

Metaphor Annotation Guidelines

Note: We have translated some of Chinese annotation guidelines, which are important, into English.

1. Annotation scheme

The following is an example of annotation and an explanation of each label.

Example:

```
<metaphor>
  <ID>W0220</ID>
  <Sentences>地球是我们的母亲“The earth is our mother”</Sentences>
  <Target>地球“earth”</Target>
  <Source>母亲“mother”</Source>
  <EmotionCategory>PB</EmotionCategory>
  <EmotionIntensity>3</EmotionIntensity>
  <MetaphorCategory>Y</MetaphorCategory>
  <Indicator>是“is”</Indicator>
  <DataSource>W</DataSource>
</metaphor>
```

1.1 ID

The number of the sentence, which is created by the system.

1.2 Sentence

A metaphorical sentence.

1.3 Target domain vocabulary (Target)

Humans use one concept in metaphors to describe another concept for reasoning. The function of a metaphor is to use known objects (sources) to describe unknown and (targets). The target vocabulary comprises unknown objects; the source vocabulary comprises known objects.

For example: That lawyer is like a fox.

Target: lawyer;

Source: fox.

The financial crisis has eaten up all my savings.

Target: finances;

Source: eat up.

(The target domain is finances and the source domain, implied by the verb “eat up,” is some sort of ravenous beast.)

That manager is controlling the situation well.

Target: situation;

Source: control.

1.4 Source domain vocabulary (Source)

See above 1.3.

1.5 EmotionCategory

Emotions evoked by metaphor can be classified into seven categories: joy, anger, sadness, fear, love, disgust, and surprise. The annotation of emotions takes place on the sentence level. The emotion contained in each metaphorical sentence can be placed into one of the seven categories of emotion using an “emotional lexicon ontology” as a reference to decide which emotion category applies. “Emotional lexicon ontology” is a resource for sentiment analysis produced by our lab (Xu et al., 2008). The emotional lexicon ontology has been publicly released at <http://ir.dlut.edu.cn/EmotionOntologyDownload>.

1.6 EmotionIntensity

Emotion intensity is divided into five levels, namely 1, 3, 5, 7, and 9. From 1 to 9, the intensity becomes progressively stronger, which is also the case in the emotional lexicon ontology.

1.7 MetaphorCategory

Metaphors can be nominal (N) or verbal (V); verb metaphor, which contains a verb used metaphorically (e.g., 她怀揣着美好的梦想 “She *wove* a good dream in her mind”); noun metaphor, which contains a noun used metaphorically. Noun metaphor includes a metaphor of “A is B” (e.g., 语言就是力量 “*language is power*”) and metaphor with linguistic makers such as “as” and “like” (e.g., 他像箭似的跑开了 “he ran away *like an arrow*”).

1.8 Indicator

Indicators refer to metaphor devices such as 像 “like,” 好似 “as,” etc. as “indicators”.

1.9 Source of material

Classification of source material: Networks: W; Books: B; Scripts: S; Journals: N.

2. Annotation label description

Attribute	Range
EmotionCategory	Joy: PA; Love: PB; Angry: NA; Sad: NB; Fear: NC; Disgust: ND; Surprise: PC; Neutral: OO
EmotionIntensity	1, 3, 5, 7, 9 (1 represents the lowest level, 9 represents the highest)
MetaphorCategory	Nominal metaphor: Y; Verbal metaphor: V
DataSource	Networks: W; Books: B; Scripts: S; Journals and Newspapers: N

Table 1 Annotation label description

3. Identification of Metaphor

Metaphor has been viewed as a mapping system that conceptualizes one domain (target) in terms of another (source) (Lakoff and Johnson, 1980). We define metaphor as whenever one concept is used to describe another concept. Our metaphor annotation is at the relational level, which involves the identification of metaphorical relations between source and target domain vocabulary. To discriminate between words used metaphorically and literally, the annotators followed the guidelines of the Pragglejazz Group (2007) and Shutova and Teufel (2010):

1. Read the entire text-discourse to establish a general understanding of the meaning.
2. Determine the lexical units in the text-discourse.
3.
 - For each lexical unit in the text, establish its meaning in context, that is, how it applies to an entity, relation, or attribute in the situation evoked by the text (contextual meaning). Take into account what comes before and after the lexical unit.
 - For each lexical unit, determine if it has a more basic contemporary meaning in other contexts than the one in the given context. For our purposes, basic meanings tend to be
 - more concrete [what they evoke is easier to imagine, see, hear, feel, smell, and taste];
 - related to bodily action;
 - more precise (as opposed to vague);
 - historically older.

Basic meanings are not necessarily the most frequent meanings of the lexical unit.

 - If the lexical unit has a more basic current contemporary meaning in other contexts than the given context, decide whether the contextual meaning contrasts with the basic meaning but can be understood in comparison with it.
4. If yes, mark the lexical unit as metaphorical.

4. Matters needing attention

- (1) Proverbs or idiomatic expressions are not the focus in this study, although some are included because we would like to create a special corpus for idiomatic expressions in the future.
- (2) Very short sentences (less than four words) should be avoided.
- (3) Try not to present entity names that the participle system cannot distinguish, to avoid ambiguity.

References:

Lakoff, George, and Mark Johnson. 1980. *Metaphors We Live By*. Chicago: University of Chicago Press.

- Pragglejaz Group. 2007. MIP: A Method for Identifying Metaphorically Used Words in Discourse. *Metaphor and Symbol*, 22:1-39.
- Shutova, Ekaterina, and Simone Teufel. 2010. Metaphor Corpus Annotated for Source-Target Domain Mappings. In *Proceedings of LREC 2010*, Malta, pp. 3255-61.
- Xu Linhong, Lin Hongfei, Pan Yu, Ren Hui, and Chen Jianmei. Constructing the Affective Lexicon Ontology. 2008. *Journal of the China Society for Scientific and Technical Information*, 27(2):180-85