

# Annotation Guidelines

## Purpose

The purpose of this annotation is to classify propositions extracted from a text into those that would be suitable propositions in a concept map and those that are not.

## Annotation Task

Given a list of extracted **propositions**, each consisting of **two arguments and a relation phrase** in between describing their connection, such as

*Inadequate resources -- translate into -- inappropriate materials*  
*Boys -- need -- a heterosexual male parent*

**label** them with

1	>	would be a suitable proposition for a concept map
0	>	otherwise

according to the following **general criteria**:

- **Correctness**  
The extraction has to be a meaningful proposition at all.
- **Context-Independence**  
The proposition has to be understandable on its own, without any context.
- **Suitability for Concept Maps**  
The arguments have to be concepts, and a meaningful relation between these concepts has to be expressed by the relation phrase.

The extracted proposition is allowed to be ungrammatical and have incorrect upper-/lowercase letters.

Please refer to the next section for detailed instructions and examples.

# Detailed Instructions and Examples

Please use the following scheme to make a labeling decision for an extracted proposition:

## 1. Verify the correctness of the extracted proposition

The automatic extraction process makes errors. Therefore, verify that the given proposition expresses something meaningful at all.

Cues for negative classification:

- Arguments or relations contain something that is not a word
- Arguments or relations span over sentence boundaries
- Arguments or relations contain words that seem to be in no reasonable order
- The proposition is not a meaningful statement

Not a reason for negative classification:

- The proposition is ungrammatical / not a proper sentence
  - As long as it can still be understood
- Wrong usage of uppercase
- Arguments or relations contain an unnecessary word at the beginning or end
  - If it could be corrected by slightly rephrasing the argument / relation

Negative examples:

*Step Program -- is Second of -- peers. The*

> Arg 2 spans over a sentence boundary and the complete proposition makes no sense at all

*A great book – tells -- parents and educators*

> Although arguments and the relation look fine, the proposition as a whole is not meaningful, in this case, because “tell” is not a suitable relation between two concepts, we would always want to know *who* told *what* to *whom*, which cannot be expressed in this binary manner.

Positive examples:

*Attention Deficit Hyperactivity Disorder – affects -- 3-5% of all children*

> Perfectly extracted proposition

*companies -- to lower -- the interest rate*

> Relation has unnecessary “to”, but can still be understood

## 2. Verify that both arguments represent concepts

Our definition of a concept is broad, including abstract concepts (*love, problems, control*), activities (*home schooling, treatments*), physical objects (*plane, cars*), persons/groups/organizations (*Barack Obama, children*) among others.

Please check whether something is **not a concept** with the following criteria. If in doubt, assume it is a concept.

Cues that an argument is not a concept:

- Is a full sentence or very long phrase (latter is just a hint, long concepts also exist)
- Is on its own a proposition (i.e. contains a verb with arguments)
  - § Typically in extractions like *Peter – said – the weather is good*
  - § While Peter could be a concept, the second argument is a proposition
- Unspecific arguments, not meaningful without further context
  - § Unresolved pronouns / references
    - *He / she / this / that / them* → not clear who/what is meant
  - § Determined nouns that are not further specified
    - *the boy* → without context, we don't know which specific boy
    - but: *boys* is a valid concept, and *the boy who did X* also
- Arguments containing several conflicting concepts
  - § Comparisons, Exceptions, etc.
  - § *Boys but not girls* → not a single concept
  - § But: conjunctions and disjunctions are ok: *boys and girls, boys or girls*

Cues that something is an argument

- Contains at least one noun
- Can also contain:
  - § Further nouns, Adjectives, Determiners, Negations, Conjunctions or Disjunctions, Relative Clauses

Negative examples:

- I -- 'm -- 13 years old responsible enough to where I can do basically anything*
  - > first argument unspecific, not clear who pronoun references
  - > second argument too long, own sentence
- The kids -- to help support -- each other*
  - > first argument unspecific, not clear which kids are meant
  - > second argument not a concept

Positive examples:

- Boys -- need -- a heterosexual male parent*
- Attention Deficit Hyperactivity Disorder – affects -- 3-5% of all children*
- Kids – should have – hobbies that they love*

### 3. Verify that the relation phrase expresses a meaningful relation between the concepts

Make sure that the relation phrase expresses a relationship between the two concepts in a way that the triple forms a meaningful statement.

Cues that a phrase is not a proper relation label:

- Phrase is very long / full sentence
- Contains parts that are rather an argument / a concept
- Its meaning is not clear
  - § Strange word order / partial expression
  - § But: we tolerate an unnecessary *to* at the beginning of the phrase
- Not a suitable relationship for the concepts, does not express relationship

Cues that a phrase is a relation label:

- Contains at least one verb or one preposition

Negative examples:

*Parents - are positive about trying CBT to -- help them cope*

- > Relation phrase already introduces a relationship “are positive about” and a target concept “trying CBT”, too long

*simple things -- can do to -- work on early literacy at home*

- > Both concepts are fine (abstract concept left, activity right), the relation phrase also expresses a relation, but it doesn’t make sense for the concepts (*things cannot work*)

Positive examples:

*Homeschooling -- would likely be acceptable to -- the general public*

- > Valid relation phrase

*homeschool graduates -- to pursue -- either post-secondary education or employment*

- > Valid, although the “to” is superfluous and makes the phrase ungrammatical here

#### **4. Label proposition positively**

In case you reach this step and the proposition met all described requirements, label it with 1.