TAC KBP Event Detection Annotation Guidelines, v1.7

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Last updated: September 15, 2014

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Comparison between *DEFT ERE Annotation Guidelines: Events V1.3* and *TAC KBP Event Detection Annotation Guidelines, V1.7*

		ERE V1.3	TAC KBP V1.7
Concept	Comparison	(Section No. in <i>ERE Guidelines</i> followed by an E)	(Section No. in <i>TAC KBP Guidelines</i> followed by a T)
States	Same	Annotate states that result	Annotate states that result
		from taggable events.	from taggable events.
		Sec 2.2-E	Sec 3.2-T
More Than One	Same	No double-tagging.	No double-tagging.
Type/Subtype		Sec 4.3-E	Sec 1-T
Pronouns	Same	Annotate if referring to	Annotate if referring to
		taggable events.	taggable events.
		Sec 2.1-E & 2.3-E	Sec 3.5-T
Elided, Inferred, or	Same	Events must be explicitly	Events must be explicitly
Implicated Events		referenced in text.	referenced in text.
	_	Sec 2-E	Sec 6-T
Figurative Language	Same	(Not addressed in	Annotate as usual if meet
		guidelines, but verbally	definitions of Subtype.
		confirmed by LDC to	
		annotate as usual if meet	
		definition of Subtype.)	Sec 4.9-T
Misspellings and	Same	Annotate according to	Annotate according to
Incorrect		deciphered intent of	deciphered intent of
Punctuation		author.	author.
	2:55	Sec 8.2-E	Sec 8.2-T
Job Titles	Different?	(Not addressed in	Do not annotate titles.
	- 155	guidelines.)	Sec 6-T
Criminal Charge	Different?	(Not addressed in	Do not annotate titles.
Titles		guidelines.)	Sec 6-T
Proper Nouns	Different?	(Not addressed in	Annotate if meet
		guidelines.)	definitions of
			types/subtypes.
Overton and	D:ff===+2	(Not odduces dis	Sec 4.8-T
Quotes and	Different?	(Not addressed in	Annotate within
References in		guidelines.)	<headlines>, <post>,</post></headlines>
Discussion Forums			<text>, and <quote> XML</quote></text>
			tags. Do not annotate
			within or
			XML tags.
			Sec 8.1-T

		ERE V1.3	TAC KBP V1.7
Concept	Comparison	(Section No. in ERE Guidelines	(Section No. in <i>TAC KBP</i>
•	•	followed by an E)	Guidelines followed by a T)
Word or phrase that	Different	Event Trigger : the smallest	Event Nugget : an instance
signifies an event		extent of text (usually a	in the text referring to an
		word or phrase) that	event; may be more than
		expresses the occurrence	one word. <i>Maximum</i>
		of an event.	Extent: all of the words
		Sec 2.1-E	which together as a
		Stand-Alone Rules help	Semantically Meaningful
		choose which word to tag	Unit meet the definition of
		as trigger when more than	a type/subtype. When
		one word could	words act together, tag
		reasonably act as the	them all together as one
		trigger.	event nugget.
		Secs 3.1-E & 3.2-E	Secs 2-T & 4-T
Asserted vs Non-	Different	Annotate only asserted	Annotate all events
Asserted Events		events.	whether asserted or not.
			Sec 2-T
			Assign REALIS to each
			event.
		Secs 2-E & 6-E	Sec 3.3-T
Arguments	Different	Only annotate event if at	No arguments required to
		least one argument is	annotate an otherwise
		present within <i>event</i>	taggable event; no
		<i>mention scope</i> and	argument tagging.
		asserted as true.	
		Sec 4.3-E	
		Arguments are tagged.	
		Sec 4-E	Sec 3.5-T
Coreference	Different	Coreference events of	Coreference not part of
		similar granularity.	task.
22 Tunos / Cubtunos	Cliabt	Sec 7-E	Sec 7-T
33 Types/Subtypes	Slight	Annotate events which meet the definitions.	Annotate events which
	Difference	meet the definitions.	meet the definitions. TAC
			KBP Guidelines remained
			as true as possible to the
			intent of the original
			definitions while covering
		Co. F. F.	more vocabulary.
		Sec 5-E	Sec 2-T & 5-T

Concept	Comparison	ERE V1.3 (Section No. in ERE Guidelines	TAC KBP V1.7 (Section No. in TAC KBP
Definition of Transaction.Transfer- Ownership	Different	followed by an E) Transfer-Ownership refers to "buying, selling, loaning, borrowing, giving, or receiving of artifacts or organizations".	Guidelines followed by a T) Expanded definition to include more variety of transactions (added "bartering, stealing, or renting") and clarified objects of the transactions ("tangible assets, intangible assets, or organizations").
Definition of Transaction.Transfer- Money	Different	Sec 5.7.1-E Transfer-Money refers to "giving, receiving, borrowing, or lending money when it is not in the context of purchasing something." The actual payments of court-ordered fines are annotated as Transfer-Money events. Do not annotate "I paid \$9 for the movie ticket."	Sec 5.7.1-T Expanded definition to include more variety of transactions (added "stealing") and clarified objects of transactions ("not assets or organizations"). Similar to paying fines (from ERE), added paying taxes. Also added paying for services and paying for tokens or licenses for services. Annotate "I paid \$9 for the movie ticket."
Annotation of Multiple Interactions with Contact Events	Different	Not addressed in guidelines, but verbally confirmed by LDC to only annotate first reference to a Contact Event, not subsequent speech acts within the same Contact Event.	Annotate all speech acts within the context of Contact Events (all references to two-way communication) - either face-to-face (Meet) or mediated through communication methods (Communicate). Secs 5.5.1-T & 5.5.2-T

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1 Introduction

The purpose of this annotation project is to mark events in texts. Eventually we will mark the events' arguments and link together events which corefer. 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 only.

An event is something that happens at a particular place and time, involving specific participants either in the past or present (ongoing). An event is also something that is predicted to happen in the future, something that could conditionally happen, something which has an unclear status as to its occurrence, something that didn't happen or failed to happen, or something that generally happens. The goal at the Event level of annotation is to detect and characterize explicitly mentioned events, both realis and irrealis - that is, both events that happen at a particular place and time involving specific participants and those that don't.

For present purposes, we are annotating **asserted events** – that is, events that happen at a particular place and time, involving specific entities. Asserted events can be completed or ongoing. We are also annotating **generic events**, which are events that occur generally to categories of participants and do not refer to specific instances. Additionally, we are annotating **irrealis events** such as future, conditional (hypothetical), uncertain, negation, or other irrealis events. The repeated occurrence of events (habitual occurrences) can be attributed to asserted, generic, or irrealis events.

Event **arguments** can be entities (with roles such as Agent, Victim, Defendant, Person, Seller, Buyer, etc.), time, and locations. We will not be concerned with tagging arguments for the purposes of this task. Since arguments further define event types/subtypes, they are useful for determining if an event should be annotated, and their descriptions are therefore included in these guidelines.

For this task, annotation is limited to events corresponding to eight **event types**: Life, Movement, Business, Conflict, Contact, Personnel, Transaction, and Justice events. These eight types include a total of 33 subtypes among them:

- "Life" includes important events in a person's life: BE-BORN, MARRY, DIVORCE, INJURE, and DIE
- "Movement" presently includes only one subtype: TRANSPORT-PERSON
- "Business" includes important events in an organization's life-cycle: START, MERGE, DECLARE BANKRUPTCY, and END
- "Conflict" includes: ATTACK and DEMONSTRATE
- "Contact" includes certain interpersonal communication events: MEET and COMMUNICATE

- "Personnel" includes events related to holding a job or other formal position: START, END, NOMINATE, and ELECT
- "Transaction" includes two subtypes: TRANSFER-OWNERSHIP and TRANSFER-MONEY
- "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

The event nugget is a string of text which specifically indicates an event. An event nugget can be made up of more than one word. For each event nugget we will label only one event type/subtype and REALIS. In the few instances where more than one type/subtype or REALIS could apply, trumping rules are given in this guideline. A multi-word event nugget can be discontiguous. When an event nugget contains more than one word, the maximum extent will include all content words of the semantically meaningful unit which map onto a designated type/subtype.

Using the maximum extent of the event nugget allows for more nuanced assessments of annotation, since there can be reasonable disagreement on which part of a potentially multiword event nugget should be tagged. For instance, sometimes a verb and a noun could be seen as working together to express one event, but if the "correct" annotation is only the noun, any annotation of only the verb would be assessed as incorrect. If the "correct" annotation is both the verb and noun (as the maximum extent), then annotations with both the verb and noun, with just the verb, or with just the noun could all be assessed. See Section 4.6 for more details on tagging the maximum extent of complex event nuggets.

2 General Rules

We based these guidelines on previous versions of ACE/ERE guidelines, but a few major changes were needed to meet the requirements of this task. We define terms in the following fashion:

Event – an action or process signifying a change in state.

State – a condition that remains until an event brings about a change.

Event Nugget – an instance in the text referring to an event; may be more than one word.

Maximum Extent – all of the words which make up one event nugget.

Semantically Meaningful Unit – words which together meet the definition of a type/subtype.

REALIS – relating to the expressed level of certainty as to the occurrence of an event; three values are ACTUAL, GENERIC, and OTHER.

A note about some differences in terminology between ACE/ERE and this task: In the ACE/ERE guidelines, "trigger" is defined as "the smallest extent of text (usually a word or phrase) that expresses the occurrence of an event". For this task, an event nugget is similar to the ACE/ERE

term "trigger". However, event nuggets include the maximum extent which makes up a semantically meaningful unit, whereas "triggers" are concerned with "the smallest extent". Event nuggets should not be confused with the ACE/ERE term "event mention scope", which is defined as "the span of a document from the first trigger you see for a particular event to the next trigger you see for a particular event." Since we are not concerned with tagging arguments in this task, there is no equivalent to the ACE/ERE term "event mention scope."

Our goal is to tag all event nuggets that meet the definition of one of the 33 event type/subtype categories specifically developed for ACE/ERE. (The event types/subtypes are described in Section 5 in this guideline.) Some clarification of definitions and the addition of an expanded range of examples may cause slight differences in tagging using these definitions rather than ACE/ERE. Our goal was to remain as true as possible to the intent of the original definitions while covering more vocabulary.

Unlike ACE/ERE, we will not annotate event arguments (e.g., event participants, event attributes). We keep ACE/ERE argument identification in the definitions of the types/subtypes, since arguments often help annotators determine whether an event nugget meets a definition.

Usually an event nugget is the main verb of a sentence; less often a noun or an adjective. Once event nuggets are identified, it will be necessary to determine whether those nuggets are taggable or not according to the defined event types/subtypes. If the event nuggets fall into the appropriate types/subtypes, they will be tagged. In the rare instances of figurative language whose meaning is different from the literal meaning, we will tag according to the figurative, not literal meaning.

In a departure from ACE/ERE, we are tagging more than just asserted events. We tag all event nuggets which meet the definition of a type/subtype, whether asserted or not. The REALIS tag added to each tagged event indicates the expressed level of "specificity" about the occurrence of the event. For asserted events both completed and ongoing, we assign a REALIS value of ACTUAL. (These ACTUAL events correspond to the "atomic events" tagged in ACE/ERE.) Additionally in this task, events that occur generally to types or categories - and do not refer to specific instances nor to specific participants - are tagged with the appropriate type/subtype and are assigned a REALIS value of GENERIC. All other events which meet the definition of a type/subtype are tagged with the appropriate type/subtype and are assigned a REALIS value of OTHER. These OTHER events include those which are predicted to happen in the future, could conditionally happen, have an unclear status as to their occurrence, didn't happen, or failed to happen. The occurrence of events at regular intervals (habitual occurrence) can be attributed to asserted, generic, or irrealis events. (See Section 3.3 for more details on REALIS.)

Although most event nuggets are single verbs, nouns or adjectives, there are some cases in which multiple words will be tagged as a single event nugget. Where ACE/ERE tried to tag minimal triggers, we try to avoid having to choose between possibly equally weighted potential triggers. Instead, when words together create a semantically meaningful unit, we tag them as a single event nugget. Thus we avoid one potential cause of inter-annotator disagreement -

deciding which word to tag when the words act closely together to create a meaning. For example, in "The security forces waged war on the guerrillas," "waged war" will be tagged as one event nugget. It may seem that only "wage" should be tagged as a Conflict.Attack event, because it is the main verb in the sentence. However, "war" is also a Conflict.Attack event which could alternately be seen as the more meaningful trigger. Yet, most agree there is only one event occurring in this sentence. By tagging "waged war," we indicate that one Conflict.Attack event is occurring without having to decide which word better represents the event. Thus assessments can be more nuanced when a comparison of alternate annotations is made against "waged war".

In Section 3, we describe the issues involving the tagging of single word event nuggets. In Section 4, we discuss complex event nuggets involving more than one word in a semantically meaningful unit.

3 Single Word Event Nuggets

For purposes of this annotation task, we annotate all events of appropriate type/subtype that are explicitly referenced within the document, whether the events are asserted or not. We will exhaustively annotate taggable events. That is, if the same event is mentioned multiple times within the same document, each occurrence should be annotated. It is <u>not</u> necessary for at least one event argument to be present for the event to be considered taggable.

Note on notation conventions used in this guideline: all markable events in most example sentences are indicated in **bold**. Some words which should not be mistakenly tagged are struck through. In the case of complex event nuggets, the maximum extent of the event nugget is underlined and the tagged words which make up the complex event nugget are **bolded**. Immediately following the sentence, [Type.Subtype, REALIS] is specified. In complicated cases, events are rewritten before their type description for clarity: **event** [Type.Subtype, REALIS].

We **will** tag negative, future, hypothetical, conditional, uncertain, or generic events. E.g., all of the events in the following sentences would be taggable:

- Hillary Clinton was not elected president in 2008. (negative) [Personnel.Elect, OTHER]
- If he had been arrested he would have called us. (conditional)
 arrested [Justice.Arrest-Jail, OTHER]

called [Contact.Communicate, OTHER]

- It may not have been just an accident but a terrorist <u>attack</u>. (uncertain)
 attack [Conflict.Attack, OTHER]
- President Obama will nominate John Kerry for Secretary of State (future)
 [Personnel.Nominate, OTHER]
- Killings by the group Abu Sabaya are often random. (generic) [Life.Die, GENERIC]

Examples in Section 3 use mostly simple, single word event nuggets. Section 4 goes into more detail about event nuggets with two or more words.

3.1 Annotating Event Nuggets

For the purposes of this task, an event nugget is a semantically meaningful unit that maps to one of the event type/subtypes described in this guideline. In many cases, this will just be a main verb in the sentence that describes the event.

Example event nuggets with main verbs:

• The terrorists killed 7 and injured 20.

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killed [Life.Die, ACTUAL] injured [Life.Injure, ACTUAL]
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- He **died** yesterday of renal failure. [Life.Die, ACTUAL]
- In 1927 she **married** William Gresser, a New York lawyer and musicologist. [Life.Marry, ACTUAL]

Sometimes, however, the main verb will be in the form of an adjective, present-participle, or past-participle.

- Milosovic was **indicted** yesterday for war crimes. [Justice.Indict, ACTUAL]
- Shenson, who was **born** in San Francisco, was working in London at the time. [Life.Be-Born, ACTUAL]
- Fifteen Palestinians were injured this morning in the town of Rafah. [Life.Injure, ACTUAL]
- Refugees are streaming across the border. [Movement.Transport-Person, ACTUAL]
- We are going to a bed and breakfast this weekend. [Movement.Transport-Person, OTHER]

We will also see cases where the event nugget is in the form of a noun or pronoun:

- The attack by insurgents occurred on Saturday. [Conflict.Attack, ACTUAL]
- Protesters interrupted their meeting. [Contact.Meet, ACTUAL]
- The **talks** between the Koreas were largely unsuccessful. **They** ended without agreement on Monday.

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talks [Contact.Communicate, ACTUAL] they [Contact.Communicate, ACTUAL]
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- In accepting the **nomination** he spoke of his immigrant ancestors.
 [Personnel.Nominate, ACTUAL]
- The selling of drugs to minors qualifies for a jury trial.
 selling [Transaction.Transfer-Ownership, GENERIC]
 trial [Justice.Trial-Hearing, GENERIC]

For simple, single noun event nuggets, adjectives that do not meet the definition of a type/subtype will not be included with the taggable noun. In general, we will not tag descriptive adjectives not meeting type/subtype definitions (e.g. "large", "uneven", "empty", "gentle"), articles (e.g. "a", "an", "the"), demonstrative adjectives (e.g. "this", "that" "those"), indefinite adjectives (e.g. "some", "few"), or possessive adjectives (e.g. "his", "her", "their"). For example,

The sudden arrival of the police enlivened an otherwise boring meeting.
 arrival [Movement.Transport-Person, ACTUAL]
 meeting [Contact.Meet, ACTUAL]

Only the nouns "arrival" and "meeting" are tagged, not "the", "sudden", "an", "otherwise", and "boring".

For details on tagging more complex constructions involving nouns, see Section 3.4 *Noun Modifiers with Untagged Main Nouns*, Section 4.7 *Noun Phrases*, Section 4.8 *Proper Nouns*, and Section 4.9 *Idioms and other Figurative Language*.

3.2 States and Ongoing Events

Canonically we think of events as actions or processes but we will also tag the states that result from taggable events. These "resultative" events are annotated the same way as their corresponding "action" events. (For more details on assigning REALIS, see Section 3.3.)

Resultatives and in-progress events can be expressed in a number of different constructions:

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

- 1. As predicate adjectives or participles:
 - All her grandparents are **dead**. [Life.Die, ACTUAL]
 - They have been married for three years. [Life.Marry, ACTUAL]
 - Her father is **retired**. [Personnel.End-Position, ACTUAL]
 - The firm is **bankrupt**. [Business.Declare-Bankruptcy, ACTUAL]
- 2. As an adjective or past-participle in the nominal pre-modifier position:
 - The newly **merged** companies [Business.Merge, ACTUAL]
 - The **bankrupt** firm [Business.Declare-Bankruptcy, ACTUAL]
 - The **dead** civilians' families [Life.Die, ACTUAL]
 - The happily married couple [Life.Marry, ACTUAL]
- 3. As a present-participle in the nominal pre-modifier position:

- The rioting crowd [Conflict.Demonstrate, ACTUAL]
- The arresting officer [Justice.Arrest-Jail, ACTUAL]
- The dying man [Life.Die, ACTUAL]

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

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

Sometimes resulting states are expressed as predicate adjectives (or participles) using a verb other than "be". There may be some extra material (usually the direct object of the verb, but sometimes other material as well) intervening between the tensed verb and the resultative adjective (or participle). An example of this phenomenon is:

The explosion left at least 30 dead and dozens injured.
 explosion [Conflict.Attack, ACTUAL]
 dead [Life.Die, ACTUAL]

injured [Life.Injure, ACTUAL]

In the above example, the main verb "left" is not tagged since "leave" does not meet the definition of any designated type/subtype, but the resultative states "dead" and "injured" are tagged.

In all such cases, we will annotate the adjective (or participle) whenever it describes the resulting state which came about due to an event of a designated type/subtype. (See Section 4.4 for "leave dead" vs. "shoot dead".)

3.3 REALIS

In addition to type/subtype, all tagged events will be assigned a REALIS label relating to whether or not the event occurred. REALIS represents the expressed level of "specificity" of the event's occurrence. In formal logic terms, REALIS marks whether the event is an instance or not. REALIS has three values: ACTUAL, GENERIC or OTHER.

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 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]

Note that in the examples above, the agent of "sales" can be anyone selling, the agents of "mergers" can be any companies, the agents of "give" can be any countries, and the agents of "move" can be any Palestinian.

Another way of describing this is that a GENERIC event has an agent that is a set with one or more unspecified members; different readers of the sentence will select different agents from that set without violating the sentence. For example:

• Here it's not unusual to only **see** a doctor at 12-14 weeks. [Contact.Meet, GENERIC]

One of the arguments for a Contact.Meet event is Entity-Arg (PER ORG GPE) for "the agents who are meeting." (See Section 5.5.1 more on Contact.Meet events.) In the sentence above, one of the agents could be any pregnant woman in general. This is an example of a set with unspecified members. Determining that an event has an agent that is a set with unspecified members is an indicator that the event is GENERIC.

Note that the agent set may contain only one instance, in which case all readers will pick the same individual. Nonetheless, the sentence describes not an instantiated individual, but a set, and hence gives rise to the GENERIC reading. Also note that generic agents can be expressed with varied forms: "a", "the" and plural.

- A pardon is an important duty of a governor. [Justice.Pardon, GENERIC]
- The **pardon** is an important duty of the governor. [Justice.Pardon, GENERIC]
- Pardons are important duty of governors. [Justice.Pardon, GENERIC]

GENERIC will also be used for taggable event nuggets which appear in statistics or demographic information. (See examples in Sections 5.1.1 and 5.3.2.)

Generic should not be confounded with the regular occurrence of an event (habitual occurrence). Some generic events reoccur in a habitual pattern, but others don't. For example,

- Quite a few tourists visit Death Valley every summer. [Movement.Transport-Person, GENERIC]
- Campers phone home once a week. [Contact.Communicate, GENERIC]
- People **die**. [Life.Die, GENERIC]

All events above are GENERIC, since their agents ("tourists", "campers" and "people") are general categories, yet only "visit" and "phone" reoccur regularly.

Specific agents can be individuals or groups and can also perform habitual activities. For example,

• The terrorist group **bombs** the market every Tuesday. [Conflict.Attack, ACTUAL]

In this case, a regularly occurring (habitual) event of "bombing" is done by a specific "terrorist group". Since this is asserting that at least one event has occurred with a specific agent, we tag this as ACTUAL. This tagging is consistent with ongoing events being tagged as ACTUAL. In both cases (ongoing and habitual events of specific agents) the future continuation or reoccurrence of the event is implied, but these events are tagged as ACTUAL rather than OTHER.

More examples of habitual events of specific agents which are tagged as ACTUAL:

- We **meet** on the first Tuesday of month. [Contact.Meet, ACTUAL]
- The council **communicates** its recommendations on the economy to the prime minister every week. [Contact.Communicate, ACTUAL]

The agents in the above sentences ("we" and "the council") are specific groups who are agents of regularly occurring (habitual) events ("meet" and "communicates"). Since each sentence is asserting that at least one event has occurred with a specific agent, we tag these as ACTUAL.

The REALIS of OTHER will be used for events that are neither ACTUAL nor GENERIC. If it is determined that an event meets the definition of a type/subtype and it is not an ACTUAL or GENERIC event, it can simply be tagged OTHER. You do not need to understand all of the different types of OTHER occurrences in order to assign OTHER, only that the event is not ACTUAL and not GENERIC. However, for clarity we define the different types of OTHER events below, including future, conditional (hypothetical), uncertain, and negation. These types of irrealis events include:

Future events – predicted or expected to occur:

- She will be **nominated** next week. [Personnel.Nominate, OTHER]
- Russian and U.S. trade officials will **meet** in London on May 17. [Contact.Meet, OTHER]
- He plans to **meet** with lawmakers from both parties. [Contact.Meet, OTHER]

- ... with the merger likely to be completed later this year. [Business.Merge, OTHER]
- When he's **born**, he'll be named after his father. [Life.Be-Born, OTHER]

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

- If they find the gun, Smith's definitely getting indicted. [Justice.Charge-Indict, OTHER]
- A demonstration of how he would behave if he were to **become** President. [Personnel.Start-Position, OTHER]
- Should he not pay the money, they would kill him.

pay [Transaction.Transfer-Money, OTHER]
kill [Life.Die, OTHER]

• There have been concerns the **clashes** in southern Serbia could explode into **violence** similar to the 1999 **conflict** in Kosovo.

clashes [Conflict.Attack, ACTUAL]
violence [Conflict.Attack, OTHER]
conflict [Conflict.Attack, ACTUAL]

- Fueling speculation that John Paul II might **retire** at the end of this year, a Belgian cardinal says ... [Personnel.End-Position, OTHER]
- Chapman would be concerned for his safety if released. [Justice.Release-Parole, OTHER]

Uncertain events – status of occurrence unclear:

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

funding [Transaction.Transfer-Money, OTHER]

Negated events – did not occur:

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

- NEGATIVE examples (using a negative word or the standard negative syntax):
 - 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]
- 2. NEGATIVE example (using negative affixes):
 - The companies have **unmerged**. [Business.Merge, OTHER]
- 3. NEGATIVE examples (using context): event fails to occur
 - 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]

A note about REALIS in example sentences: Determining REALIS depends on the context of usage, sometimes beyond the sentence level. It is the nature of single sentence examples that more context is sometimes needed to determine a REALIS with certainty. One sentence alone can occasionally be interpreted in different ways as to the occurrence of events within the sentence. Attempts have been made to include unambiguous sentence examples in this guideline, but occasionally multiple readings about the REALIS of events in an example sentence could be hypothesized. For such sentences in this guideline, one choice of REALIS is given for the purposes of showing a possible REALIS. When annotating actual text, the broader context is available, and determining REALIS can be done with greater certainty.

Some rules to note about REALIS:

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

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

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

Steps to Determine REALIS

Once an event nugget 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); or it can have happened regularly in the past and be predicted to reoccur regularly in the future (habitual).
- 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)?

3.4 Noun Modifiers with Untagged Main Nouns

As noted in Section 3.1, event nuggets can be verbs, nouns, and occasionally adjectives like "dead" or "bankrupt". It is worth noting that nominal events (nouns) can also occur as modifiers of other nouns, even when the main noun in the noun phrase is not markable:

Riot police responded with restraint to yesterday's demonstrations.
 riot [Conflict.Demonstrate, GENERIC]
 demonstrations [Conflict.Demonstrate, ACTUAL]

- Quaker Oats rejected PepsiCo's takeover offer as too low. [Transaction.Transfer-Ownership, OTHER]
- In April of last year, the CR Company began **bankruptcy** procedures. [Business.Declare-Bankruptcy, GENERIC]
- Another possibility is to change the meeting times. [Contact.Meet, ACTUAL]

REALIS for noun modifiers depends on the meaning of all of the nouns in the noun phrase. Noun modifiers can be any REALIS – ACTUAL, GENERIC or OTHER – so we must look closely at the context to decide which REALIS to apply. The sentences above each contain a noun phrase where the modifier is of a designated type/subtype, but the main noun is not: "riot police", "takeover offer", "bankruptcy procedures" and "meeting times". Below we describe how to use the specific context to determine the REALIS. For discussion of noun phrases when the main noun is taggable, see Section 4.7.

The first example contains two Conflict.Demonstrate events. The obvious event is "demonstrations" which is an atomic event with a REALIS of ACTUAL. The phrase "riot police" contains a GENERIC reference to a Conflict.Demonstrate event: "riot". These police are specifically trained to handle riots. These riots are not referring to specific riots, but a general notion of riots. Thus "riots" has a REALIS of GENERIC.

In the second example above, "takeover offer" is "an offer by PepsiCo to take over Quaker Oats". "Takeover" in this case is a specific Transfer-Ownership event between two specific participants, which is proposed to happen in the future, thus OTHER. Quaker Oats rejected the offer as too low, but nothing is markable there.

In the third example above, "bankruptcy procedures" are "procedures (set by the government) for any company to declare bankruptcy". In this case "bankruptcy" is general and the same for any company, thus GENERIC. "CR Company" began to follow these procedures in April of last year, but nothing is markable there.

In the fourth example, "meeting times" are "the regularly scheduled times (of a particular organization) when their meetings occur". These meetings are of a specific organization at regular times and are habitual, thus ACTUAL. There is the possibility to change them, but nothing is markable there.

Since we are tagging every event of the designated type/subtypes for this task, we must tag noun modifiers, even if the main noun in the noun phrase is not taggable. Care must be taken to determine the appropriate REALIS of noun modifiers, depending on the meaning of the entire noun phrase.

For a description of tagging noun phrases containing more than one possible type/subtype, see Section 4.7.

3.5 Pronouns and Other Anaphors

Anaphors are expressions which depend on other expressions in context (known as antecedents) in order to be interpreted. Pronouns can be used as anaphors referring back to explicit antecedents. When their antecedents are taggable events, the pronouns are tagged with the same type/subtype as their antecedents and are assigned a REALIS appropriate to the use of the pronoun.

An example of tagging a pronoun with the type/subtype of its antecedent:

• The **talks** between the Koreas were largely unsuccessful. **They** ended without agreement on Monday.

```
talks [Contact.Communicate, ACTUAL] they [Contact.Communicate, ACTUAL]
```

In addition to pronouns, other common words which refer back to previous expressions are "that" and "which".

In this example, there is an antecedent for "that":

• They had a messy **divorce**, and his ex **took** the kid out of state. My ex threatened **that**.

```
divorce [Life.Divorce, ACTUAL]
took [Movement.Transport-Person, ACTUAL]
that [Movement.Transport-Person, OTHER]
```

In the passage above, "that" refers back to "took the kid out of state". Therefore "that" is tagged as Movement. Transport-Person. "My ex threatened" provides uncertainty to the specific Transport-Person event referred to by "that", making its REALIS OTHER. Note that the antecedent "took" has a REALIS of ACTUAL.

Not all pronouns are used anaphorically. **Pleonastic pronouns** are pronouns which are required for syntax, but do not add any real meaning. They are sometimes referred to as dummy pronouns. Typical examples of pleonastic pronouns are "it" in "It is raining," and "there" in "There seems to have been an accident." Pleonastic pronouns should not be tagged, since they do not refer back to explicit antecedents.

Example of a pleonastic pronoun which is not tagged:

• The two were **married** on July 20. The **ceremony** was performed at St.Paul's. The reception was in the gardens of the museum. # was a splendid day.

```
married [Life.Marry, ACTUAL]
ceremony [Life.Marry, ACTUAL]
```

In the last sentence, "it" is a pleonastic (or dummy) pronoun and should not be tagged. Additionally in this example, "ceremony" is an anaphor which clearly refers back to the Life.Marry event "married" and should thus be tagged with the same type/subtype. This type of anaphor is further described below.

In addition to anaphoric pronouns, another type of anaphor is a definite description of a previously mentioned event. In the example above, "ceremony" is this kind of anaphor. Notice that "ceremony" would not have been tagged if the first sentence in the passage had been "The two graduated from divinity school on July 20." "Graduation" does not fit one of the described type/subtypes, so would not be tagged. So in this case, "ceremony" would not be tagged either.

Words such as "incident", "act", "action", "affair", and "event" often refer back to an antecedent. When these kinds of anaphors refer back to antecedents that are taggable, the anaphors are tagged with the same type/subtype as their antecedents and an appropriate REALIS for their usage. For example:

• In August 1902, Roosevelt was the first president to be seen **riding** in an automobile in public. (The reference includes a photo of the **event**.)

riding [Movement.Transport-Person, ACTUAL] **event** [Movement.Transport-Person, ACTUAL]

In this sentence, the anaphor "event" receives the same type/subtype as its antecedent "riding", i.e. Movement.Transport-Person. Note that determiners and other modifiers are not included with "event", as is the case when tagging non-anaphoric nouns. See Section 3.1 for a further explanation of modifiers not included with tagged nouns.

A reason for an anaphor to be tagged, whether a pronoun or other descriptive anaphor, is the presence of an explicit, tagged antecedent. An example lacking an explicit antecedent:

 So it looks like I am thinking too much this morning. I am afraid of something happening to me or baby during labor. Really afraid. I had a good cry about it.

In the passage above, it may seem like "something happening" is referring to a Life.Injure or Life.Die event. But in this passage, there is no explicit antecedent to "something" or "happening"; rather "something happening" is some unspecified, potentially disastrous injury or death event in the writer's imagination. "Something happening" is thus not taggable. Note that the first word in this passage is actually the very first word in the first post in a discussion forum, with no chance for an antecedent that isn't included in the passage.

So called "empty" nouns such as "incident" and "activity" can also be used in ways other than anaphoric reference to an antecedent. Another reason for events such as "incident" and "activity" to be tagged with a designated type/subtype is that their modifier specifies that they belong to that type/subtype. Two examples are: "bombing incident" and "act of war." No previous antecedents are required to tag these events. In such cases, the event and its modifier are tagged as the maximum extent of the event nugget. See Section 4.7 for more details on maximum extent annotation for noun phrases.

3.6 Arguments Not Required

For the purposes of this task, explicit arguments are not required for an event nugget to be tagged with a particular type/subtype and REALIS. Often when the REALIS is GENERIC no arguments are explicitly mentioned, yet the event nugget can still fit the definition for a designated type/subtype and should be tagged.

For example:

• **Divorce** is really stupid. [Life.Divorce, GENERIC]

The arguments for Life.Divorce are Person-Arg and Time-Arg. (See Section 5.1.3 for more on Life.Divorce.) Neither of those arguments is explicitly stated in the passage above, yet "divorce" meets the definition of Life.Divorce and is still tagged and given a REALIS of GENERIC.

4 Complex Event Nuggets

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

In this section, potential events are shown in *italics*. Each example sentence is shown fully tagged in later sections of this guideline.

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

1. There is an event that is mentioned by multiple words which seem to belong together in a way that makes it difficult to identify a single word as the event nugget.

Some examples of this are:

- The leaders held a meeting in Beijing.
- They are *fighting a war* for control of resources.
- 2. There are a number of distinct events mentioned within the same sentence (either all taggable events or a mix of taggable and non-taggable events).

Some examples of this are:

- The attack killed seven and injured twenty.
- I went to see them to review his IEP.

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 maximum extent of the event nugget is ambiguous. The following subsections describe the rules for choosing between the various options.

Note on notation conventions for complex event nuggets: the maximum extent of multiword single event nuggets will be <u>underlined</u> with each taggable component **bolded**. For example, the maximum extent of the Contact.Communicate event in the sentence below is "got his text" and "got" and "text" are tagged as one event nugget:

I got his text at 3 p.m.
 got text [Contact.Communicate, ACTUAL]

For further details on which words to tag within the maximum extent of an event nugget see Section 4.6.

We begin this section on Complex Event Nuggets with a discussion on how to determine taggable main verbs vs non-taggable supporting verbs (see Section 4.1). Then we continue by describing verb constructions where both a verb and its participle or adverb are tagged (in Section 4.2). In the remainder of Section 4, we describe the two major sources of event nugget complexity - when to tag multiple words as one single event nugget and when to tag them separately as two events. We begin with the case of verb+noun being tagged together as one event nugget (in Section 4.3). Next we detail how to decide between multi-word single event nuggets and multiple individual events (in Sections 4.4 and 4.5). And finally we outline the specifics on how to tag the words within an event nugget with more than one word (in Section 4.6). The final three sections describe special cases of phrases: noun phrases with various combinations of tagged modifying and main nouns (in Section 4.7), proper nouns (in Section 4.8) and figurative language (in Section 4.9).

4.1 Main Verbs and Supporting Verbs

Often several verbs are used together to express an event. These verbs can consist of a **main verb** and **supporting verbs**. The main verb is typically the last verb in a string of verbs. It expresses the type of event most clearly. We can think of these verbs as semantic main verbs. Non-main verbs do not carry the main semantic meaning of the event, but contribute

or support the main verb in various ways. We do not mark supporting (non-main) verbs in most instances.

NOTE: In the examples that follow, strike through is used to indicate the verb string which is not tagged and **bold** will be used to indicate the verb to be tagged.

A common non-main verb is the supporting verb "be" in all of its various tenses ("was", "has been", "had been", etc.):

- John had been being attacked on a regular basis. [Conflict.Attack, ACTUAL]
- In a disclosure earlier this month, government-controlled creditor banks named 52 financially weak companies that had been shut down or merged for sale.

```
shut down [Business.End-Org, ACTUAL]
merged [Business.Merge, ACTUAL]
sale [Transaction.Transfer-Ownership, OTHER]
```

• 79 million people have been born since the war ended.

```
born [Life.Be-Born, ACTUAL]
war [Conflict.Attack, ACTUAL]
```

More than 200 people were killed. [Life.Die, ACTUAL]

In such cases, the main verb will be annotated as the event, not the supporting verbs.

In American English, we can sometimes substitute "get" for the passive form of "be". As with passive "be", we will not tag "get" in these cases.

- ("be") They will be married in Hawaii. [Life.Marry, OTHER]
- ("get") They are getting married in Hawaii. [Life.Marry, OTHER]
- ("be") She was hired by the company in 2003. [Personnel.Start-Position, ACTUAL]
- ("qet") She got hired by the company in 2003. [Personnel.Start-Position, ACTUAL]
- ("be") I was picked up by my mother at the airport. [Movement.Transport-Person, ACTUAL]
- ("get") I got picked up by my mother at the airport. [Movement.Transport-Person, ACTUAL]

Other examples of untagged supporting verbs include:

```
modals ("would", "can", etc.)
aspectual verbs ("begin", "end", "continue", etc.)
causative verbs ("get", "help", "have", "let", "make", etc.)
other verbs reflecting on the REALIS of the main verb ("promise", "try", "claim", "do not", etc.)
```

These types of verbs also play a non-main verb role in complex verbal constructions, and will not be tagged.

- Men in civilian clothes in the crowd began firing with AK-47 assault rifles.
 [Conflict.Attack, ACTUAL]
- U.S. forces continued to bomb Fallujah. [Conflict.Attack, ACTUAL]
- You might try posting your question on the forum. [Contact.Communicate, OTHER]
- The governor did not pardon the prisoner in spite of the potential negative publicity. [Justice.Pardon, OTHER]
- The company had to close. [Business.End-Org, ACTUAL]

Note that aspectual verbs (like "begin" and "end") can also be used as main verbs (followed by a noun). We will not label main aspectual verbs, as shown in the example below.

• Men in civilian clothes in the crowd began the assault. [Conflict.Attack, ACTUAL]

We will not tag "began", since it is an aspectual verb.

Case Study in Aspectual Verb vs Main Verb

Care should be taken with "launch", which can be ambiguous between describing an aspect of an attack (beginning an action) and performing an attacking event (setting an object into physical motion to cause harm or damage).

- Hamas launched an attack. [Conflict.Attack, ACTUAL]
- Hamas launched a rocket. [Conflict.Attack, ACTUAL]

In the first sentence above, Hamas began an attack. The tag is on the noun "attack" as the Conflict.Attack event. The verb "launched" here reflects the aspect of the attack as having already been started by Hamas. Aspectual verbs are not tagged. In the second sentence, Hamas set a rocket into motion, which is a Conflict.Attack event. The main verb "launched" in this case is the event, which here means "to set into motion". "Rocket" is not tagged, because it is not an event.

Exception to Aspectual Rule

It should be noted that four types/subtypes specifically include aspect: Business.Start-Org, Business.End-Org, Personnel.Start-Position, and Personnel.End-Position. Sometimes one word encompasses the meaning ("found", "disband", "hire", "fire", "join", etc.) without using an explicit aspectual verb. However, sometimes aspectual verbs are combined with general nouns or verbs to express the meaning ("start office", "job ended", "begin working", etc.). In

these instances, we will tag the aspectual verbs along with their nouns or verbs as the maximum extent that expresses the meaning of the type/subtype. For example,

- Bill Clinton <u>started office</u> on January 20, 1993.
 started office [Personnel.Start-Position, ACTUAL]
- Nowadays there are more and more young people who <u>start</u> an <u>Internet-related</u> <u>venture <u>business</u> while still at college.
 </u>

start business [Business.Start-Org, GENERIC]

She <u>began working</u> at CMU in July of last year. [Personnel.Start-Position, ACTUAL]

However, specific job position titles will not be included in a tag.

• John became CEO of the company in 2006. [Personnel.Start-Position, ACTUAL]

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

Insurgents burned or bombed several buildings.
 burned or bombed [Conflict.Attack, ACTUAL]

However, when "and" is used, two separate events are being referred to, so they will be tagged separately.

• Insurgents burned and looted several buildings.

burned [Conflict.Attack, ACTUAL] **looted** [Transaction.Transfer-Ownership, ACTUAL]

If coordinated events are of different type/subtypes, each event will be tagged separately.

• More than 300 people were **killed** or **injured**.

killed [Life.Die, ACTUAL] **injured** [Life.Injure, ACTUAL]

4.2 Verb+Particle and Verb+Adverb

Sometimes a verb combines together with a particle or adverb to have a meaning which cannot be understood based simply on the meaning of the two parts separately. These types of verbs are commonly called **phrasal or compound verbs**. In verb+particle and verb+adverb constructions, we will tag the main verb and the particle together.

- Jane was laid off by XYZ Corp. [Personnel.End-Position, ACTUAL]
- John D. Idol will take over as Chief Executive. [Personnel.Start-Position, OTHER]

If the words occur non-contiguously, then we will only annotate the verb constructions, but not any intervening words which are not part of the event nugget.

• XYZ Corp laid Jane off.

laid off [Personnel.End-Position, ACTUAL]

• John D. Idol had <u>taken</u> the company <u>over</u>.

taken over [Transaction.Transfer-Ownership, ACTUAL]

4.3 Verb+Noun

While many event nuggets are expressed by a single verb or noun, there are two potentially problematic cases where a verb plus a noun should be tagged together as one semantic unit. In the first case, a verb plus a noun could reasonably be considered as a semantic unit referring to one event. In the second case, a verb plus a noun are both needed to specify a particular type/subtype.

For the first case, consider the sentences below. The verb+noun units are *italicized*. (Full annotations are listed further in this section.)

- Foo Corp. had previously *filed Chapter 11* in 2001.
- The leaders held a meeting in Beijing.
- They are *fighting* a *war* for control of resources.

In each of these examples, we could reasonably select either of the italicized words to act as the event nugget. A common cause of disagreement between annotators stems from different choices about which word to tag - the noun which names the event or the verb which is about the performance or "doing" of the event. Indeed, many 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 to have an extent not just of "filed", not just of "Chapter 11", but of "filed Chapter 11".

Maximum Extent Verb+Noun Rule (1): In cases where both a verb and noun work together to describe the execution (or "doing") of an event, tag them together as one event nugget.

Some examples where verbs and nouns work together to describe the same event and should be tagged together as one multi-word single event nugget:

 Foo Corp. had previously <u>filed Chapter 11</u> in 2001. [Business.Declare-Bankruptcy, ACTUAL]

- The leaders held their meeting in Beijing. [Contact.Meet, ACTUAL]
- He <u>carried out the assassination</u>. [Life.Die, ACTUAL]
- They are **fighting** a **war** for control of resources. [Conflict.Attack, OTHER]

Light verbs constructions use verbs of little semantic content on their own paired with another word (usually a noun) to express a more complex meaning. Common light verbs are "do", "give", "have", "make", and "take" and common examples are "take a bath" and "do damage". Like the verbs and nouns described above that work together to describe one event, we will tag light verbs and their nouns together as one event when their meaning is of designated types/subtypes.

- I wouldn't <u>take</u> a <u>trip</u> there if my life depended on it. [Movement.Transport-Person, OTHER]
- We <u>had</u> a surprisingly personal <u>conversation</u> over the phone. [Contact.Communicate, ACTUAL]

At other times verbs and nouns will actually be two separate events (even if sometimes one "event" is not itself of a taggable type).

The words struck through below are not tagged.

- Protesters interrupted their meeting. [Contact.Meet, ACTUAL]
- An officer witnessed the attack. [Conflict.Attack, ACTUAL]
- The union began its strike on Monday. [Conflict.Demonstrate, ACTUAL]
- Brentwood Academy responded with a lawsuit. [Business.Sue, ACTUAL]

Basically, we will annotate the maximum extent of an event nugget which maps onto a designated type/subtype. We include the verb+noun when the verb refers to performing ("doing") the nominal event (noun) in such a way that it is difficult to distinguish two separate events.

The second case where verb+noun are tagged together is when the verb alone does not completely specify the meaning of the type/subtype. In some of the 33 types/subtypes defined in this task, the noun is an important part of the definition. For example, the difference between Contact.Meet and Contact.Communicate is that Meet events are two-way communication done in person ("face-to-face") and Communicate events are two-way communication done over mediated channels (such as email, telephone, or letters sent by mail). There are a fixed number of mediated channels over which two-way communication can occur to meet the definition of Contact.Communicate. Sometimes a verb+noun are used to express Communicate events, and occasionally just a verb. When the verb+noun are used to meet the definition of Contact.Communicate, both should be tagged.

For example, both "emailing" and "sending email" meet the definition of Contact.Communicate as a mediated form of two-way communication.

- She **emailed** him. [Contact.Communicate, ACTUAL]
- She **sent** him an **email**.

sent email [Contact.Communicate, ACTUAL]

Both "sent" and "email" are tagged as one event nugget.

Consider the verb "receive" and the types/subtypes Contact.Communicate, Transaction.Transfer-Ownership, and Transaction.Transfer-Money. For example,

He <u>received an email</u> from the university.
 received email [Contact.Communicate, ACTUAL]

As is the case with "sending email", "receiving email" is a type of Contact event between two parties that is mediated by technology, thus a Contact.Communicate event. Both "received" and "email" are tagged as one event nugget, since both are required to meet the definition.

However, if someone "receives" something that can be owned, it is a Transfer-Ownership event. The definition of Transaction. Transfer-Ownership is the buying, giving, receiving, etc. of tangible assets, intangible assets, or organizations.

• He **received** a car for his birthday. [Transaction.Transfer-Ownership, ACTUAL]

In the above example, "car" does not need to be tagged, since it could be replaced by innumerable other things which can be owned without changing the meaning of ownership. The meaning of Transfer-Ownership does not depend on "car" per se, but the type of thing a "car" is – namely a tangible asset.

Note that if you replace "a car" with "cash", the event type is Transfer-Money.

• He <u>received much cash</u> for his birthday. [Transaction.Transfer-Money, ACTUAL]

The definition of Transaction. Transfer-Money is the giving, receiving, etc. of money or services. The meaning of Transfer-Money depends on both "receiving" and "cash", so both are tagged.

Consider another example of "receiving".

"He received a warning from the officer for a noise violation."

There is no type/subtype match for warnings by law enforcement officials, thus no tag on "received" in this example.

From these examples, we can see that the definitions of the type/subtypes help determine if just a verb or a verb+noun express the semantically meaningful unit to be tagged as the maximum extent of an event nugget.

Maximum Extent Verb+Noun Rule (2): In cases where both a verb and noun combine to meet the definition of a type/subtype, tag them together as one event nugget.

Case Studies in Verb+Noun Rule (2):

"I find that the accused is not guilty on all counts."
 find not guilty [Justice.Acquit, ACTUAL]

The definition of Justice. Acquit is "whenever a trial ends but fails to produce a conviction." Both "find" and "not guilty" participate in meeting this definition.

President Obama won the election.
 won election [Personnel.Elect, ACTUAL]

The definition of Personnel. Elect is "whenever a candidate wins an election." Both "win" and "election" participate in meeting this definition.

 She will probably have to <u>serve out her sentence</u> in FL serve out sentence [Justice.Arrest-Jail, OTHER]

The definition of Justice. Arrest-Jail is "whenever a state actor takes official custody of a person or whenever a state actor puts a person in jail or a confined situation." Both "serve out" and "sentence" participate in the meaning of the Arrest-Jail event.

 ... and demand that all USCF <u>money</u> which might be used to <u>pay</u> Marinello be <u>frozen</u>. money frozen [Transaction.Transfer-Money, OTHER]
 pay [Transaction.Transfer-Money, OTHER]

The definition of Transaction. Transfer-Money is "the giving, receiving, borrowing, lending, or stealing of money when it is <u>not</u> in the context of purchasing assets or organizations." This sentence uses a passive form of "freeze money" and means preventing a transfer of money — in other words, a negation of a Transfer-Money event. Both verb+noun meet the definition of Transfer-Money and the REALIS is OTHER. "Pay" is another Transfer-Money event separate from "freeze money" and is tagged on its own.

• Indeed, New York's statute says, "Discretionary <u>release on parole</u> shall not be granted merely as a reward for good conduct or efficient performance of duties..."

release on parole [Justice.Release-Parole, GENERIC]

The definition of Justice.Release-Parole is "whenever a state actor ends its custody of a person. This can be because the sentence has ended, because the charges are dropped, or because parole has been granted." In the sentence above, both "release" and "parole" meet the definition of Justice.Release-Parole event and we cannot separate one from the other. Both are tagged together as one Release-Parole event.

For a discussion on which content words to tag within the maximum extent of an event nugget, see Section 4.6.

4.4 More Than One Event within a Single Sentence

Cases where there is more than one event nugget within the same sentence should not be confused with cases where there are multiple words for a single event nugget within the same sentence.

In the following examples, each **bold-faced** word is an independent event and therefore should be tagged as such:

• The attack killed seven and injured twenty.

attack [Conflict.Attack, ACTUAL]
killed [Life.Die, ACTUAL]
injured [Life.Injure, ACTUAL]

• He was **returning** from a **climb** to the summit.

returning [Movement.Transport-Person, ACTUAL] **climb** [Movement.Transport-Person, ACTUAL]

• I went to see them to review his IEP.

went [Movement.Transport-Person, ACTUAL]
see [Contact.Meet, OTHER]

Frequently, sentences which contain taggable events also contain other events which are not of a taggable type. In the following examples, taggable events are indicated in **bold** and non-taggable events are indicated with strike through:

- An officer witnessed the attack. [Conflict.Attack, ACTUAL]
- Protesters interrupted their meeting. [Contact.Meet, ACTUAL]
- He heard about the assassination. [Life.Die, ACTUAL]

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

4.5 Distinguishing between Multiple Separate Events and Multi-Word Single Events

Sentences containing multiple events (some tagged and others not tagged) should be distinguished from sentences containing multiple words in the maximum extent of a single event nugget.

Sometimes, tests are unnecessary and the decision can be made using reasons described in Sections 4.1 through 4.3 above. For example:

- An officer witnessed an attack. [Conflict.Attack, ACTUAL]
- An officer carried out an attack. [Conflict.Attack, ACTUAL]
- His lawyer should contest the lawsuit. [Justice.Sue, ACTUAL]
- His lawyer should <u>file a lawsuit</u>. [Justice.Sue, OTHER]

These examples show the difference between two separate events ("witness" and "attack", "contest" and "lawsuit") and a verb+noun where the verb expresses the "doing" of the noun event ("carried out attack" and "file lawsuit").

There are plenty of cases where it is unclear whether the main verb is (a) part of the maximum extent of one semantically meaningful unit for the event picked out by the noun (or adjective); or (b) a separate, taggable event (an event which is an example of a taggable event type/subtype). For example:

- A Palestinian worker was <u>thrown in jail</u> in the Gaza Strip. (1 event) thrown in jail [Justice.Arrest-Jail, ACTUAL]
- A Palestinian worker was shot dead in the Gaza Strip (2 events)
 shot [Conflict.Attack, ACTUAL]
 dead [Life.Die, ACTUAL]

In the first sentence, the verb+noun are describing the same Arrest-Jail event. In the second sentence, "shot" is an Attack event which causes the resultative state of "dead."

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

- 1. Do both "possible events" have the same type/subtype? If not the same, then annotate two separate events.
- 2. Is the entity doing one "possible event" the same as the entity doing the other? If not the same, then annotate two separate events.
- 3. Is one "possible event" is a component part of the other. If so, then annotate two separate events.

4. Did one "possible event" cause the other event? If so, we annotate two separate events.

Multi-Word Event Nugget / Multiple Events Case Studies

Here are some examples that exhibit the problem described above. Care should be taken in annotating examples such as these.

CASE STUDY 1. "leave dead" and "shoot dead"

- Kennedy was shot dead by Oswald.
 shot [Conflict.Attack, ACTUAL]
 dead [Life.Die, ACTUAL]
- The hurricane left 20 dead. [Life.Die, ACTUAL]

The first sentence above will have two separate events tagged ("shot" = Conflict.Attack; "dead" = Life.Die) because "dead" is the resultative state brought about by the shooting event; whereas the second example will only have a single event tagged because *left* is not a taggable event, but it causes the resultative state of "dead" (Life.Die).

CASE STUDY 2. "imposed sentence" vs. "sentenced"

- The judge <u>imposed</u> a <u>death sentence</u> yesterday.
 impose sentence [Justice.Sentence, ACTUAL]
- The judge sentenced him to death yesterday.
 sentenced [Justice.Sentence, ACTUAL]

The first sentence above has a verb+noun to describe one Justice. Sentence event. The verb "imposed" cannot be easily teased apart from the noun "sentence". They describe the performance of the same Justice. Sentence event being done by the same entity. The definition of Justice. Sentence is "whenever the punishment for the defendant is issued by a state actor." The type of punishment is not important for the definition and does not need to be tagged in the Sentence event.

In the second sentence above, a different syntactic surface structure - "sentenced to death" - is used to express the same meaning as "imposed a death sentence". In the second sentence, there is only one verb to tag ("sentenced") as a Justice. Sentence event. The sentencing happened in the past, thus is REALIS ACTUAL. As in the first example, "death" is describing the type of "sentence", and as a modifier does not need to be tagged.

CASE STUDY 3. "executed" vs "carried out a death sentence"

- He was executed today. [Justice.Execute, ACTUAL]
- His <u>death sentence</u> was <u>carried out</u> today.
 death sentence carried out [Justice.Execute, ACTUAL]

The first sentence above is a straight-forward, main verb Justice. Execute event in the passive without an expressed agent. (Active form would be "Someone executed him today.") The second sentence expresses the same meaning with a different syntactic surface structure. In the second sentence, the verb+noun "carry out"+"death sentence" means "execute" from the definition of Justice. Execute. (Refer to Section 5.8.9 Justice. Execute.) Only one event is tagged here on the maximum extent of the event nugget.

4.6 Tagging Multiple Words in a Single Event Nugget

A multi-word single event nugget has two or more words in its maximum extent which contribute to a meaning corresponding to a designated type/subtype. In the vast majority of cases, this meaning is based on the literal meanings of the words themselves. Less often a multi-word event has a figurative meaning not deducible from the meaning of the individual words (e.g. idioms, slang, sayings, etc.). Tagging of idioms and other expressions with figurative meanings is discussed in Section 4.9. The remainder of this section will detail tagging the maximum extent of multi-word event nuggets with literal meanings.

When the maximum extent of an event nugget includes multiple words contributing to the literal meaning, only those content words that contribute to the meaning of the event should be tagged. Modifiers are **NOT** typically tagged. Examples of modifiers **NOT** typically tagged are: determiners ("the", "a"), possessive pronouns ("their", "your"), reflexive pronouns ("himself"), quantifiers ("all", "none"), other modifiers (adjectives), and objects of verbs which do not contribute to the type/subtype meaning.

Example of tagging content words in maximum extent of event nuggets:

 If she has not already <u>served</u> all her <u>time</u> in AZ, they will then <u>ship</u> her back there to <u>do THAT time</u>.

serve time [Justice.Arrest-Jail, OTHER]
ship [Movement.Transport-Person, OTHER]
do time [Justice.Arrest-Jail, OTHER]

In the example above, for the first multi-word single event nugget "served all her time," "serve" and "time" are tagged to meet the definition of Arrest-Jail. The quantifier "all" and possessive pronoun "her" are not tagged, since they do not contribute to meeting the

definition. In the second multi-word event nugget - "do that time" - "do" means "serve", so "serve time" is tagged. The modifier "that" is not tagged, since it is not necessary to meet the definition.

Direct objects are not usually tagged:

• Also, you can call someone to come pick you up when you leave.

```
call [Contact.Communicate, GENERIC]

come [Movement.Transport-Person, GENERIC]

pick up [Movement.Transport-Person, GENERIC]

leave [Movement.Transport-Person, GENERIC]
```

In the example above, the direct object "you" is not tagged in the verb+particle construction "pick up".

Some multi-word event nuggets include prepositions which contribute content their meaning. In the following example, "their" does not add to the meaning of "lose job", but "to" does add to the meaning of "go to jail".

And people <u>lose their jobs</u> when they <u>go to jail</u>, right?
 lose jobs [Personnel.End-Position, GENERIC]
 go to jail [Justice.Arrest-Jail, GENERIC]

To decide if a word should be tagged as part of a multi-word event nugget, try replacing it with a similar word to see if the type/subtype would become unclear or otherwise change. For example, if you replace "their" with "his" in "lose their jobs", it would still be a Personnel.End-Position event. Therefore "their" should not be tagged as part of the multi-word event nugget "lose job". However, if you replace "to" in "go to jail" with "from", as in "go from jail", it would no longer be a Justice.Arrest-Jail event, but would change to Justice.Release-Parole event or a Movement.Transport-Person event, depending on the context. Therefore, "to" is an important element of the meaning of "go to jail" and all three words should be tagged as part of the multi-word event nugget.

4.7 Noun Phrases

In this section, we discuss how to annotate the phrases that consist of multiple nouns. The common structure of noun phrases is described in the form of Modifying Noun + Main Noun. Noun phrases can contain more than one modifying noun.

We can categorize noun phrases into the following types: (1) Taggable modifying noun + Non-taggable main noun (e.g., "murder weapon"), (2) Non-taggable modifying noun + Taggable main noun (e.g., "rocket attack"), (3) Taggable modifying noun + Taggable main noun with different types/subtypes (e.g., "war meeting"), (4) Taggable modifying noun + Taggable main noun with the same type/subtype (e.g., "bombing attack"), (5) Taggable modifying noun + "empty" main noun (e.g., "murder incident"), and (6) More than one modifying noun + main noun. Taggable nouns refer to the nouns that meet the definitions of 33 event types/subtypes. We explain how to tag these 6 types of noun phrases below, with examples.

1. Taggable modifying noun + Non-Taggable main noun (e.g., "murder weapon")

In this type of noun phrase, we only annotate taggable modifying nouns, not the untaggable main noun. Examples of noun phrases that fall in this category are:

- murder weapon [Life.Die]
- **meeting** times [Contact.Meet]
- **protest** camp [Conflict.Demonstrate]
- **bankruptcy** procedure [Business.Declare-Bankruptcy]

The REALIS of these modifying nouns depends on the meaning of each noun in context. If the noun refers to an atomic event, it should be ACTUAL. If the noun refers to a general event with an agent of a set of unspecified members, it should be GENERIC. Otherwise, it should be OTHER. Determining REALIS of taggable modifying nouns with an untaggable main noun are discussed in detail in Section 3.4.

2. Non-taggable noun + Taggable main noun (e.g., "rocket attack")

In this type of noun phrase, we only annotate a head noun that is taggable. The examples that fall in this type are:

- rocket attack [Conflict.Attack]
- teacher **strike** [Conflict.Demonstrate]
- board **meeting** [Contact.Meet]

REALIS is determined by the use of the main noun in context. See Section 3.3 for discussion of REALIS.

3. Taggable modifying noun + Taggable main noun of different types/subtypes (e.g., "war meeting")

In this type of noun phrase, we tag each noun separately. An example is:

war meeting

war [Conflict.Attack] meeting [Contact.Meet]

4. Taggable modifying noun + Taggable main noun with the same type/subtype (e.g., "bombing attack")

In this type of noun phrase, we tag both nouns together. An example is:

• **bombing attack** [Conflict.Attack]

REALIS is determined by the use of the phrase in context. Since both nouns are referring to the same event, they will have the same REALIS. See Section 3.3 for details about determining REALIS.

5. Noun phrases with "empty" main noun (e.g., "murder incident")

In this task, "empty" nouns refer to nouns that do not semantically carry specific meaning without a noun or phrase that modifies them. When noun phrases consist of empty main nouns and taggable modifying nouns, we will annotate the entire phrase as one event nugget. The modifiers of empty nouns will determine the event types/subtypes for those phrases and the main noun will determine the REALIS.

The table below lists some "empty" main nouns modified by taggable nouns and their types/subtypes.

Empty nouns	Examples	Event types/subtypes
act	act of terrorism	[Conflict.Attack]
action	terrorist action*	[Conflict.Attack]
activity	terrorist activity*	[Conflict.Attack]
	bombing activity	[Conflict.Attack]
affair	transportation affairs	[Movement.Transport-Person]
event	wedding event	[Life.Marry]
	fundraising event	[Transaction.Transfer-Money]
incident	murder incident	[Life.Die]

^{*} The word "terrorist" is not an event, but it modifies the empty nouns ("act", "action") and creates events ("terrorist action", "terrorist activity") that meet the definition of event type/subtype (Conflict.Attack). Thus, we tag the word "terrorist" with the accompanying empty noun as a single event nugget.

NOTE: The word "attempt" is not considered an empty noun, because it refers to an act of achieving something.

- assassination attempt [Life.Die]
- rescue attempt --- not taggable

We only annotate the modifiers that meet the definition of a type/subtype.

6. Noun phrases with more than two nouns (e.g., "transportation cost reimbursement")

There are some cases where noun phrases consist of more than two events. In those phrases, we will annotate all taggable nouns. Here are the examples.

- transportation cost reimbursement transportation [Movement.Transport-Person] reimbursement [Transaction.Transfer-Money]
- cancer **mortality** rate [Life.Die]

BASIC RULES FOR ANNOTATING NOUN-PHRASES

- Annotate taggable nouns. They will be either head nouns or modifiers.
- If noun phrases consist of empty nouns and modifying nouns that are taggable, annotate entire phrases as single event nuggets. The modifiers determine event types/subtypes for the noun phrases. The use of the main noun in context determines the REALIS.
- When modifier and main noun both refer to the same event, tag them as together as one event nugget.
- When modifier and main noun refer to different events (different types/subtypes), tag them separately as two event nuggets.

4.8 Proper Nouns

A proper noun is a type of noun that refers to a specific entity (e.g. *Pittsburgh* or *Carnegie Mellon University*) rather than a common noun that refers to a general class of entities (e.g. *city* or *university*). Proper nouns of designated types/subtypes will be tagged in this task. All words in the proper noun will be tagged as part of the maximum extent of the event nugget. For example,

 The three-day <u>World Media Summit</u> provided a good opportunity for world media organizations to <u>exchange</u> views on shared issues, said a director of Brazil's Folha group on Monday. Chinese President Hu Jintao delivered a keynote speech at the <u>summit</u>, calling on world media organizations to promote "true, correct, comprehensive and objective communication of information."

World Media Summit [Contact.Meet, Actual] exchange [Contact.Meet, Other] summit [Contact.Meet, Actual]

In this example, "World Media Summit" is a proper noun for a specific instance of a Contact.Meet event. Later the common noun "summit" is used to refer to the same specific instance. Both of these are tagged with Contact.Meet. Contact events are two-way communications between two or more agents. A summit is an organized event to facilitate two-way communication, as are meetings and conferences. These types of organized events are tagged as Contact events since they meet the definition. An exposition is a different type of organized event to facilitate the exhibition of art or trade goods, as are exhibitions, fairs, and trade shows. These types of events are not Contact events and do not meet the definition of any other types/subtypes and are thus not taggable.

In some cases, proper nouns can be used as noun modifiers in noun phrases where the main noun is not taggable. As is the case with noun modifiers that are common nouns (see Section 3.4), only the event nuggets of designated type/subtype are tagged. For example,

• Yet again I notice that the media see gays as "invisible" when it comes to **Holocaust** Day. The **Holocaust** of the Jews and Zigeuner was motivated by racial prejudices."

Holocaust [Life.Die, Actual] **Holocaust** [Life.Die, Actual]

In the first use of "Holocaust" is tagged even though the main noun "Day" is not taggable.

4.9 Idioms and other Figurative Language

Figurative language is using words to express meanings different from the literal meaning of the words. Such figurative language includes idioms, metaphors, metonyms, slang, euphemisms, and fictional events. While figurative language is more common in informal language, such as is found in discussion forums, it is also present in formal language, such as found in newspaper articles. For this task, we will tag the words in the maximum extent of an event nugget when the figurative meaning is of a designated type/subtype, and we will also assign an appropriate REALIS according to the context. As with non-figurative usage, tag as many words in one event nugget as are required to meet the definition of the type/subtype.

• I **got** into town on Saturday, we spent the day together. He slipped into a coma early Sunday and was **gone** by Monday morning. I've always felt that he was in control until the end and **checked out** like that, so quickly, because he chose to.

got [Movement.Transport-Person, ACTUAL]
gone [Life.Die, ACTUAL]
checked out [Life.Die, ACTUAL]

In the example above, "checked out" means "die", so it is tagged as a Life.Die event.

 He has <u>cleaned out</u> the bank account, so there isn't enough to cover the direct debits and nothing for food at all, just don't know what to do now..." cleaned out [Transaction.Transfer-Money, ACTUAL]
cover [Transaction.Transfer-Money, OTHER]
debits [Transaction.Transfer-Money, ACTUAL]

In the example above, "cleaned out" means to "transfer money out of" and is tagged as a Transaction. Transfer-Money event.

They will then ship her back there to <u>do THAT time</u>.
 ship [Movement.Transport-Person, OTHER]
 do time [Justice.Arrest-Jail, OTHER]

In the above example, "do time" means "serve time", so is tagged as a Justice. Arrest-Jail event.

 For the month that she was here she was helpful while I was away and for about 2 or 3 days after I got back... and then she phoned it in and we had to clean up after her more than the kids!"

got back [Movement.Transport-Person, ACTUAL] *phoned in* is NOT a Contact.Communicate event

Fundamentally, choosing not to vote is actually a vote for the other side. If you choose
not to vote, then you choose to give your opponents all the power. If one slices off one's
nose to spite their face, then nobody should be surprised about their complaints of
bleeding.

slice off is NOT a Life.Injure event

 He called for dialogue with terrorists, saying, "One must talk to the devil, if it brings about a solution."

> **dialogue** [Contact.Communicate, OTHER] *talk* is NOT a Contact.Meet NOR a Contact.Communicate event

The maximum extent of the event nugget should include all the words required to match the meaning of the type/subtype. For example, if you "close down a business" only the phrase "close down" needs to be tagged as a Business. End-Org event. However, "business" does need to be included to meet the type/subtype requirements in the example below.

• Many companies went out of business during the economic recession.

went out of business [Business.End-Org, ACTUAL]

The verb "go out of" usually means to leave some place. When "go out of" is combined with "business", "go out of business" has a meaning of Business. End-Org. So in the example above the maximum extent of the event nugget includes "business".

5 Event Types and Subtypes

Annotating event nuggets will be limited to the types/subtypes defined in the table below. To annotate event nuggets, annotators should tag the maximum extent of an event that could map to one of the event types. Each event nugget could have its own potential arguments, and sometimes these could help determine some of the types/subtypes and REALIS. Event arguments are further specified by entity types: PER (Person), ORG (Organization), GPE (Geopolitical Entity), LOC (Location), TTL (Job Title), or MONEY (Money).

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

TYPE	SUBTYPE	TYPE	SUBTYPE
Life	Be-Born	Transaction	Transfer-Ownership
Life	Marry	Transaction	Transfer-Money
Life	Divorce	Justice	Arrest-Jail
Life	Injure	Justice	Release-Parole
Life	Die	Justice	Trail-Hearing
Movement	Transport-Person	Justice	Charge-Indict
Business	Start-Org	Justice	Sue
Business	End-Org	Justice	Convict
Business	Declare-Bankruptcy	Justice	Sentence
Business	Merge-Org	Justice	Fine
Conflict	Demonstrate	Justice	Execute
Conflict	Attack	Justice	Acquit
Contact	Meet	Justice	Appeal
Contact	Communicate	Justice	Pardon
Personnel	Start-Position		
Personnel	End-Position		
Personnel	Nominate		
Personnel	Elect		

¹ Entity types are based on the taxonomy developed for ACE 2005.

-

5.1 Life Events

5.1.1 Life.BE-BORN

A BE-BORN event occurs whenever a PERSON Entity is given a birth to. 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	[john robert bond] was born in england.
Place-Arg	GPE LOC	Where the birth takes place	john robert bond was born in [england] .

Examples of Life.BE-BORN events:

- Jane Doe was **born** in Casper, Wyoming on March 18, 1964. [Life.Be-Born, ACTUAL]
- For me, it's not difficult, because I was **born** without my hand, and I've never known any different. [Life.Be-Born, ACTUAL]
- Ali Mohamed, a native of Egypt, has admitted to five **charges** of conspiring with a Saudi**born** dissident Osama bin Ladin to **attack** U.S. targets in the Middle-East.

charges [Justice.Charge-Indict, ACTUAL]
born [Life.Be-Born, ACTUAL]

attack [Conflict.Attack, OTHER]

• Since 1991 the **stillbirth** (fetal **death**) rates in Canada have been fluctuating 6.0 around per 1000 **birth**.

stillbirth [Life.Die, GENERIC]

death [Life.Die, GENERIC]

birth [Life.Be-Born, GENERIC]

NOTE: We assign GENERIC when taggable event nuggets appear in statistics or demographic information.

• But he wanted to see his grandson be **born**. [Life.Be-Born, OTHER]

5.1.2 Life.MARRY

MARRY events are official events where two people get married under the legal definition. MARRY events refer to an act of getting married. A state of being married is also considered a MARRY event.

Person- Arg	PER	The people who are married	[James] recruited her as an informant in 1983, then married [her] two years later.
Place-Arg	GPE LOC	Where the marriage takes place	We were married in [Spain]

Examples of Life.MARRY events:

- Jane and John are **married**. [Life.Marry, ACTUAL]
- Their wedding last week attracted worldwide media attention. [Life.Marry, ACTUAL]
- Residents were able to register their marriages. [Life.Marry, ACTUAL]
- In 1927 she wedded William Gresser, a New York lawyer and musicologist. [Life.Marry, ACTUAL]
- But what I'd have gone for in your situation would be a registry office **wedding** with two witnesses. [Life.Marry, OTHER]
- I think it's quite sad that there's such a huge "wedding industry" these days and most people seems to feel the ONLY way to get married is to have a massively expensive party for dozens of people.

wedding [Life.Marry, GENERIC] married [Life.Marry, GENERIC]]

5.1.3 Life.DIVORCE

A DIVORCE event occurs whenever two people get officially divorced under the legal definition of divorce. We do not include separations or church annulments. DIVORCE events include an act of getting divorced and a state of being divorced.

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

Examples of Life.DIVORCE events:

- John is a **divorced** father of three. [Life.Divorce, ACTUAL]
- But the Simpson **trial** and the jury's findings marked a turning point in the career of the twice-**divorced** mother of two.

trial [Justice.Trial-Hearing, ACTUAL] **divorced** [Life.Divorce, ACTUAL]

- The couple **divorced** four years later. [Life.Divorce, ACTUAL]
- But what I'd have gone for in your situation would be a registry office **wedding** with two witnesses and a party in the evening. [Life.Marry, OTHER]
- She wrote an article about a **divorce** support group, ending it with something about Mrs. B being happily married ...

divorced [Life.Divorce, GENERIC]

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.

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

Place-Arg	GPE LOC	Where the injuring takes place	Two Palestinians were killed as they staged a drive-by ambush on an Israeli jeep in [the Gaza Strip near the Israeli settlement of Gush Katif] Saturday afternoon, and two Israeli soldiers were wounded, one critically.
Time-Arg		Date the injuring takes place	Two Palestinians were killed as they staged a drive-by ambush on an Israeli jeep in the Gaza Strip near the Israeli settlement of Gush Katif [Saturday afternoon], and two Israeli soldiers were wounded, one critically.

NOTE: For events where a single common event nugget 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.

For example in:

• They were **shot** on the battlefield. [Life.Injure, ACTUAL]

This rule will not apply when there are two separate event nuggets.

For example in:

• Three protesters were **shot dead.**

there are two events:

Ev1: *shot* [Conflict.Attack, ACTUAL]

Ev2: dead [Life.Die, ACTUAL]

NOTE: INJURE events are **not** annotated for medical conditions that develop over time (e.g., "a brain tumor"), for injuries themselves (e.g., "the cuts", "the wounds"), or for medical treatments that follow INJURE events (e.g., "hospitalization," "surgery," "rehabilitation").

Examples of Life.INJURE events:

- The **injured** soldiers ... [Life.Injure, ACTUAL]
- Two soldiers were wounded in the attack.

wounded [Life.Injure, ACTUAL] attack [Conflict.Attack, ACTUAL]

- She was badly **hurt** in an automobile accident. [Life.Injure, ACTUAL]
- Auto insurance usually covers medical costs for people who are wounded in car accidents.

wounded [Life.Injure, GENERIC]

• All the talk about her being so good looking... She's a 5 ... You're a 10. not to mention you never **hurt** anyone. [Life.Injure, OTHER]

5.1.5 Life.DIE

A DIE event occurs whenever the life of a PERSON Entity ends except the context of capital punishment. DIE events can be accidental, intentional, or self-inflicted. DIE events also include a state of being dead, that is, a resultative state caused by a PERSON's death. Note that we will annotate "death" as a Justice. Execute event when the life of a person is taken by a state actor according to the decision of a court. (See Section 5.8.9.)

Agent-Arg	PER ORG GPE	The attacking agent / The killer	Canadian authorities arrested [two Vancouver-area men] on Friday and charged them in the deaths of 329 passengers and crew members of an Air-India Boeing 747 that blew up over the Irish Sea in 1985, en route from Canada to
			London.

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

NOTE: For events where a single common event nugget is ambiguous between the types LIFE (i.e., INJURE and DIE) and CONFLICT (i.e., ATTACK), we will only annotate the events as a LIFE event. Such event nuggets include: murder, assassinate, etc.

For example in:

• They were **assassinated** in their homes. [Life.Die, ACTUAL]

This rule will not apply when there are two separate event nuggets.

For example in:

• Three Palestinians were **shot dead**.

there are two events:

Ev1: **shot** [Conflict.Attack, ACTUAL] Ev2: **dead** [Life.DIE, ACTUAL]

Examples of Life.DIE events:

- The **slain** leader ... [Life.Die, ACTUAL]
- The **fetal** accident ... [Life.Die, ACTUAL]
- The late Pope John Paul II ... [Life.Die, ACTUAL]
- She was **killed** in an automobile accident. [Life.Die, ACTUAL]
- The commander of Israel troops in the West Bank said there was a simple goal to the helicopter assassination on Thursday of a gun-wielding local Palestinian leader. [Life.Die, ACTUAL]
- Once again, I'm not diminishing the horror of any individual **murder**, just trying to get it into perspective. [Life.Die, GENERIC]
- "I have almost given up hope," he **told** a doctor in 2008, medical records show. "I should have **died** in Iraq."

told [Contact.Meet, ACTUAL]
died [Life.Die, OTHER]

5.2 Movement Events

There is only one subtype of Movement event: TRANSPORT-PERSON.

5.2.1 Movement.TRANSPORT-PERSON

A TRANSPORT-PERSON event occurs whenever a PERSON moves or is moved from one PLACE (GPE, LOC) to another. The movement may also occur through or within one LOC or GPE.

Agent-Arg	PER ORG GPE	The agent responsible for the transport event.	Israel had to remove [its] soldiers from the outskirts of Palestinian cities.
Person-Arg	PER	The person doing the traveling	Israel had to remove [its soldiers] from the outskirts of Palestinian cities.

Origin-Arg	GPE LOC	Where the transporting originated	Israel had to remove its soldiers from [the outskirts of Palestinian cities] .
Destination- Arg	GPE LOC	Where the transporting is directed	

The following are important characteristics of TRANSPORT-PERSON events:

- 1. 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.
- 2. Either the origin or destination does not need to be explicit somewhere in the document for a TRANSPORT-PERSON event to be taggable.
- 3. We will only tag TRANSPORT-PERSON events when the movement is explicitly indicated.
- 4. EXTRADITE and MEET events are treated independently as their own type. EXTRADITE examples should be clear from context (see Section 5.8.10 below).
- 5. When the object/destination of a "visit" event is a LOC/GPE entity, it is tagged as 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). For example:
 - Fred visited [New York] on Friday. [Movement.Transport-Person, ACTUAL]
 - Fred visited [Harry] in New York on Friday. [Contact.Meet, ACTUAL]

Example of Movement. Transport-Person events:

- Zone escaped the incident with minor injuries, and Kimes was moved to the prison's disciplinary housing unit, the authorities said. [Movement.Transport-Person, ACTUAL]
- Roosevelt and his family immediately departed for Buffalo. [Movement.Transport-Person, ACTUAL]
- Flying can be very expensive for large families. [Movement.Transport-Person, GENERIC]
- Mr. Erekat is due to **travel** to Washington to **meet** with U.S. Secretary of State Madeleine Albright and other U.S. officials attempting to win a ceasefire.

travel [Movement.Transport-Person, OTHER]
meet [Contact.Meet, OTHER]

5.3 Business Events

Business Event types are not limited to events affecting business or trading entities, but are applicable to all organizations—to all starting, merging, bankruptcy, and ending events for all types of organization (ORG) entities—e.g., governmental, political, non-profit, social, etc.

5.3.1 Business.START-ORG

A START-ORG event occurs whenever a new ORGANIZATION is created.

Agent-Arg	PER ORG GPE	The agent responsible for the START-ORG event (the 'founder')	[British Airways PLC] plans to sell Go, its profitable cut-price subsidiary launched two years ago, the company said Monday.
Org-Arg	ORG	The ORGANIZATION that is started	British Airways PLC plans to sell [Go, its profitable cut-price subsidiary] launched two years ago, the company said Monday.
Time-Arg		Date the event takes place	British Airways PLC plans to sell Go, its profitable cut-price subsidiary launched [two years ago], the company said Monday.

The following are the important characteristics of Start-Org events:

- 1. 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-ORG event. The establishment of or independence of GPEs will not be considered a START-ORG event, however.
- 2. Although we do not usually annotate aspectual words in this task, we will mark aspectual verbs when they appear with a noun to describe a Start-Org event. (e.g., "start a company"). See Exception to Aspectual Rule in Section 4.1.

Examples of Business.Start-Org events:

• Joseph Conrad Parkhurst, who **founded** the motorcycle magazine Cycle World in 1962, has **died**.

founded [Business.Start-Org, ACTUAL]
died [Life.Die, ACTUAL]

- Workers have **organized** this union. [Business.Start-Org, ACTUAL]
- Nowadays there are more and more young people who <u>start an Internet-related</u> venture **business** while still at college.

start business [Business.Start-Org, GENERIC]

• I think we all agree that monopolies aren't to our benefit generally, but as to whether

or not a **merger** would have <u>created</u> a too <u>powerful</u> combine in communications I cannot say.

merger [Business.Merge, OTHER]
created combine [Business.Start-Org, OTHER]
communications [Contact.Communicate, GENERIC]

5.3.2 Business.MERGE-ORG

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

Org-Arg	ORG	The ORGANIZATIONS that are merged	[Parkhurst] later merged with another [company] that owned Road & Track to become Bond/Parkhurst
			Publishing.

NOTE: Buying an organization (or a company) is a Transaction. Transfer-Ownership event. (See Section 5.7.1.) It is not a Business. Merge-Org event.

Examples of Business.MERGE-ORG events:

- The newly merged company ... [Business.Merge-Org, ACTUAL]
- The drug companies passed the final regulatory hurdle to their \$72 billion merger, and created the world's largest pharmaceutical company.

merger [Business.Merge-Org, ACTUAL] created company [Business.Start-Org, ACTUAL]

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

consolidated [Business.Merge-Org, ACTUAL]
attacks [Conflict.Attack, GENERIC]

- This law firm specializes in business law which deals with mergers. [Business.Merge-Org, GENERIC]
- I wondered if **merging** one crappy service provider with another crappy service provider would result in a doubly-crappy service provider. [Business.Merge, OTHER]

5.3.3 Business.DECLARE-BANKRUPTCY

A DECLARE-BANKRUPTCY event will occur whenever an Entity officially requests legal protection from debt collection due to a negative balance sheet. DECLARE-BANKRUPTCY events also include a resultative state caused by filing for bankruptcy.

Org-Arg	ORG PER GPE	The ORGANIZATION declaring bankruptcy	[Orange County] declared bankruptcy in 1995.
Time- Arg		Date the declaration takes place	Orange County declared bankruptcy in [1995].

Examples of Business.DECLARE-BANKRUPTCY events:

- The bankrupt MCI-Worldcom ... [Business.Declare-Bankruptcy, ACTUAL]
- Orange County had previously <u>filed Chapter 11</u> in 1995. [Business.Declare-Bankruptcy, ACTUAL]
- In February, Japanese wireless carrier Willcom Inc. <u>declared bankruptcy</u> with debts of 206 billion yen (2.3 billion dollars).

declared bankruptcy [Business.Declare-Bankruptcy, ACTUAL]

• If your family decided to <u>file bankruptcy</u>, we will be here to help you during the process.

file bankruptcy [Business.Declare-Bankruptcy, OTHER]

• The amount of **debt incurred** by companies **going bankrupt** was also 64.2 percent, smaller than that for the same month in 2009.

debt incurred [Transaction.Transfer-Money, GENERIC] **going bankrupt** [Business.Declare-Bankruptcy, GENERIC]

NOTE: We assign GENERIC when taggable event nugget appear in statistics or demographic information.

5.3.4 Business.END-ORG

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

Org-Arg	ORG	The ORGANIZATION that is	[The Serb Parliament]
		ended	has agreed to dissolve .

Notes for annotating Business. End-Org events:

- A temporary closure of an Organization or their facilities will not be annotated as END-ORG events. Annotators will need to use their judgment when determining whether the closure is intended to be permanent or not.
- 2. Although we do not usually annotate aspectual words in this task, we will mark aspectual verbs when they appear with a noun to describe an End-Org event. (e.g., "end a business"). See **Exception to Aspectual Rule** in Section 4.1.

Examples of Business.END-ORG events:

- The company **folded** in 2002. [Business.End-Org, ACTUAL]
- Telecommunication giant AT&T was <u>broken up</u> in the 1980s. [Business.End-Org, ACTUAL]
- Starbucks causes local coffee shops to **go out of business**. [Business.End-Org, GENERIC]
- Your T-Mobile is going to be **bought** by someone or **go out of business** completely by the end of next year, so you are not going to get to keep "your" T-Mobile anyway.

bought [Transaction.Transfer-Ownership, OTHER] **go out of business** [Business.End-Org, OTHER]

 Many small businesses will have to <u>close down</u> (alcohol related). [Business.End-Org, OTHER]

5.4 Conflict Events

5.4.1 Conflict.ATTACK

An ATTACK event is defined as a violent physical act causing harm or damage that occurs in the contexts of attacks, and political and personal conflicts. 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 also includes less specific violence-related nouns such as 'conflict', 'clashes', and 'fighting'. A 'coup' is considered kind of ATTACK (and so is a 'war').

Attacker-Arg	PER ORG GPE	The attacking/instigating agent	A number of [demonstrators] threw stones and empty bottles at Israeli soldiers positioned near a Jewish holy site at the town's entrance.
Target-Arg	PER ORG	The target of the attack (including unintended targets)	A number of demonstrators threw stones and empty bottles at [Israeli soldiers] positioned near a Jewish holy site at the town's entrance.

bottles at Israeli soldiers positioned near [a Jewish holy site at the town's entrance].
--

NOTE: For events where a single common event nugget 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.

For example:

• Some of the soldiers were **hit** by the enemy's combat vehicle on the way to their base camp. [Life.Injure, ACTUAL]

The above rule will not apply when there are two separate event nuggets. For example in:

• Three Palestinians were **shot dead**.

there are two events:

Ev1: **shot** (Conflict.Attack, ACTUAL)

Ev2: **dead** (Life.Die, ACTUAL)

Additional notes for annotating Conflict. Attack events:

- 1. The generic concepts typically represented by the strings 'terrorism' and 'terrorist activities' will be taggable as ATTACK events. However, those represented by the string 'military operations' will not.
- 2. The resulting damage caused by an *ATTACK* event is not itself taggable as an *ATTACK* event.
- 3. Cyber attacks, such as hacking, are not taggable as Conflict.ATTACK events in the present task.

Examples of Conflict.ATTACK events:

- Sunday night's clashes ... [Conflict.Attack, ACTUAL]
- A car bomb **exploded** in central Baghdad. [Conflict.Attack, ACTUAL]
- His remarks come after a spate of bloody school **attacks** around China since late March which have left 17 people **dead**, including 15 students, and scores **injured**.

attacks [Conflict.Attack, ACTUAL]

dead [Life.Die, ACTUAL]
injured [Life.Die, ACTUAL]

• Israel retaliated with rocket **attacks** and terrorists **blew** a hole in a United States warship in Yemen.

attacks [Conflict.Attack, ACTUAL]
blew [Conflict.Attack, ACTUAL]

• In late April, a former doctor who **stabbed** eight schoolchildren to **death** in a March school **attack** was **executed**.

stabbed [Conflict.Attack, ACTUAL]
death [Life.Die, ACTUAL]
attack [Conflict.Attack, ACTUAL]
executed [Justice.Execute, ACTUAL]

 Gadhafi, who was long accused of sponsoring terrorism, got tepid applause from the Italian lawmakers he addressed on the second day of a trip to Italy, Libya's former colonial ruler.

terrorism [Conflict.Attack, GENERIC]
trip [Movement.Transport-Person, ACTUAL]

A complaint says that Khan gave \$4,900 to Faisal Shahzad, of Bridgeport,
 Connecticut, who was later convicted in the bombing attempt.

gave [Transaction.Transfer-Money, ACTUAL]
convicted [Justice.Convict, ACTUAL]
bombing [Conflict.Attack, OTHER]

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.

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

Examples of Conflict.DEMONSTRATE events:

- The **rioting** crowd ... [Conflict.Demonstrate, ACTUAL]
- The union began its **strike** on Monday. [Conflict.Demonstrate, ACTUAL]
- A crowd of 1 million **demonstrated** Saturday in the capital, San'a, **protesting** against Israel, the United States and Arab leaders regarded as too soft on Israel.

demonstrated [Conflict.Demonstrate, ACTUAL] **protesting** [Conflict.Demonstrate, ACTUAL]

 In Ramallah, around 500 people took to the town's streets chanting slogans denouncing the summit

took to the streets [Conflict.Demonstrate, ACTUAL]
summit [Contact.Meet, ACTUAL]

 A spokesman for Johnson said the mayor respected the right to demonstrate but the protest caused "considerable damage" to the square.

demonstrate [Conflict.Demonstrate, GENERIC]
protest [Conflict.Demonstrate, ACTUAL]

• He also said the presence of the **protest** camp had "prevented (the square's) peaceful use by other Londoners, including those who may have wished to conduct an authorized **protest**."

protest [Conflict.Demonstrate, GENERIC]
protest [Conflict.Demonstrate, OTHER]

5.5 Contact events

The Contact.MEET and Contact.COMMUNICATE event subtypes cover two-way communication, both done in-person face-to-face and done through communication media other messaging methods, such as discussion forums, texts, letters, etc. Fundamentally one-way communication methods, with no expectation of direct response, such as announcements, orders, blog postings, commands, lectures, speeches, etc., will be considered outside of scope for Contact-type events, including all news media-related communication - interviews, publicizing, comments to reporters, etc.

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, at an explicitly understood location.

The main difference in annotating Contact. Meet events between this task and ACE/ERE is that we annotate all reporting events (e.g., "say", "tell", "talk", etc.) and illocutionary speech acts (e.g., "advise", "ask", "suggest", etc.) when they appear in the context of face-to-face interactions. For example in:

John and Jane met in the cafeteria and discussed their plan to travel to Boston.

met [Contact.Meet, ACTUAL]
discussed [Contact.Meet, ACTUAL]
travel [Movement.Transport-Person, OTHER]

There are two Contact.Meet events (e.g., "met," "discussed") and those events occur in the same face-to-face interaction between John and Jane. We will, therefore, tag "met" and

"discussed" as Contact. Meet events.

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

Notes for annotating Contact.Meet events:

- 1. To qualify as a MEET event, a mention must refer to an occurrence in which it is explicitly made clear that the meeting is physically located somewhere. In other words, the meeting must be known to be face-to-face in order for it to be taggable as a MEET event—otherwise, it must be tagged as COMMUNICATE. A direct consequence is that the following, without any further context indicating location of the Contact event, are not taggable as MEET events:
 - GM is in talks with Chrysler to purchase Jeep.

talks [Contact.Communicate, OTHER]

purchase [Transaction.Transfer-Ownership, OTHER]

• **Talks** are at a standstill, but 4,000 **striking** drivers have promised to respond to the latest management offer, Thursday.

talks [Contact.Communicate, OTHER]

striking [Conflict.Demonstrate, OTHER]

- Bush and Rice conferred closely on the evolving situation.
 [Contact.Communicate, ACTUAL]
- We will annotate all the reporting events and speech acts as Contact. Meet when they occur in the same face-to-face interaction. This is a change from ACE/ERE. For example,
 - I sat him down on the couch and **talked** to him, and **asked** him what had happened. He **said** he'd **asked** for something for pain and they **told** him he couldn't have anything.

talked [Contact.Meet, ACTUAL]

asked [Contact.Meet, ACTUAL]
said [Contact.Meet, ACTUAL]
asked [Contact.Meet, ACTUAL]
told [Contact.Meet, ACTUAL]

Examples of Contact.MEET events:

• Bush and Putin **met** earlier this week to **discuss** Chechnya.

met [Contact.Meet, ACTUAL]
discuss [Contact.Meet, OTHER]

- After attending the meeting, the senator expressed his hope for a resolution.
 [Contact.Meet, ACTUAL]
- Owens complained to Defense Secretary William Cohen, prompting a meeting Friday between the governor and Gen. John Coburn, commander of the Army Material Command.

complained [Contact.Communicate, ACTUAL]
meeting [Contact.Meet, ACTUAL]

- I would call and double check and see when they usually see clients for the first time.
 call [Contact.Communicate, OTHER]
 see [Contact.Meet, GENERIC]
- Today I <u>got a letter</u> from the hospital with an appointment for the 26th of May. got letter [Contact.Communicate, ACTUAL] appointment [Contact.Meet, OTHER]

5.5.2 Contact.COMMUNICATE

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. This type of event also includes communication via Internet channels such as Skype or WebEx. Communication that is explicitly stated to take place in person should be considered a MEET event.

In this task, we will annotate as Contact.Communicate events all reporting events (e.g., "say", "tell", "talk", etc.) and illocutionary speech acts (e.g., "ask", "advise", "suggest", etc.) if they appear in the same context of two-way communication mediated through communication methods. This is a change from ACE/ERE guidelines.

Entity-Arg	PER ORG GPE	The communicating agents	[I] communicate with [international friends] without the hefty phone
			bills.

Notes for annotating Contact.Communicate events:

- 1. 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 COMMUNICATE events.
 - He discreetly **interacted** with his girlfriend. [Contact.Communicate, ACTUAL]
- 2. Italicized words below are not taggable as Contact.Communicate events, because they are news media related or one-way communications.
 - Smith told reporters...
 - Hamas issued a statement that...
 - The group *announced* ...
 - The foreign minister *ordered* all diplomatic personnel out of the war zone.
- 3. We annotate all the reporting events and speech acts as Contact.Communicate when they occur in the same interaction mediated through communication methods. Those reporting event and speech acts are all considered as Contact.Communicate events according to the event types/subtypes developed for this task, since they are two-way communication events mediated through communication devices. For example,
 - OH rang me at 8pm as he does every night and when I told him he had left the back door open he said he hadn't and asked me if anything had gone missing, I mentioned the safe which he said he hadn't moved and we realized we had been burgled and I rang the police

```
rang [Contact.Communicate, ACTUAL]
told [Contact.Communicate, ACTUAL]
said [Contact.Communicate, ACTUAL]
asked [Contact.Communicate, ACTUAL]
mentioned [Contact.Communicate, ACTUAL]
said [Contact.Communicate, ACTUAL]
rang [Contact.Communicate, ACTUAL]
```

- 4. In order to meet the definition of Contact.Communicate events, we will include nouns in the event nuggets as a medium of communication. For example in,
 - I got a card from him. [Contact.Communicate, ACTUAL]
 - I got an email from him. [Contact.Communicate, ACTUAL]
 - I got a message from him. [Contact.Communicate, ACTUAL]

"Got" is a main verb and tagged with nouns (e.g., card, email, and message) as event nuggets. Since "get" has different kinds of meanings, we need nouns to meet the definition of Contact.Communicate events.

Examples of Contact.COMMUNICATE events:

- All three parties discussed the matter in a teleconference Thursday.
 discussed [Contact.Communicate, ACTUAL]
 teleconference [Contact.Communicate, ACTUAL]
- John and Jane Skyped last night. [Contact.Communicate, ACTUAL]
- The Internet is likely to have a great impact on the way we **communicate**. [Contact.Communicate, GENERIC]
- If you don't mind, let's **chat** on Yahoo messenger. [Contact.Communicate, OTHER]

5.6 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 (Job Title) or PER (Person).

For example:

Mary Smith joined Foo Corp. as CEO in June 1998, [Personnel.Start-Position, ACTUAL]

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'.

5.6.1 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.

Person- Arg	PER	the employee	In 1997, the company hired [John D. Idol] to take over as chief executive.
Entity- Arg	ORG GPE	the employer	In 1997, [the company] hired John D. Idol to take over as chief executive.
Position- Arg	TTL PER	The job title for the position being started	In 1997, the company hired John D. Idol to take over as [chief executive].

Time-Arg	Date the employment relationship begins	In [1997], the company hired John D. Idol to take
		over as chief executive.

Notes for annotating Personnel.Start-Position events:

- 1. In general we **will not** annotate large-scale economic trends in employment such as 'job creation'.
- 2. Although we do not usually annotate aspectual words in this task, we will mark aspectual verbs when they appear with a noun to describe a Start-Position event. (e.g., "start," "become"). See **Exception to Aspectual Rule** in Section 4.1.

Examples of Personnel.START-POSITION events:

- Foo Corp. hired Mary Smith in June 1998. [Personnel.Start-Position, ACTUAL]
- Mary Smith joined Foo Corp. in June 1998. [Personnel.Start-Position, ACTUAL]
- Bill Clinton <u>started office</u> on January 20, 1993.
 - **started office** [Personnel.Start-Position, ACTUAL]
- The question of which party controls the Texas Senate is especially important this
 year because the Senate will redraw congressional and legislative districts and could
 elect the next lieutenant governor if Gov. George W. Bush is elected president and is
 succeeded by Lt. Gov. Rick Perry.

elect [Personnel.Elect, OTHER]
elected [Personnel.Elect, OTHER]
succeeded [Personnel.Start-Position, OTHER]

- Google prefers to hire experienced programmers. [Personnel.Start-Position, GENERIC]
- In December, Paterson **pardoned** a soldier whose **conviction** for gun possession had prevented him from **joining** the New York Police Department.

pardoned [Justice.Pardon, ACTUAL]
conviction [Justice.Convict, ACTUAL]
joining [Personnel.Start-Position, OTHER]

5.6.2 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 through term expiration, impeachment, firing or other forms of leaving a position.

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

Notes for annotating Personnel.End-Position events:

- 1. 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".
- 2. Although we do not usually annotate aspectual words in this task, we will mark aspectual verbs when they appear with a noun to describe an End-Position event. (e.g., "job ends"). See **Exception to Aspectual Rule** in Section 4.1.

Examples of Personnel.END-POSITION events:

- Georgia fired football coach Jim Donnan Monday after a disappointing 7-4 season that started with the Bulldogs ranked No. 10 and picked to win the SEC East, his players said. [Personnel.End-Position, ACTUAL]
- Richard Jr. had 14 months, before he was <u>laid off</u> in October. [Personnel.End-Position, ACTUAL]
- And people <u>lose their jobs</u> when they <u>go to jail</u>, right? lose jobs [Personnel.End-Position, GENERIC] go to jail [Justice.Arrest-Jail, GENERIC]
- Some demanded the **resignation** of Morales, a close ally of Venezuelan President Hugo Chavez. [Personnel.End-Position, OTHER]

5.6.3 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.

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

Examples of Personnel.NOMINATE events:

- The recently nominated Forley said ... [Personnel.Nominate, ACTUAL]
- The president **nominated** Rep. Mark Foley (R-Fla.) to head the commission. [Personnel.Nominate, ACTUAL]
- Gore holds a degree from the university, and is one of about 500 people nominated for the job. [Personnel.Nominate, ACTUAL]
- Presidential nominations usually begin by the 3rd or 4th day of the national conventions of both major parties. [Personnel.Nominate, GENERIC]
- With most polls showing her as the clear frontrunner in the race, would you also

choose Hillary Clinton for the Democratic **nomination** for president in 2016? [Personnel.Nominate, OTHER]

5.6.4 Personnel.ELECT

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

Person- Arg	PER	the person elected	[Greg Lashutka] was elected mayor of Columbus in 1993.
Entity- Arg	PER ORG GPE	the voting agent(s)	
Position- Arg	TTL PER	The JOB-TITLE for the position being nominated to	Greg Lashutka was elected [mayor of Columbus] in 1993.
Place-Arg	GPE LOC	Where the election takes place	Greg Lashutka was elected mayor of [Columbus] in 1993.
Time-Arg		Date the election takes place	Greg Lashutka was elected mayor of Columbus in [1993] .

Examples of Personnel.ELECT events:

- Shareholders elected Sheila Johnson to a second term on the Board of Directors. [Personnel.Elect, ACTUAL]
- Many other Israelis have turned away from the man they elected just 18 months ago. [Personnel.Elect, ACTUAL]
- In the United States, the President and Vice-President are **elected** every four years. [Personnel.Elect, GENERIC]
- The former coca leaf grower's union leader Morales is positioned to be comfortably reelected to a second term in Sunday's presidential vote, a new poll showed Monday. [Personnel.Elect, OTHER]
- President Obama won the election.
 won election [Personnel.Elect, ACTUAL]

5.7 Transaction events

5.7.1 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.

- 1. Common language usage of the term "own" usually indicates that a Transfer-Ownership could occur (e.g. "own intellectual property rights", "own a certificate of deposit", "own a car insurance policy", "own a home", etc.). The event occurs when ownership is transferred through buying, selling, giving, etc.
- 2. Renting can be thought of as "temporary" ownership. "Renting an apartment" is a Transfer-Ownership event, even though only some of the usual rights of ownership are only temporarily transferred.
- 3. "Seizing a facility" will count as a TRANSFER-OWNERSHIP event, but "securing a facility" will not.
- Exchanging services for compensation is NOT considered Transfer-Ownership event. The exchange of services is considered a Transfer-Money event. (See 5.7.2 TRANSFER-MONEY.)
- 5. Metaphorical or virtual transactions such as "selling one's soul" are not annotated.
- 6. Under the current type/subtype schema, people can be transported and goods can have their ownership transferred. Currently we do not tag events where the "ownership" of people or GPEs are transferred nor do we tag events where goods are transported without a change in ownership.

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 Movement.TRANSPORT-PERSON event; if the entity being transferred without a change in ownership is not a person, then the event is not taggable.
 - The group specialized in transporting illegal weapons.

Seller-Arg	PER GPE	The person/org/country selling	China has purchased two nuclear submarines from
	ORG		[Russia].

Buyer-Arg	PER ORG GPE	The person/org/country buying	[China] has purchased two nuclear submarines from Russia.
Beneficiary -Arg	PER	The person benefiting from the purchase	
Org-Arg	ORG	An ORG being bought/sold	

Examples of Transaction.TRANSFER-OWNERSHIP events:

- This report concerns China's recently **acquired** submarines. [Transaction.Transfer-Ownership, ACTUAL]
- Three years ago, investors **bought** two stagnant web-hosting companies and **merged** them into what is now known as The Planet.

bought [Transaction.Transfer-Ownership, ACTUAL] **merged** [Business.Merge, ACTUAL]

 If the man accused of killing seven people near Boston on Tuesday got his guns in 22Massachusetts, he was able to skirt some of the strictest regulations in the country, people familiar with the state's laws said Wednesday.

killing [Life.Die, OTHER]

got [Transaction.Transfer-Ownership, OTHER]

- 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.... [Transaction.Transfer-Ownership, OTHER]
- The cost of lawsuits is factored into the cost of everything you buy.

lawsuits [Justice.Sue, GENERIC]

buy [Transaction.Transfer-Ownership, GENERIC]

- I was given a copy of the citation. [Transaction.Transfer-Ownership, ACTUAL]
- Every 43 seconds, a car is stolen in the United States. [Transaction.Transfer-Ownership, ACTUAL]
- She **inherited** the house, land, and boat upon his death. [Transaction.Transfer-Ownership, ACTUAL]

5.7.2 Transaction.TRANSFER-MONEY

TRANSFER-MONEY events refer to the giving, receiving, borrowing, lending, or stealing of money when it is <u>not</u> 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.)

The following are the important characteristics of Transfer-Money events:

- 1. Transfer-Money events include changing money into another form which is similar to money (e.g. buying a gift card, paying to add minutes onto a cell phone, etc.), changing money into another form of actual money (e.g. exchanging foreign currency) or receiving/giving a check/money order.
- 2. The buying of tokens or licenses that provide access to services is considered a Transfer-Money event (e.g. movie tickets for entertainment, bus tokens for transportation, stamps for postal service, licenses for permission to perform actions like driving a car, etc.)
- 3. Paying taxes is considered a Transfer-Money event. Taxes can be thought of as paying for services from a GPE.
- 4. Paying fines is considered a Transfer-Money event. The service that a fine pays for can be thought of as a reminder by a GPE not to break the law. Note that the actual imposing of a fine is a Justice. Fine event. (See Section 5.8.8.)
- 5. Setting a price or a charge is not a Transfer.Money event. There is no taggable event in: "They billed him \$150 for the service."
- 6. Sometimes services include goods. The purchasing of services (Transfer-Money) will trump the incidental exchange of ownership of goods (Transfer-Ownership) which may come along with the service. For instance, paying a contractor to install a garage door opener would be considered a Transfer-Money event as a payment for services, even when the buyer of the service ends up owning a garage door opener.
- 7. We will annotate extortion, embezzlement, and the paying of bribes as TRANSFER-MONEY events.
- 8. We will not tag numerical amounts, such as \$10,000.
- 9. Settlements between two parties outside of court will be annotated as a Transfer-Money event, not a Justice. Fine event.
- 10. When main verbs have different meanings and do not clearly describe the definition of a Transaction. Transfer-Money event, we will include nouns and tag the maximum extent of the event nugget. When main verbs meet the definition of a Transaction. Transfer-Money event, we will annotate main verb only and not include nouns that follow after the main verbs. For example in,
 - John gave money to his son. [Transaction.Transfer-Money, ACTUAL]
 - The airline company **paid** compensation for any passenger who was **killed** in the plane crash.

paid [Transaction.Transfer-Money, ACTUAL]
killed [Life.Die, ACTUAL]

We tag "gave money" because "gave" is used in any situation and may be considered as multiple event types/subtypes if it is not tagged with a noun that follows after a main verb. Thus, we tag "gave" and "money" together so that it will meet the definition of a Transaction. Transfer-Money event. On the other hand, "paid" clearly shows that it is a Transfer-Money event due to its original meaning. We do not tag "paid compensation," but rather tag "paid" only.

Giver-Arg	PER ORG GPE	The person/org/country giving the money	Americans donated more than \$290 billion to charities in 2010.
Recipient-Arg	PER ORG GPE	The person/org/country receiving the money	Americans donated more than \$290 billion to charities in 2010.
Beneficiary -Arg	PER	The person benefiting from the purchase	

Examples of Transaction.TRANSFER-MONEY events:

• The charity was discovered to have **given money** to Al Qaeda.

given money [Transaction.Transfer-Money, ACTUAL]

• 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.

borrowed [Transaction.Transfer-Money, ACTUAL] **buy** [Transaction.Transfer-Ownership, OTHER]

• The organization is living on **borrowed funds**. (resultative)

borrowed funds [Transaction.Transfer-Money, OTHER]

• Suppose, for example, there were to be a proposal to the effect that each EB member would be **given** \$10,000 upon the **expiration** of his/her term.

given [Transaction.Transfer-Money, OTHER] **expiration** [Personnel.End-Position, OTHER]

- Online banking is a convenient way to <u>send money</u> to family or friends.
 - **send money** [Transaction.Transfer-Money, GENERIC]
- I paid \$9 for the movie ticket. [Transaction.Transfer-Money, ACTUAL]
- Exporting companies often argue that **bribing** is the normal way of doing business in foreign markets. [Transaction.Transfer-Money, GENERIC]

5.8 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.

5.8.1 Justice.ARREST-JAIL

An Arrest-Jail event occurs whenever a state actor (GPE, ORGANIZATION subpart, or PERSON representative) takes official custody of a PERSON Entity for the purpose of evaluating legal liability in a criminal activity or whenever a state actor (a GPE, its ORGANIZATION subparts, or its PERSON representatives) puts a PERSON in jail or a confined situation. Arrest-Jail events also include a state of being held in any place for the confinement of a PERSON such as a jail, prison, detention center etc.

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

Notes for annotating Justice. Arrest-Jail events:

- 1. "Serving a sentence" will be annotated as an ARREST-JAIL event.
- 2. We will annotate "serve in prison" as the maximum extent of an Arrest-Jail event. For example,
 - He served 8 years in prison.
 serve in prison [Justice.Arrest-Jail, ACTUAL]

Examples of Justice.ARREST-JAIL events:

- ... where Pope is imprisoned. [Justice.Arrest-Jail, ACTUAL]
- The **jailed** suspects demanded to **speak** to a lawyer. **jailed** [Justive.Arrest-Jail, ACTUAL]

speak [Contact.Meet, OTHER]

• The police later **arrested** two suspects who **came** to the parking lot to pick up the car, said the report.

arrested [Justice.Arrest-Jail, ACTUAL]
came [Movement.Transport-Person, ACTUAL]

Since May, Russia has detained over 20 suspected terrorists without a trial.

detained [Justice.Arrest-Jail, ACTUAL]
trial [Justice.Trial-Hearing, OTHER]

- The images outraged President Rupiah Banda, who ordered that she be **arrested** for distributing obscene images. [Justice.Arrest-Jail, OTHER]
- Military detention was designed precisely to prevent such fighters from returning to the battlefield.

detention [Justice.Arrest-Jail, GENERIC] **returning** [Movement.Transport-Person, GENERIC]

5.8.2 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. Sometimes a "releasing" event and a "parole" event appear together in the same phrase and are hard to differentiate one from the other. In that case, we will tag the maximum extent of an event nugget. For example, "release on parole" will be tagged as one Justice.Release-Parole event. Release-Parole events also include a resultative state caused by releasing a PERSON entity.

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

Examples of Justice.RELEASE-PAROLE events:

- The newly **freed** prisoners ... [Justice.Release-Parole, ACTUAL]
- Harvey was released the following day. [Justice.Release-Parole, ACTUAL]
- He was <u>put out on parole</u> in 1986, ...
 put out on parole [Justice.Release-Parole, ACTUAL]
- "First of all, we want to thank the governor for saving Qing Wu's life," said Elizabeth

OuYang, the president of an Asian-American civil rights organization that led the campaign to **free** Wu from an immigration jail in New Jersey and keep him in the country. [Justice.Release-Parole, OTHER]

Getting out on parole is usually a reward for good behavior while serving time.
 getting out on parole [Justice.Release-Parole, GENERIC]
 serving time [Justice.Arrest-Jail, GENERIC]

5.8.3 Justice.TRIAL-HEARING

A Trial-Hearing 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 or whenever a state actor (GPE, ORGANIZATION subpart, or PERSON representative) officially gathers to discuss some criminal legal matter.

Defendant-Arg	PER ORG GPE	the agent on trial	[Edmond Pope] is being tried on charges of spying by government prosecutors in a closed court in Russia.
Prosecutor-Arg	PER ORG GPE	The prosecuting agent	Edmond Pope is being tried on charges of spying by [government prosecutors] in a closed court in Russia.
Adjudicator-Arg	PER ORG GPE	the judge or court	Edmond Pope is being tried on charges of spying by government prosecutors in [a closed court in Russia].
Place-Arg	GPE LOC	Where the trial takes place	Edmond Pope is being tried on charges of spying by government prosecutors in a closed court in [Russia].

Examples of Justice.TRIAL-HEARING events:

 Stewart's hearing was held on Monday in the superior court. [Justice.Trial-Hearing, ACTUAL] The decision by the Manhattan federal court jury Wednesday in the case of the 1998
 U.S. embassy bombings in Africa - the first federal court trial of a Guantanamo detainee - has triggered a predictable political backlash against President Obama.

bombings [Conflict.Attack, ACTUAL] **trial** [Justice.Trial-Hearing, ACTUAL]

- Jenna Raleigh is being **tried** in a military court. [Justice.Trial-Hearing, OTHER]
- Clinton also touched on the matter of American Edmond Pope who is being **tried** in a closed court in Russia on **charges** of spying.

tried [Justice.Trial-Hearing, OTHER]
charges [Justice.Charge-Indict, ACTUAL]

• The prosecution was designed to showcase the feasibility of terrorist **trials** in civilian courts. [Justice.Trial-Hearing, GENERIC]

5.8.4 Justice.CHARGE-INDICT

A Charge-Indict 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) or 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.

Defendant- Arg	PER ORG GPE	the agent that is indicted	[Joy Fenter] was indicted by a grand jury on eleven counts of mail fraud.
Prosecutor- Arg	PER ORG GPE	the agent bringing charges or executing the indictment	
Adjudicator- Arg	PER ORG GPE	the judge or court	Joy Fenter was indicted by [a grand jury] on eleven counts of mail fraud.

Examples of Justice.CHARGE-INDICT events:

- Ryan Mathers was charged with reckless endangerment. [Justice.Charge-Indict, ACTUAL]
- Moving 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.

moving to bench [Personnel.Start-Position, ACTUAL]
charged [Justice.Charge-Indict, ACTUAL]
accept bribe [Transaction.Transfer-Money, OTHER]

Polk County Sheriff Grady Judd has previously called Moore a "person of interest,"

- though she has not been charged. [Justice.Charge-Indict, OTHER]
- A criminal **charge** is a formal accusation made by a governmental authority asserting that somebody has committed a crime. [Justice.Charge-Indict, GENERIC]

5.8.5 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.

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	Donald Crutchfield filed suit against [Toys 'R' Us] in 1997.
Adjudicator-	PER ORG	the judge or court	
7"8	GPE		
Time-Arg		Date of the suit	Donald Crutchfield filed suit against Toys 'R' Us in [1997].

Examples of Justice.SUE events:

• The **suit** against their company and the resulting bad publicity almost reduced it to **bankruptcy**.

suit [Justice.Sue, ACTUAL]

bankruptcy [Business.Declare-Bankruptcy, OTHER]

- Brentwood Academy responded with a lawsuit that has made its way to the U.S. Supreme Court, where arguments will be made Wednesday. [Justice.Sue, ACTUAL]
- He is **suing** the news site for slander. [Justice.Sue, OTHER]
- All <u>class actions</u> do is **enrich** lawyers and raise costs to everyone.

class actions [Justice.Sue, GENERIC]
enrich [Transaction.Transfer-Money, GENERIC]

5.8.6 Justice.CONVICT

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

Defendant- Arg	PER ORG GPE	The convicted agent(s)	A Russian court convicted [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] convicted Pope Wednesday on espionage charges and sentenced him to 20 years in prison.
Place-Arg	GPE LOC	Where the conviction takes place	A [Russian] court convicted Pope Wednesday on espionage charges and sentenced him to 20 years in prison.
Time-Arg		Date the conviction takes place	A Russian court convicted Pope [Wednesday] on espionage charges and sentenced him to 20 years in prison.

Notes for annotating Justice. Convict events:

- 1. Pleading guilty to a crime does not constitute a CONVICT event.
- 2. We tag "find guilty" as a Convict event.

Examples of Justice.CONVICT events:

 Martha Breckenridge was convicted of two counts of manslaughter. [Justice.Convict, ACTUAL]

- It **found** him **guilty** of enriching himself through a property deal with the state's main food supply agency. [Justice.Convict, ACTUAL]
- If the case against Zimmerman ever reaches a jury (which it probably won't), there is no chance he will be **convicted**. [Justice.Convict, OTHER]
- In some countries a criminal record is limited to actual **convictions**, while in others it also includes **arrests**.

convictions [Justice.Convict, GENERIC]
arrests [Justice.Arrest-Jail, GENERIC]

5.8.7 Justice.SENTENCE

A SENTENCE event takes place whenever the punishment for the DEFENDANT-ARG of a Trial-Hearing event is issued by a state actor (a GPE, an ORGANIZATION subpart or a PERSON representing them). SENTENCE events refer to issuing any type of punishment (e.g., imprisonment, death penalty, flogging, etc.) except fining. (Also see 5.8.8. for Justice.Fine events.)

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.
Adjudicator- Arg	PER ORG GPE	The judge or court	
Place-Arg	GPE LOC	Where the sentencing takes place	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.

Time-Arg	Date the sentencing takes place	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.
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Notes for annotating Justice. Sentence events:

- 1. Sometimes Justice. Sentence events contain speech acts (e.g., "order," "sentence") which are used to declare the punishment. We annotate those speech acts as Justice. Sentence events. The words or phrases that follow after those speech acts describe types of punishment (e.g., life imprisonment, death penalty). We do not tag those words or phrases, but rather tag the speech acts only as Justice. Sentence events. For example,
 - He was sentenced to death. [Justice.Sentence, ACTUAL]
 - He was **sentenced** to life in prison. [Justice.Sentence, ACTUAL]
 - He was **ordered** to do 200 hour community service. [Justice.Sentence, ACTUAL]
- 2. "Sentencing to pay" will be annotated as a FINE event due to the definition of Justice. Fine. (See Section 5.8.8.). Be careful not to tag instances of actual payment of a court-ordered fine under SENTENCE or FINE, as they are annotated as Transaction. TRANSFER-MONEY events.
 - He was <u>sentenced to pay</u> a fine.
 <u>sentenced to pay</u> [Justice.Fine, ACTUAL]
 - He was **fined** \$10,000. [Justice.Fine, ACTUAL]
 - The court <u>ordered him to pay</u> \$100, and he paid it on the next day.
 ordered to pay [Justice.Fine, ACTUAL]
 paid [Transaction.Transfer-Money, ACTUAL]
- 3. "Serving a sentence" will be annotated as an ARREST-JAIL event. (See Section.5.8.1.)
- 4. 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 Justice. Execute. For example:
 - Two prisoners who had been sentenced to death have been exonerated.
 sentence [Justice.Sentence, ACTUAL]
 exonerated [Justice.Acquit, ACTUAL]
 - David Goran was **executed** by lethal injection in 1987.

executed [Justice.Execute, ACTUAL]

Examples of Justice.SENTENCE events:

• She was given a sentence of life without parole.

given sentence [Justice.Sentence, ACTUAL]

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.

sentenced [Justice.Sentence, ACTUAL]
acquittal [Justice.Acquit, ACTUAL]

• A Russian court convicted Pope Wednesday on espionage charges and sentenced him

to 20 years in prison.

convicted [Justice.Convict, ACTUAL]

convicted [Justice.Convict, ACTUAL]
charges [Justice.Charge-Indict, ACTUAL]
sentenced [Justice.Sentence, ACTUAL

• She will be **sentenced** to life in prison.

sentenced [Justice.Sentence, OTHER]

• The vast majority of criminal **sentencing** takes place in state and local courts in the United States. [Justice.Sentence, GENERIC]

5.8.8 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 a FINE event does not include an act of paying a fine.

Entity-Arg	PER ORG GPE	the Entity that was fined	[The company] was ordered to pay a fine of \$300,000.
Adjudicator- Arg	PER ORG GPE	the Entity doing the fining	

Notes for annotating Justice. Fine events:

- 1. 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).
- 2. "Sentencing to pay" will be tagged as a Justice. Fine event. Due to the event type/subtype defined for this task, we will tag "sentencing to pay" as a Justice. Fine event. The act of paying a fine is not a Justice. Fine event. It is a Transaction. Transfer-

Money event. For example,

He was <u>sentenced to pay</u> \$10,000, but he refused to pay it. <u>sentenced to pay</u> [Justice.Fine, ACTUAL] <u>pay</u> [Transaction.Transfer-Money, OTHER]

Examples of Justice.FINE events:

- It **fined** the school \$3,000 and banned its football program. [Justice.Fine, ACTUAL]
- The company was also accused of illegal operation and was **fined** 71 million Yuan, it said. [Justice.Fine, ACTUAL]
- Ms. Brooks, who could **go to prison** and will certainly be heavily **fined**, has agreed to turn state's evidence, turning against her boss.

go to prison [Justice.Arrest-Jail, OTHER]
fined [Justice.Fine, OTHER]

• You will be **fined** if your vehicle is detected by a fixed speed camera, mobile speed camera or police officer. [Justice.Fine, GENERIC]

5.8.9 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) according to the decision of a court. Note that Justice. Execute events only occur in the context where a PERSON's death is caused by carrying out a death penalty. Other types of death (e.g., natural death, murder, assassination, etc.) will be tagged as Life. Die events. (See Section 5.1.5.)

Person- Arg	PER	The person executed	[David Goran] was executed by lethal injection in March 1987.
Agent- Arg	PER ORG GPE	The agent responsible for carrying out the execution	
Time-Arg		Date the execution takes place	David Goran was executed by lethal injection in [March 1987].

Notes for annotating Justice. Execute events:

1. "Sentencing" and "carrying out death sentence" are different event type/subtypes. "Sentencing" is a Sentence event and tagged as Justice. Sentence, while "carrying out death sentence" is an Execute event and tagged as Justice. Execute.

• He was **sentenced** to death in 1999, and the **death sentence** was **carried out** in 2000.

sentenced [Justice.Sentence, ACTUAL]
death sentence carried out [Justice.Execute, ACTUAL]

2. "Carrying out death sentence" is a multi-word event nugget and should be tagged as one event, because we annotate the maximum extent of the event nugget. "Carrying out" can take various nouns as objects, so we tag "death sentence" together to specify the meaning of the event nugget. (See Section 4.4 Verb+Noun)

Examples of Justice.EXECUTE events:

- David Goran was **executed** by lethal injection in March 1987. [Justice.Execute, ACTUAL]
- Smith waited 12 years on **death** row until his **death sentence** was **carried out** in 1987.

death [Justice.Execute, GENERIC]
death sentence carried out [Justice.Execute, ACTUAL]

- Twelve **executed** prisoners have been posthumously **exonerated**.
 - executed [Justice.Execute, ACTUAL]
 exonerated [Justice.Acquit, ACTUAL]
- Lethal injection is used in many states as a method of execution. [Justice.Execute, GENERIC]
- If Middleton has not been **executed** by midnight Thursday, the Missouri Supreme Court will need to set a new **execution** date.

executed [Justice.Execute, OTHER]
execution [Justice.Execute, OTHER]

5.8.10 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: Do not tag Justice. Extradite events as Movement. Transport-Person events, although Extradite events involve movements of Person entities. Each taggable event may be assigned only one event type/subtype. Justice. Extradite events trump Movement. Transport-Person events.

Agent-Arg

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	In the end, Milosevic preferred extradition to [The Hague] rather than stay here and face our justice," said opposition leader Zarko Korac.
Origin-Arg	GPE LOC	The original location of the person being extradited (rare only when explicitly mentioned)	In the end, Milosevic preferred extradition to The Hague rather than stay [here] and face our justice," said opposition leader Zarko Korac.

Examples of Justice.EXTRADITE events:

- The former leader was extradited to Burkina Faso.
 former [Personnel.End-Position, ACTUAL]
 extradited [Justice.Extradite, ACTUAL]
- "In the end, Milosevic preferred **extradition** to The Hague rather than stay here and face our justice," said opposition leader Zarko Korac. [Justice.Extradite, OTHER]
- Illegal immigrants that have not been granted 'refugee', or 'humanitarian' status will be **extradited**, said PM Oresharski. [Justice.Extradite, OTHER]
- **Extradition** is normally regulated by treaties between countries. [Justice.Extradite, GENERIC]

5.8.11 Justice.ACQUIT

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

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	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.
Time-Arg		Date of acquittal	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.

NOTE: We will consider "innocent" or "not guilty" as a Justice. Acquit event, not negations of Justice. Convict events due to the type/subtypes specifically developed for this task. If those words/phrases (e.g., "not guilty" and "innocent") appear with the verbs "find" in the sentence, we will tag them with the verbs together, such as "find ... innocent" or "find ... not guilty" because we tag the maximum extent of event nugget.

Examples of Justice.ACQUIT events:

• Chase was **acquitted** after a **trial** in the Senate.

acquit [Justice.Acquit, ACTUAL]
trial [Justice.Trial-Hearing, ACTUAL]

• After her **acquittal**, she still had difficulties <u>regaining</u> her formerly powerful <u>position</u> in the company.

acquittal [Justice.Acquit, ACTUAL]
regaining position [Personnel.Start-Position, OTHER]

• All <u>charges</u> were <u>dropped</u> against him last year, and he <u>went free</u>.

charges dropped [Justice.Acquit, ACTUAL]
went free [Justice.Release-Parole, ACTUAL]

- The court decided to acquit him due to the lack of sufficient evidence. [Justice.Acquit, OTHER]
- An acquittal signifies that a prosecutor failed to prove his or her case beyond a reasonable doubt. [Justice.Acquit, GENERIC]

5.8.12 Justice. APPEAL

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

Defendant- Arg	PER ORG GPE	The defendant or defendant's agent	[Defense attorneys] appealed the case to a higher court.
Prosecutor- Arg	PER ORG GPE	The prosecuting agent	
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 <u>filed a new attempt</u> Tuesday to gain his release from Nevada state prison.

filed attempt [Justice.Appeal, ACTUAL] **release** [Justice.Release-Parole, OTHER]

- The government lost the case when the defendant appealed. [Justice.Appeal, ACTUAL]
- Lead prosecutor Frank Mumbuna said no decision had been taken on whether to appeal. [Justice.Appeal, OTHER]
- "The state has however the right to **appeal**," Kafunda told a packed courtroom. [Justice.Appeal, OTHER]
- In law, an **appeal** is a process for requesting a formal change to an official decision. [Justice.Appeal, GENERIC]

5.8.13 Justice.PARDON

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

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

Examples of Justice.PARDON events:

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

pardoned [Justice.Pardon, ACTUAL]
released [Justice.Release-Parole, ACTUAL]

• Ronald Reagan issued a pardon to Mark Felt, a former FBI agent.

issued pardon [Justice.Pardon, ACTUAL] **former** [Personnel.End-Position, ACTUAL]

• After the article appeared, hundreds of readers signed an online petition urging that Paterson **grant** a **pardon**.

grant pardon [Justice.Pardon, OTHER]

• The review of applications for **pardons** is conducted almost entirely in secret. [Justice.Pardon, GENERIC]

6 What Not to Tag

For this task, we will not be tagging elided events, job titles, or criminal charges.

1. Elided, inferred, or implicated events that are not explicitly mentioned.

There are some cases where events are not explicitly stated even though we can infer that they would be taggable. For example:

• MIL has **come** a few times - the most recent to specifically help out while I was in the hospital. [Movement.Transport-Person, ACTUAL]

We only tag "come" as Movement.Transport-Person and do not tag "the most recent," because there is no explicit mention of a visit. Although we can infer that "visit" is elided in the sentence, we do not use inference to tag elided events or insert a particular symbol that corresponds to the elided term.

In another example:

• Bob **went** to the airport with no particular destination in mind, and the next day he found himself in Prague. [Movement.Transport-Person, ACTUAL]

We can infer that Bob flew to Prague, but the example does not have any explicit mention of his flying to Prague. Since we do not annotate inferred or implicated events, we do not tag "found," although it is a main verb and allows for the implication of his travel to Prague. Thus, we only tag "went," since it is explicitly stated.

2. Job titles for positions

We do not tag a job titles for a position that appears as an argument in Personnel events, such as "CEO," "president," and so on. For example,

Tom became GEO of the company last year. [Personnel.Start-Position, ACTUAL]

3. Criminal charges

We do not tag criminal charges, even though they might seem to meet the definition of a type/subtype. For example in,

- The court **found** him **guilty** of first-degree murder. [Justice.Convict, ACTUAL]
- I was **given** copies of a citation for simple assault and battery. [Transaction.Transfer-Ownership, ACTUAL]
- Martha Breckenridge was convicted of two counts of manslaughter. [Justice.Convict, ACTUAL]

"Murder," "assault," and "battery" seem like taggable events, but those mentions are titles of criminal charges. "Manslaughter" is more obviously the title of a criminal charge, since "manslaughter" is not a word that is used commonly outside of a legal context. In all of the examples above, we will not tag the criminal charges.

7 Event Coreference

In this event detection task, we will not annotate event coreference.

8 Discussion Forums

8.1 XML Headings

Discussion forums are a type of asynchronous communication where multiple users can engage in discussions on a topic. Participants often quote segments of previous posts or refer to outside sources, in addition to adding new comments. Those references are surrounded by various tags. Our goal in this task is to annotate the comments, not the references or repeated text. Certain XML heading tags will thus be excluded from tagging. Annotators should pay close attention to the XML headings as they read through the documents and only tag within allowed headings. The following table shows the headings in which we do and do not annotate text.

Annotate Event Nuggets Within These Headings	DO NOT Annotate Event Nuggets Within These Headings
<headlines></headlines>	
<post></post>	
<text></text>	
<quote></quote>	

In the following example, "married" can be annotated as a Life.Marry event nugget, since it is within a <post> tag.

<post author="pollywog" datetime="2009-03-24T11:34:00" id="p3"> Got
married on Wednesday!</post> [Life.Marry, ACTUAL]

In the passage below, "merger" is a Business-Merge event, but we do not annotate it since the sentence is within the <a href> tag.

T-Mobile users rejoice at Justice Dept. blocking AT&T merger - CNN.com

8.2 Misspellings and Incorrect Punctuation

Annotate misspellings accruing to the intended meanings, 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 event nugget of a Life.Be-Born event.

• Ron was **bron** in 1976. [Life.Be-Born, ACTUAL]

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 event nugget of a Justice. Sentence event in the following example:

She was sentence'd to 5 years in prison. [Justice.Sentence, ACTUAL]

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 event nugget of a Personnel.Start-Position event.

• John becameCEO of the company in 2006. [Personnel.Start-Position, ACTUAL]

9 Tokenization

Text for annotation may be pre-tokenized. Tokenization is the process of dividing a stream of text into distinct elements called tokens. Annotators should be aware of the effect of tokenization on tagging.

When tagging tokenized text, all of the characters within a token need to be included in a tag. You should never tag only part of the contents within a token, even if your annotation tool allows it. It is possible that some of the content within a token does not belong in a tag with the other part of the contents. However, for the purposes of this task, if part of the contents is taggable, tag the entire token. For example, it could be possible due to a typographical error that two words are mistakenly combined without a space and put together in one token (e.g. "becameCEO"). If one of the words is taggable, tag the entire contents of the token and apply the appropriate Type/Subtype and REALIS for the taggable word. Thus the entire token "becameCEO" would be tagged Personnel.Start-Pos with REALIS ACTUAL.

Tokenization could also lead to a situation where a taggable string of text is divided across multiple tokens. For example, it could be possible that hyphenated words are divided across three tokens (e.g. "re", "-", "election" for the word "re-election"). In such cases, include multiple tokens in one tag where appropriate.

10 Bibliography

- ACE (Automatic Content Extraction) English Annotation Guidelines for Events, Version 5.4.1 2005.05.09, Linguistic Data Consortium
- DEFT ERE Annotation Guidelines: Events V1.3, Linguistic Data Consortium March 13, 2014