian A Agency (SANA) reported the **bombing** i Mazraa neighborhood of the capital.

A spokesman for the <u>Free Syrian Army</u> creports it was responsible for the **attacl** 

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 <u>the mastermind</u> <u>behind the shooting.</u>

# 4.4. Event Argument Realis

The link between each event argument and its event trigger will also be labeled with a realis attribute. This realis attribute 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 "OTHER" when the argument is irrealis to 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 (OTHER, AGENT-ARG) in the DIE event.

- Einhorn may have killed Maddux.
  - o **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)
  - o link between kill and Maddux: ACTUAL
  - o link between kill and Einhorn: OTHER

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.
  - o attack: ACTUAL
  - o 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.
  - o killing: ACTUAL
  - o link between killing and three American tourists: ACTUAL
  - o 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 subevents, we will annotate all possible valid arguments with the large, "umbrella" event mention <u>except</u> 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:

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

Trigger	Arguments
Ev1: murders	France
Ev2: assassination	Bob France
Ev3: killing	Joe France

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

Ev1: murdered	six men
Ev2: murdered	Bob Paris
Ev3: murdered	Joe Reims

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. Events <u>must</u> possess at least one taggable argument within the event mention scope (whether Participant or Attribute) in order to be considered taggable, and the presence of one taggable argument within scope is sufficient to tag all event mentions. 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	Туре	Subtype
Business	Start Org	Movement	Transport.Person
Business	End Org	Movement	Transport.Artifact
Business	Declare Bankruptcy	Personnel	Start Position
Business	Merge Org	Personnel	End Position
Conflict	Attack	Personnel	Nominate
Conflict	Demonstrate	Personnel	Elect
Contact	Meet	Justice	Arrest-Jail

Contact	Correspondence	Justice	Release-Parole
Contact	Broadcast	Justice	Trial-Hearing
Contact	Contact	Justice	Sentence
Manufacture	Artifact	Justice	Fine
Life	Be Born	Justice	Charge-Indict
Life	Marry	Justice	Sue
Life	Divorce	Justice	Extradite
Life	Injure	Justice	Acquit
Life	Die	Justice	Convict
Transaction	Transfer Ownership	Justice	Appeal
Transaction	Transfer Money	Justice	Execute
Transaction	Transaction	Justice	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	[李傻傻],原名蒲荔子, <u>生</u> 于 1981 年 11 月,湖南隆回 人
Place-Arg	GPE LOC	Where the birth takes place	他 <b><u>出生</u>在[北京]</b> ,叫"京生 "; 他 <b>出生</b> 在[ <b>台湾</b> ],叫"台 生"

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

• 一名出生仅7天的女婴被重复接种了卡介苗,家人又急又怕又急。

## 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	2003年10月18日,天津师 范大学大三学生[王洋]同 她的未婚夫天津大学博士 生[刘航]领取了结婚证书,
Place-Arg	GPE LOC FAC	Where the marriage takes place	杨振宁与翁帆在[ <b>汕头]</b> 登记 <b>结婚</b> .
Time-Arg	TME	When the marriage takes place	

## **Examples of Life.MARRY events:**

• 美国大兵不顾上级反对与伊妇女结为夫妻惹麻烦.

## 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	[ <b>离婚女]</b> 向[ <b>前夫]</b> 讨宠物 探视权。
Time-Arg	TME	Time the divorce took place	饭岛直子 <b>[去年]<u>离婚</u>后,</b> 绯闻传个不停。

# **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	[张三]用石头把李四的 头打 <b>破</b> 了
Victim-Arg	PER	The harmed person(s)	张三用石头把[李四]的 头打 <u>破</u> 了
Place-Arg	GPE LOC FAC	Where the injuring takes place	[香港]地铁车厢内发生 火灾受伤入院人数增至 14 人
Time-Arg		Time the injuring takes place	巴民族权力机构前主席 阿拉法特[一年以前]就 已 <b>中毒</b>

**NOTE:** For events where a single common trigger is ambiguous between the types *LIFE* (i.e. *INJURE* and *DIE*) and *CONFLICT* (i.e. *ATTACK*), we will only annotate the event as a *LIFE*. 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:**

- o 香港地铁车厢内发生火灾**受伤**入院人数增至 14 人
- 美国一核潜艇触礁 20 人受伤
- o 外交部公布在泰国地震中**受伤**的中国游客名单
- o 829 名学生食物中毒入院治疗
- o 巴民族权力机构前主席阿拉法特一年以前就已**中毒**

#### 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 Marry

Throwable arguments for Brienharry							
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	[北京男子]杀 <u>死</u> 出墙妻藏尸冰柜三 年。
Victim-Arg	PER	The person(s) who died	[长春打假英雄]办公室内被条
Place-Arg	GPE LOC FAC	Where the death takes place	香港卫生福利及食物局局长杨永强 6 月 7 日宣布辞职,为非典在 <b>[香港]</b> 造成 299 人 <b>死亡</b> 负责。
Time-Arg		Time the death takes place	孙是 3 月 17 日晚被收容的,[3 月 20 日]死亡。

**NOTE:** For events that where a single common trigger is ambiguous between the types *LIFE* (i.e. *INJURE* and *DIE*) and *CONFLICT* (i.e. *ATTACK*), we will only annotate the event as a *LIFE* event. Such triggers include: murder, assassinate, etc. 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 Patient ARGs should be identical for Life.Die events. For example, from the text, "Alex killed himself last night," both the Agent and Patient ARG should be [Alex].

## **Examples of Life.DIE events:**

- 美国著名艺术家托比去世
- 多哥总统埃亚德马当天因心脏病突发而逝世
- 阿拉法特侄子首次披露阿翁可能死于谋杀
- 一些国家谴责多国部队屠杀无辜。

## 5.2. Movement Events

There are two subtypes of Movement event: TRANSPORT-PERSON and TRANSPORT-ARTIFACT.

#### 5.2.1. Movement.TRANSPORT-PERSON

A TRANSPORT-PERSON event occurs whenever a PERSON moves or is moved from one PLACE (GPE, LOCATION) to another. The movement may also occur through or within one LOC or GPE entity (i.e., tag the Origin-ARG and Destination-ARG are the same) .

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.

Allowable arguments for Movement, Transport-Person

	Throw able arguments for the content frame por the coor						
Agent-Arg	Person-	Instrument-	Origin-ARG	Destination-	Time-ARG		
	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.	[深圳地铁]首日开通 <b>运送</b> 乘客 11万人创下纪录。
Person-Arg	PER	The person doing the traveling	深圳地铁首日开通 <u>运送</u> 乘客 [11 万人]创下纪录。
Origin-Arg	GPE LOC FAC	Where the transporting originated	美军将伊拉克前总统萨达姆从 [伊拉克]转移至位于卡塔尔首都多哈附近的奥代德军事基

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Comment [28]:

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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.
- Either the origin or destination must be explicit somewhere in the document for a TRANSPORT-PERSON event to be taggable.
- 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:**

- o 政府军节节**撤退,**加勒比岛国海地局势急转直下.
- o 沙龙今天<u>飞抵</u>华盛顿,将和美国领导人举行会谈。

**NOTE**: Annotating an events as Justice.EXTRADITE takes precedent over annotating it as Movement.TRANSPORT-PERSON.

#### 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. 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).

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

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

Allowable arguments for Movement. Transport-Person:

Agent-Arg	Artifact- Arg	Instru	Origin-ARG	Destination-	Time-ARG
		ment-		Arg	

PER, ORG,	WEA, VEH,	WEA, VEH	GPE, LOC,	GPE, LOC,	TME
GPE	COM, FAC		FAC	FAC	

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

The following are important characteristics of TRANSPORT-MATERIAL events:

- Only mark movements through space between physical locations. Do not mark metaphorical or virtual movements.
- Either the origin or destination must be explicit somewhere in the document for a TRANSPORT-MATERIAL event to be taggable.
- We will only tag TRANSPORT-MATERIAL events when the movement is explicitly indicated.

## **5.3.** Business Events

Business Event subtypes are limited to events affecting ORG entities, but PER entities may also be considered as arguments for 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

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Agent-Arg	PER ORG GPE	The agent responsible for the START event	[云南大学法学院大三的男生陈 俊耕]在 2004 年这个暑假 <u>成立</u> 了自己的公司。
Entity-Arg	ORG	The ORG that is started	云南大学法学院大三的男生陈 俊耕在 2004 年这个暑假成立 了[自己的公司]。
Time-Arg		Date the event takes place  (NOTE: taggable only if a calendar date is mentioned in the text for reference.)	云南大学法学院大三的男生陈 俊耕在[2004 年这个暑假]成立 了自己的公司。

**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:**

●马丁-伯顿和马克-布莱戴尔<u>创办</u>了一家名为 2MB 运动管理公司

## 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.Start

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

Entity- Arg	ORG	The ORGs that are merged	[中国建筑材料科学研究院、中国轻工业机械总公司] <b>并入[</b> 中国建筑材料集团公司]。

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

- 中国水利电力对外公司并入中国水利投资公司。
- 惠普把打印成像部门和 PC 部门合并为一个部门 IPSG

## 5.3.3. Business.DECLARE-BANKRUPTCY

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

Allowable arguments for Business.Bankruptcy

amonabie ai gainen	This waste at Samente for Basinessibania aprey				
Org-Arg	Place-Arg	Time-ARG			
ORG	GPE, LOC, FAC	TME			

Bankrupt- Arg	ORG		在未能就重建规划与工会达成一致后, [大字公司]宣布 <b>破产</b> 。
------------------	-----	--	---

## **Examples of Business.DECLARE-BANKRUPTCY events:**

• 北京"王麻子"剪刀宣布破产清算工作展开。

## 5.3.4. Business.END

An END event occurs whenever an ORG entity is explictly 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	她证实美达 <b>倒闭</b> 一事
		ended	

**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:**

- 4年打拼现金耗尽,一家著名游戏公司关门
- 她证实美达<mark>倒闭</mark>一事

## **5.4.** Conflict Events

#### **5.4.1. Conflict.ATTACK**

An ATTACK event is defined as a violent physical act causing harm or damage. ATTACK events include any such event not covered by the INJURE or DIE subtypes, 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,	WEA, VEH, COM	GPE, LOC, FAC	TME
	FAC, WEA,			
	VEH, COM			

Attacker Ara	PER	The	[美国罗四 <b>]                                    </b>
Attacker-Arg			[美国军队] <u>轰炸</u> 伊拉克北部地
	ORG	attacking/instigating	区至少炸死 4 名平民。
	GPE	agent	
Target-Arg	PER,	The target of the attack	美国军队轰炸[伊拉克北部地
	GPE,	(including unintended	区]至少炸死 4 名平民。
	ORG,	targets)	
	FAC,		
	WEA,		
	VEH,		
	COM		
Place-Arg	GPE	Where the attack takes	[公元 2004 年 6 月 5 日], 安徽
	LOC	place	宿州南 10 公里的桃园矿发生一
	FAC		起凶杀案。被害者为一14岁
			的男孩,被杀的地点位于他家
			的唯一一张床上。

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

LOCs and GPEs 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 is ambiguous between the types *LIFE* (i.e. *INJURE* and *DIE*) and *CONFLICT* (i.e. *ATTACK*), we will only annotate the event as a *LIFE* event.

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 '恐怖主义' and '恐怖行动' will be taggable as ATTACK events. However, those represented by the string '军 **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:**

- 1999年5月7日北约以5枚导弹袭击中国驻南联盟使馆
- 他们死于战争
- 美国军方称武力镇压时开枪打死了 4 名囚犯

## 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-	PER	The demonstrating agent	[大约有一万人]参加了 <mark>示威</mark> 活	
Arg	ORG		动。	
Place- Arg	LOC GPE FAC	Where the demonstration takes place	[雅典]发生反美大 <b>游行</b>	

## **Examples of Conflict.DEMONSTRATE events:**

- 俄罗斯社会环保联盟、环保防御与苹果党今天在莫斯科市俄罗斯国会下议 门口举行反核**示威**
- 韩国公务员大罢工 140 人被捕, 更大罢工即将爆发
- 中正纪念堂前的学生绝食静坐已超过 173 个小时

## 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:
   Merkel, Hollande and Putin launched direct talks in Minsk, aiming to bring a truce to Ukraine.
- 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
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, 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.

#### 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

mowable arguments for dontactifieet			
Entity-Arg	Entity- Arg	Place-Arg	Time-ARG
PER, ORG, GPE	PER, ORG, GPE	GPE, LOC, FAC	TME

Entity-Arg	PER ORG GPE	The agents who are meeting	8月9日上午,[中国科学院副院长陈竺]在院机关 <b>会见了</b> 来访的波兰科学院副院长 Jan Strelau 教授、波兰心理学校校长[Andrzej Eliasz]教授及[其随行人员]。
Place-Arg	GPE LOC FAC	Where the meeting takes place	8月9日上午,中国科学院副院长陈 竺在[院机关] <b>会见</b> 了来访的波兰科学 院副院长 Jan Strelau 教授、波兰心 理学校校长 Andrzej Eliasz 教授及其 随行人员。

## **Examples of Contact.MEET events:**

- 2月1日,正在牙买加进行正式访问的中国国家副主席曾庆红在金斯敦<u>会见</u> 牙买加总督库克。
- 中国国家主席胡锦涛与罗马尼亚总统伊利埃斯库 13 日下午在布加勒斯特举行 会谈
- "上海合作组织"成员国总理在阿拉木图举行首次**会晤**
- 伊拉克前总统萨达姆 16 日首次获准与自己的辩护律师会面

# 5.5.2. Contact.CORRESPONDENCE

Contact.COMMUNICATE events are the default subtype to cover all Contact events where a 'face-to-face' meeting between sender and receiver is <u>not explicitly stated</u>. 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 speech acts 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 <del>said</del> 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 agents GPE	[外交部长李肇星]20 日 <b>打电话</b> 给 [中国驻伊拉克大使杨洪林]。
-------------------------------	--

# **Examples of Contact.CORRESPONDENCE events:**

- 中国共产党中央委员会 3 日 致电 越南共产党中央委员会
- 杨振宁博士的家乡水乡古镇三河,向杨振宁和翁帆发出**贺信**
- 西门子董事长给员工发邮件警告将进行裁员。
- 布什总统致电伊拉克领导人祝贺大选成功

### 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:

Throwable digaments for dontact site, is a series					
Entity-Arg	Entity- Arg	Place-Arg	Time-ARG		
PER, ORG, GPE	PER, ORG, GPE	GPE, LOC, FAC	TME		

# **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 neither the means of contact are stated nor is there an 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.

Justin Mott 5/15/15 10:04 AM **Comment [30]:** 

Allowable arguments for Contact. CONTACT:

intowable arguments for dontated continer.					
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)

### 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

			f=
Agent-Arg	PER	The agent responsible for the	[Bruce Campbell]
	ORG	Manufacture.Manufacture event	converted a Boeing 727-
	GPE		200 into a home in
	-		Oregon.
		T1 11 10 1 1	
Artifact-Arg	VEH	The material or artifact that is	a home
	<b>WEA</b>	being constructed or	
	COM	manufactured	
	<b>FAC</b>		
Instrument-	WEA,	The material or artifact that is	a Boeing 727-200
Arg	VEH,	used for constructing or	
	COM	manufacturing	
Place-Arg	GPE	The GPE or LOC in which the	Oregon
	LOC	Patient-Arg is being constructed	

Justin Mott 5/15/15 10:05 AM **Comment [31]:** 

Justin Mott 5/15/15 10:07 AM **Comment [32]:** 

# 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	"中星微" 高薪 <b>聘用</b> [IC 班全额奖学 金获得者]。
Entity- Arg	ORG GPE	the employer	["中星微"]高薪 <b>聘用</b> IC 班全额奖学 金获得者。
Position- Arg	TTL	The job title for the position being started	西曼先生于[1997 年]加入 SAP 中国公司,担任大中国区总裁,主管 SAP 在中国大陆、香港及台湾地区的业务。
Time-Arg	TME	Time the employment relationship begins	西曼先生于[1997年]加入 SAP中国公司,担任大中国区总裁,主管 SAP 在中国大陆、香港及台湾地区的

		业务。

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

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

• 西曼先生于[1997年]加入 SAP 中国公司,担任大中国区总裁,主管 SAP 在中国大陆、香港及台湾地区的业务。

### 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	[白宫首席大厨]称因无法满足第一夫人要求被 <b>解雇</b> 。
Entity- Arg	ORG GPE	the employer	[德国胡玛纳公司] <u>解雇</u> 四名豆奶粉事件 责任人。
Position- Arg	TTL	The JOB-TITLE for the position being ended	
Time-Arg	TME	Time employment in the position ended	惠普 CEO 卡莉[昨天] <b>辞职</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:**

- ●他在<mark>离任</mark>后无意继续从政
- Yahoo 公司前首席执行官 Tim Koogle 已经从该公司董事会辞职。

Justin Mott 5/15/15 10:19 AM Comment [33]:

### 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	美国总统布什 16 日正式 <b>提名</b> 国家安全事务助理 <b>[赖斯]</b> 为新一届政府的国务卿。
Agent- Arg	PER ORG GPE	the nominating agent	[美国总统布什]16 日正式 <u>提名</u> 国家安全事务助理赖斯为新一届政府的国务卿。
Position- Arg	TTL	The JOB-TITLE for the position being nominated to	美国总统布什 16 日正式 <u>提名</u> 国家安全事务助理赖斯为[新一届政府的国务卿]。

### **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-	Postion-Arg	Place-Arg	Time-ARG
	Arg			
PER, ORG,	PER	TTL	GPE, LOC,	TME
GPE			FAC	

Person- Arg	PER	the person elected	[杀人嫌疑犯]被 <u>选</u> 为巴西一城市市长。
Position- Arg	TTL	The <i>JOB-TITLE</i> for the position being nominated to	杀人嫌疑犯被 <b>选</b> 为巴西一城市[市长]。
Place-Arg	GPE	Where the election takes	

Justin Mott 5/15/15 10:22 AM Comment [34]:

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	LOC	place	
Time-Arg	TME	Time the election takes place	法律系讲师林瑞莲 <b>[昨天]当</b> 选工人党主席。

# **Examples of Personnel.ELECT events:**

- 巴勒斯坦解放组织主席阿巴斯最终胜选
- 施罗德被德国联邦议院选为新任德国总理任期4年

#### 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, one as TRANSFER-OWNERSHIP, one as TRANSFER-MONEY. For example:

I paid \$7 for the book (TRANSFER-OWNERSHIP, TRANSFER-MONEY)

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

### Way:

- **Voluntary:** The transaction is voluntary. She **donated** \$5000 to her alma mater. Jane **got** the book for \$7.
- **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 a transaction event and conflict.ATTACK event if it is same trigger. For example:

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

#### 5.8.1. Transaction.TRANSFER-OWNERSHIP

TRANSFER-OWNERSHIP events refer to the buying, selling, loaning, borrowing, giving, receiving, bartering, stealing, or renting of 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 the entity being transferred without a change in ownership is not a person, then the event is not taggable.

Allowable arguments for Transaction. Transfer-Ownership

Given- Arg	Recipient- Arg	Benificiary- 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	China has <b>purchased</b> two nuclear submarines from <b>[Russia]</b> .
Recipient- Arg	PER ORG GPE	The person/org/country buying	China
Thing-Arg	VEH, WEA, FAC, COM, ORG	The item that is been transferred	two nuclear submarines

### **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.

Allowable arguments for Transaction, Transfer-Money

THIO WADIC	Thiowable arguments for Transaction: Transfer Money							
Giver-	Recipient-	Benificiary-	Money-	Place-Arg	Time-			
Arg	Arg	Arg	Arg		ARG			
PER,	PER, ORG,	PER, ORG,	MON	GPE, LOC,	TME			
ORG,	GPE	GPE		FAC				
GPE								

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

# **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.
- 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 that you can't tell whether it is money or asset or commodity in the context of the document.

Allowable arguments for Transaction.Transfer-Money

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

Recipient-	PER	The recipient agent	[John] received the best birthday
Arg	ORG		gift ever last week.
	<b>GPE</b>		

Justin Mott 5/15/15 10:32 AM Comment [35]:

Time-Arg	TME	When the amount is	last week
		transferred	

Justin Mott 5/15/15 10:32 AM Comment [36]:

### 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 <u>not</u> 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).

For all Justice.ARREST-JAIL events, be certain to tag them as "Arrest-Jail" in the tool and not "Arrest" or "Jail" – the tool categories require updating to reflect the combined annotation for Justice.ARREST-JAIL events.

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

-		

**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.

For all Justice.RELEASE-PAROLE events, be certain to tag them as "Release-Parole" in the tool and not "Release" or "Parole" – the tool categories require updating to reflect the combined annotation for Justice.RELEASE-PAROLE events.

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

#### **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.

For all Justice.TRIAL-HEARING events, be certain to tag them as "Try-Hearing" in the tool and not "Try" or "Hold Hearing" – the tool categories require updating to reflect the combined annotation for Justice.TRIAL-HEARING events.

Allowable arguments for Justice. Trial-Hearing:

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

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

**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 Damascusbased
  - 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.

### 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.

For all Justice.CHARGE-INDICT events, be certain to tag them as "Charge-Indict" in the tool and not "Charge" or "Indict" – the tool categories require updating to reflect the combined annotation for Justice.CHARGE-INDICT events.

Allowable arguments for Justice. Charge-Indict

Allowable arguillents for justice. Charge-indict:					
Prosecutor-	Adjudicator-	Defendant-Arg	Crime-	Place-	Time-
Arg	Arg		Arg	Arg	ARG
PER, ORG,	PER, ORG,	PER, ORG, GPE	CRM	GPE,	TME
GPE	GPE			LOC,	
				FAC	

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

**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:

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

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

# **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 TRY 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-	Defendant-Arg	Crime-	Place- Arg	Time-
Arg		Arg		ARG
PER, ORG,	PER, ORG, GPE	CRM	GPE, LOC,	TME
GPE			FAC	

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

# **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 TRY event is issued by a state actor (a GPE, an ORGANIZATION subpart or a PERSON representing them).

Allowable arguments for Justice.Sentence:

miowable arguments for Justice. Sentence.						
Adjudicator-	Defendant-	Crime-	Sentence-	Place-	Time-	
Arg	Arg	Arg	Arg	Arg	ARG	
PER, ORG,	PER, ORG,	CRM	SEN	GPE, LOC,	TME	
GPE	GPE			FAC		

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

### **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. E.g.:

• 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.TRANSFERMONEY 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. E.g.:

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

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

**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,	PER	CRM	GPE, LOC,	TME
GPE			FAC	

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

# **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 facility under its control) to another place (LOCATION, 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	In the end, [Milosevic] preferred extradition to The Hague rather than stay here and face our justice,'' said opposition leader Zarko Korac.
Destination- Arg	GPE LOC	Where the person is extradited to, the destination	The Hague
Origin-Arg	GPE LOC	The original location of the person being extradited (rare only when explicitly mentioned)	here

# **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. Aqcuit:

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

Defendant- Arg	PER ORG GPE	The agent being acquitted	[He] was acquitted 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.
Adjudicator- Arg	PER ORG GPE	the judge or court	[a jury
Time-Arg	TME	Time of acquittal	[1983

# **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:

Allowable alguments for justice.Appeal.					
Prosecutor-	Adjudicator-	Defendant-Arg	Crime-	Place-	Time-
Arg	Arg		Arg	Arg	ARG
PER, ORG,	PER, ORG,	PER, ORG, GPE	CRM	GPE,	TME
GPE	GPE			LOC,	
				FAC	

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

# **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:

Tillowabic al	guillenes for Justice ar doll.			
Adjudicator-	Defendant-	Crime-	Place-	Time-
Arg	Arg	Arg	Arg	ARG
PER, ORG,	PER, ORG,	CRM	GPE,	TME
GPE	GPE		LOC,	
			FAC	

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

### **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 holistic or 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.

### 6.2 Event Hoppers: Expanding Light ERE Event Coreference

The Event Hopper level of annotation is intended to avoid limitations caused by Event Argument granularity. 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.
  - o ev1, ev3, and ev6 would all occupy the same Event Hopper
  - o 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, annotators will mark any event mentions that meet the strict coreference criterea 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

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

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

- Intuitively the same event
- Same attested scope, also same temporal and location scope
- Same types and subtypes

- Not necessarily the same trigger
- · Not necessarily the same arguments
- Not necessarily the same realis

### **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 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
- 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 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 <u>not</u> 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 <u>not</u> 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

Obviously, 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 type 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.

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.

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

Event Hopper 1: conflict-attack

EM1: conflict-attack trigger: murders

Attacker: Georges Cipriani

Event Hopper 2: life-die

EM2: life-die trigger: murders agent: Georges Cipriani

Event Hopper 3: conflict-attack

EM3: conflict-attack trigger: murder

Attacker: George Cipriani

Attacker: four members of Action Directe

Attacker: Joelle Aubron Attacker: Nathalie Menignon Attacker: Jean-Marc Rouillan

Target: George Besse

Date: 1986

Event Hopper 4: Attack EM4: trigger: murder Attacker: Georges Ciriani

Attacker: four members of Action Directe

Attacker: Joelle Aubron Attacker: Nathalie Menignon Attacker: Jean-Marc Rouillan

Target: Rene Audran

Date: 1985

Event Hopper 5: Die EM5: trigger: murder Agent: Georges Ciriani

Agent: four members of Action Directe

Agent: Joelle Aubron Agent: Nathalie Menignon

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Agent: Jean-Marc Rouillan Victim: George Besse

Date: 1986

Event Hopper 6: Die EM6: trigger: murder Agent: Georges Ciriani

Agent: four members of Action Directe

Agent: Joelle Aubron Agent: Nathalie Menignon Agent: Jean-Marc Rouillan Victim: Rene Audran

Date: 1985

The general rule that we will apply is: In case of event plurals and conjoined events, we will do multiple tagging if all the arguments are explicitly stated (as in EM3,4,5,6). Otherwise, we will tag it once (as in EM1, 2).

Demonstrators flooded streets in cities around US

EHopper 1: conflict-demonstrate

EM1: flooded

**Agent: Demonstrators** 

Location: streets in cities around US

vs.

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

EHopper 1: Conflict-demonstrate

EM2: protested Entity: Angry crowds Location: Oakland

EHopper 2: Conflict-demonstrate

EM3: protested Entity: Angry crowds Location: Philadelphia

EHopper 3: Conflict-demonstrate

EM4: protested Entity: Angry crowds Location: New York

EHopper 4: Conflict-demonstrate

EM5: protested Entity: Angry crowds Location: 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. In the murder example, EHopper 1 will be the whole and EHopper 3 and 4 the parts; EHopper 2 will be the whole and EHopper 5 and 6 the parts. In the protest example, EHopper 1 will be the whole and EHopper 2, 3, 4 the parts.

#### 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.<sup>2</sup>

#### 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

- ACE (Automatic Content Extraction) English Annotation Guidelines for Events, Version 5.4.1 2005.05.09, Linguistic Data Consortium
- MR\_Coref\_guidelines\_Vl.7, Linguistic Data Consortium
   TAC KBP Event Mention Detection Annotation Guidelines Vl.7, LTI of CMU



# **Appendix: Annotation Decision Tree**

