**Matching guidelines (BenchIEFL)**

This document contains the matching guidelines for the open information extraction task and has been used in the development of the BenchIEFL reference matching function. The various principles dictate which pairs of extractions made by systems and annotations should and should not match. Clusters in black represent annotations. Examples in green are examples that match an annotation in the reference, while examples in red do not. In this document we refer to annotated facts (Gold) using the words tuple, fact, and triplet interchangeably.

The information is presented in the following format: The different formulations of the same cluster (of the same fact), are in a paragraph and a line break separates them.

| *Sentence* | Cluster 1 Formulation 1 Gold  Cluster 1 Formulation 2 Gold  Cluster 2 Formulation 1 Gold  etc.  Extraction 1  Extraction 2  etc. |
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**Identical extractions**

Two absolutely identical extractions should match.

**Relation specificity**

Extractions are allowed very little flexibility in the specificity of the relation: it's the relation that is the vehicle of information, so it's important that it's almost as specific as the reference. That said, a different formulation that is just as specific should be accepted. In the example, *was thrown* is not a relevant relation in the context of this extraction, as *was* or *was thrown* *out of* would have been (the word *out* in argument 2 modifies the meaning of the relation).

| *The Finns party was thrown out of the government and the new “Blue Reform” group kept its cabinet seat.* | (The Finns party, **was**, thrown out of the government)  (The Finns party,**was thrown out of**, the government)  (The Finns party, **was thrown**, out of the government) |
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**Syntax errors**

Some extractions made by systems may present syntax errors, when a word is misplaced or unnecessary. If this error changes the meaning of the relation or one of the arguments, the extraction should not be matched. If not, it should match the corresponding annotation. In the example, the word *also* refers to the relation *is*, and does not change the meaning of the relation, whereas the word *and* changes the meaning of the extraction, making it nonsensical.

| *Known for his albums of classical piano compositions, he is also a producer and songwriter.* | (He, is **[also]**, a songwriter)  (He, is also, a songwriter **and**)  (He, is, a songwriter **also**) |
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**Word Choice**

Some words may be equivalent to those present in the annotations in certain contexts, even if we have chosen not to include them in the reference. If these words are used in the system extractions instead of those used in the reference, we still accept the system extraction. Some word choices may be wrong, but we still accept the extraction if the meaning remains. In the first example, the determiner *the* is used instead of *a* in the extraction because it's the word found in the original sentence, but both are equally appropriate, so we accept the extraction.

| *He is the younger brother of the prolific film composer Christophe Beck.* | (He, is, **a** younger brother)  (He, is , **the** younger brother) |
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| *His parents are Ashkenazi Jews who had to flee from Hungary during World War II.* | (**He**, has, parents)  (**His**, has, parents) |

**Level of detail**

We want to match extractions which have a level of detail higher than the annotation but that convey the same information. By level of detail we mean that they combine information from two annotated clusters. On the other hand, if an extraction combines information from three or more annotated clusters, we consider it to be too noisy and not precise enough to be useful. The positive example is matched because it combines the information from the second and third annotated clusters. The negative example is not matched because it combines information from all three annotated tuples.

| *Gonzales broadcasts a web series Pop Music Masterclass on WDR, the documentary Classical Connections on BBC Radio 1, The History of Music on Arte, and Music's Cool with Chilly Gonzales on Apple Music's Beats1 radio show.* | (Gonzales, broadcasts, The History of Music)  (Gonzales, broadcasts The History of Music on, Arte)  (Gonzales, broadcasts, The History of Music on Arte)  (Gonzales, broadcasts, a web series Pop Music Masterclass on WDR) |
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