

This is the annotation guideline we provided to the annotators at MAVEN annotation. We provide it here for more information about the annotation process.

The other document we ask the annotators to briefly read is the ACE 2005 English Annotation Guidelines for Events (<https://www ldc.upenn.edu/sites/www ldc.upenn.edu/files/english-events-guidelines-v5.4.3.pdf>).

Task Description

1. Task Overview

The purpose of this task is to find the "trigger word" of the event and the corresponding event type from the document, and then merge the events.

2. Trigger word

"Trigger word" refers to the word that represents the occurrence of an event, which is often a verb that indicate the core action of an event, or a noun that describes and refers to the event. After distinguishing the event trigger word, we also need to classify the event, that is, select the most suitable type for each event according to the recommended event types and the corresponding descriptions we gave.

Our definition of "event" is broad and consistent with common sense. Any action that can cause some changes or have some impact can be regarded as an event, including naturally occurring action and man-made action, including action that has already happened, planned or envisaged.

The scope of annotation is not limited to verbs, but also nouns that can represent events, such as *explosion*, *hurricane*, etc.

Here are some examples :

" *This attack happened like an **earthquake**.*" ×
(*Earthquake* is a word that represents an event, but it is used here as a metaphor and modification. It does not specifically refer to an event and does not need to be labeled.)

" *He attacked two man **traveling** in London.*" ×
(*Travel* is a verb that expresses an event, but here it is a post-attribute that modifies *man*. There is no specific reference here. So it is no need to label.)

"*He was attacked when on his **travel** to London.*" ✓
(Although *travel* is in the clause, it expresses an event and needs to be labeled.)

In the above three examples, *attack* also needs to be labeled.

"*He is a good boy.*"
No trigger words in this sentence.

When an expression has multiple events, events should be labeled separately:

" *Hit and Kill Bob*"

Two events are in this sentence. *Hit* and *kill* should be labeled separately.

All trigger words with event semantics should be labeled, including events that did not actually occur:

He is planning to kill Jack.

He didn't kill Bob.

Kill should be labeled in the above two sentences.

For verb phrases with two words (such as *get up*), please label *get*

In addition, the labeled events should not include punctuation marks that indicate separation(., ? ; ! , etc.) should not be marked

3. Event Type

After the labeling trigger word, you need to label the event type of the trigger word.

Among the candidate types, find the most suitable event type from the given options.

If there are similar candidate event types, please select more specific events types that are closer to the candidate words, for example, select theft if crime event and theft event are all suitable for the trigger word. This is because theft is a typical criminal event and can provide more specific information, while the crime is more broad. For other crimes that are not typical enough, they can be classified as crime

Sometimes, the event type of the trigger word may be very vague, for example, bombing. Recommended options will include *use firearm / terrorism / attack / committing crime*. If the article talks about war, then *use firearm* is more appropriate. If the article talks about terrorist attacks, *terrorism* should be selected.

4. Merge

The last task is the merging of events. For the same event but appears twice in the text, we need annotator to merge them into the same event. E.g. two sentences in the same document:

*“It is believed to be the worst **flood** in Bihar in the last 30 years.”*

*“The 2007 Bihar **flood**, which started in August 2007, was described by the United Nations as the worst flood in the living memory of Bihar.”*

The flood in these two sentences refers to the same event and needs to be merged

Different words referring to same event also need to be merged

For events that can be merged, please select merge and label the merged event type.

Usage of Annotation Platform

After understanding the tasks above, we can start labeling.

You can see that the annotated words (that is, the words in the list) are red, and the candidate words are blue. Select a word in the list and it will turn green in the original text.

When we open a new annotation page, it looks like this:

- The ones highlighted in blue are candidate words
- The ones highlighted in red are selected words
- The ones highlighted in green are word selected in the list

We need to find trigger words mentioned above in these candidate words.

If the candidate word does not contain the trigger word, you need to contact us. The information that needs to be provided includes the title of the text and the sentence index. Do not label this sentence when submitting.

The index of the sentence in which the word appears Merge different trigger words

We **ONLY** need to choose the trigger words. Time, person, etc. are NOT needed.

Please note that for sentences that you are not sure how to annotate, please choose as many trigger words as possible, rather than miss the words.

When we click on the **candidate word**, it will be selected, and its blue highlight will change to **red highlight**, and the word will enter the list below.

There will be some trigger words pre-selected by the system in the list, but they are not necessarily correct and need to be confirmed by the annotator.

The labeled words will appear in the list below.

When we click on a labeled word in the list, the word will be highlighted in **green** in the text above.

In the event type recommendation list (ranking), there are several candidate types, and there are detailed descriptions of each type on the right. If there are no suitable types, select "none of the above"

When merging events, click the *mention* area, and all the mentions that can be merged with the current word will appear in the drop-down list. You need to select mentions from them to merge. Only two identical events can be merged. Note that not all events of the same type are the same. For example, the text may mention two different wars.

To cancel the wrong merge, select *None* from the *mention* drop-down menu

For the labeled trigger word, if you want to delete it, click the “-” button on the right side of the *mention* column

If the annotations are all completed, this page will look like this:

The screenshot shows a text-based annotation interface for the sentence: "The 1960 Commonwealth Prime Ministers Conference was the tenth Meeting of the Heads of Government of the Commonwealth of Nations .". The text is displayed in a light gray box with a score of 6.000 in the top right corner. Below the text, there are six numbered lines, each containing a sentence with words highlighted in blue or red. The first line is: "0. The 1960 Commonwealth Prime Ministers Conference was the tenth Meeting of the Heads of Government of the Commonwealth of Nations .". The second line is: "1. It was held in the United Kingdom in May 1960 , and was hosted by that country 's Prime Minister , Harold Macmillan .". The third line is: "2. This was the first Commonwealth conference since Malayan independence in August 1957 and saw the growing importance of the non-white " New Commonwealth " countries .". The fourth line is: "3. Malaya 's prime minister , Tunku Abdul Rahman and his government vigorously opposed the apartheid policies of South Africa and , with the support of Pakistan , India and Ghana , demanded that the issue be addressed by the Commonwealth .". The fifth line is: "4. However , Macmillan insisted that the final communique could only include matters on which the leaders were unanimous .". The sixth line is: "6. Ghana was advised that its continued membership in the Commonwealth as a republic was recognised , however , South Africa was advised that it would need to seek consent of other Commonwealth governments for its membership to continue .".

name	type	ranking	sent_id	pos	mention	
Conference	Social_event	Social_event	0	[6, 7]	Meeting(0_10_11),Confere	-
Meeting	Social_event	Social_event	0	[10, 11]	Meeting(0_10_11),Confere	-
held	Defending	Defending	1	[2, 3]	held(1_2_3)	-
hosted	Come_together	Come_together	1	[13, 14]	hosted(1_13_14)	-
conference	Social_event	Social_event	2	[5, 6]	Meeting(0_10_11),Confere	-
independence	Change_of_leadership	Change_of_leader	2	[8, 9]	independence(2_8_9)	-
growing	Cause_expansion	Cause_expansion	2	[15, 16]	growing(2_15_16)	-
opposed	Agree_or_refuse_to_act	Agree_or_refuse_i	3	[12, 13]	opposed(3_12_13)	-
support	Supporting	Supporting	3	[23, 24]	support(3_23_24)	-
demanded	Request	Request	3	[31, 32]	demanded(3_31_32)	-
addressed	Speak_on_topic	Speak_on_topic	3	[36, 37]	addressed(3_36_37)	-
insisted	Reasoning	Reasoning	4	[3, 4]	insisted(4_3_4)	-
advised	Suasion	Suasion	5	[1, 2]	advised(5_1_2)	-
becoming	Becoming	Becoming	5	[8, 9]	becoming(5_8_9)	-
advised	Suasion	Suasion	5	[14, 15]	advised(5_14_15)	-
referendum	Choosing	Choosing	5	[21, 22]	referendum(5_21_22)	-
advised	Suasion	Suasion	6	[2, 3]	advised(6_2_3)	-
recognised	Becoming_aware	Becoming_aware	6	[14, 15]	recognised(6_14_15)	-
advised	Suasion	Suasion	6	[21, 22]	advised(6_21_22)	-
seek	None of the above	None of the above	6	[27, 28]	seek(6_27_28)	-
consent	Commitment	Commitment	6	[28, 29]	consent(6_28_29)	-
continue	None of the above	None of the above	6	[37, 38]	continue(6_37_38)	-

After you finish annotating, selecting and categorizing trigger words in all sentences in the entire article, you can submit!

After Submitting

1. Modify submitted Articles

In the "Personal Center" you can modify the submitted articles

2. Count the number of annotated articles

You can view the number of annotated articles in "Personal Center"

3. When can I get feedback?

We will regularly sample and inspect the labeled results. If there are any common problems, we will @ everyone in the WeChat group. If a single user has obvious problems, he/she will be informed by private message.

4. We will manually check and cross-validate the annotation results of the annotators in different time periods. If there is an obvious problem in the quality of the labeling (such as unreasonable use of the "skip article" function, many incorrect labels, missing labels, incorrect merging, etc.), twice the salary of the wrong article will be deducted. If there is an obvious problem with the overall labeling quality, no remuneration will be paid. **Therefore, please pay attention to the quality to prevent economic losses.**