# Named Entity Annotation Guide

Group Number: 35

Group Members: YoungJun Cho (Unikey: ycho6245)

The initial annotation guide was based on "An Annotated Dataset of Literary Entities," David

Bamman, Sejal Popat and Sheng Shen, NAACL 2019.

We consider six types of entities: Person (PER), Facility (FAC), Geo-political entities (GPE), Location (LOC), Vehicle (VEH), Organisation (ORG). Note, we will not annotate 'Other' or 'Misc' entities, a practise that is used in some Named Entity annotations.

# 1.Examples

## Person (PER)

Here are some examples from group35-stage1.txt that were classified as PER:

Barbican

the travellers

Captain

scientists

astronomers

# Facility (FAC)

Here are some examples from group35-stage1.txt that were classified as FAC:

the Cambridge Observatory

faculties

# Geo-political entities (GPE)

Here are some examples from group35-stage1.txt that were classified as GPE:

Parsontown

Long's Peak

Stony Hill

New York

a \_Mediterranean\_

# Location (LOC)

Here are some examples from group35-stage1.txt that were classified as LOC:

the Moon

the Earth

the summit

the mountains

The northern hemisphere

# Vehicle (VEH)

Here are some examples from group35-stage1.txt that were classified as VEH:

An express train

the Projectile

# Organisation (ORG)

Here is an example from group35-stage1.txt that was classified as ORG:

Representatives

# 2. Explanation

### Annotation

```
What had switched them off? He would have given worlds for an answer,
                                                                                                  (2, 4) - PER
but his brain sorely puzzled sought one in vain.
                                                                                                  (11, 9) - PER
((18, 1), (18, 3)) - LOC
In the mean time, the Projectile continued to turn its side rather than
                                                                                                  ((22, 0), (22, 2)) - PER
(36, 0) - PER
its base towards the Moon; that is, to assume a lateral rather than a
direct movement, and this movement was fully participated in by the
                                                                                                  ((41, 4), (41, 6)) - LOC
multitude of the objects that had been thrown outside. Barbican could
                                                                                                  (46, 4) - PER
even convince himself by sighting several points on the lunar surface,
                                                                                                  (57, 6) - PER
by this time hardly more than fifteen or eighteen thousand miles
distant, that the velocity of the Projectile instead of accelerating was
                                                                                                  (61, 1) - PER
                                                                                                  (64, 3) -
becoming more and more uniform. This was another proof that there was
                                                                                                  (72, 7) - PER
no perpendicular fall. However, though the original impulsive force was
                                                                                                  (73, 6) - PER
still superior to the Moon's attraction, the travellers were evidently
                                                                                                  (80, 3) - PER
approaching the lunar disc, and there was every reason to hope that they
                                                                                                  (86, 5) -
would at last reach a point where, the lunar attraction at last having
                                                                                                  (92, 4) -
the best of it, a decided fall should be the result.
                                                                                                  (105, 0) - PER
                                                                                                  (110, 5) -
The three friends, it need hardly be said, continued to make their
                                                                                                  (118, 6)
                                                                                                             PER
observations with redoubled interest, if redoubled interest were
                                                                                                  (127, 4) -
                                                                                                             PER
possible. But with all their care they could as yet determine nothing
regarding the topographical details of our radiant satellite. Her
                                                                                                  (136, 3) -
                                                                                                             PER
                                                                                                  (141, 8) -
                                                                                                             PFR
surface still reflected the solar rays too dazzlingly to show the relief
                                                                                                  (150, 1) - LOC
necessary for satisfactory observation.
                                                                                                  (152, 4) - LOC
Our travellers kept steadily on the watch looking out of the side
                                                                                                  ((158, 0), (158, 2)) - LOC
                                                                                                  (168, 0) - PER
lights, till eight o'clock in the evening, by which time the Moon had
                                                                                                  (174, 10) - PER
grown so large in their eyes that she covered up fully half the sky. At
this time the Projectile itself must have looked like a streak of light,
                                                                                                  (182, 8) - PER
reflecting, as it did, the Sun's brilliancy on the one side and the
                                                                                                  (185, 2) - PER
Moon's splendor on the other.
                                                                                                  (189, 9) - PER
```

Annotation was proceeded like the picture above.

For example, In the text, the word "Barbican" appears in the 11th line and is located in the 9th position based on the whitespace. Therefore, we annotated it as a named entity of type PER with the coordinates (11,9).

Also, I identified a nested annotation in the text, specifically the phrase "the lunar disc", which appears in the first three words of the 18th line. Therefore, we annotated it as a named entity of type LOC with the coordinates ((18,1), (18,3)).

### **Unusual Cases**

1. Personal and Objective pronouns

In order to determine whether personal pronouns and objective pronouns should be classified as PER in Named Entity Recognition, we utilised the NLTK package.

```
sentence = "James is nice"
tokenized_sentence = pos_tag(word_tokenize(sentence))
print(tokenized_sentence)
ner_sentence = ne_chunk(tokenized_sentence)
print(ner_sentence)

[('James', 'NNP'), ('is', 'VBZ'), ('nice', 'JJ')]
(S (PERSON James/NNP) is/VBZ nice/JJ)

sentence = "My sister is pretty"
tokenized_sentence = pos_tag(word_tokenize(sentence))
print(tokenized_sentence)
ner_sentence = ne_chunk(tokenized_sentence)
print(ner_sentence)

[('My', 'PRP$'), ('sister', 'NN'), ('is', 'VBZ'), ('pretty', 'JJ')]
(S My/PRP$ sister/NN is/VBZ pretty/JJ)
```

Hence, I decided Personal pronouns such as "I", "you", "he", "she", "it", "we", and "they" and Objective pronouns such as "his", "her", and "them" are not annotated as PERSON in Named Entity Recognition (NER) tasks.

This is because PERSON is a category that is reserved for specific named entities and those pronouns are not specific enough to identify a named entity on their own.

However, as an exception, when a person comes after an objective pronoun, we decided to tag them together as PER. One example for this format would be 'My sister'.

### 2. 'The southern'

In the context of the sentence, this word refers to 'the southern hemisphere' with the word 'hemisphere' being omitted. Therefore, I classified it as a named entity of type LOC.

### 3. 'Representatives'

"Representatives" in this sentence refers to a group of individuals who represent Earth and humanity. While "Representatives" could be interpreted as referring to specific people, the more appropriate interpretation in this context is that "Representatives" refers to a collective entity.

Therefore, I decided to annotate it as ORG.

### 4. 'the track'

The word used in the context does not refer to an actual track, but rather to being 'off the track'. Therefore, we did not tag it as a location but rather interpreted it to mean 'deviating from the desired path'.

#### 5. 'Latin'

The word 'Latin' was used to refer to the Latin language, and therefore I did not annotate it as a named entity of type PER.

#### 6. 'somewhere'

Although the word indicates a location, its physicality is unclear. Therefore, I excluded it from the LOC category.

### 7. Words with '--'

There were cases where words had '--' attached either at the beginning or end of the word. For instance, in the phrase 'a Polish astronomer--more', the words 'astronomer' and 'more' were connected by '--'. Since 'a Polish astronomer' needed to be annotated as a person, we classified the word 'more' as a named entity of type PER even though it was attached to the word 'astronomer' with '--'.