Annotation Guidelines for Fine-Grained Opinion Analysis

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The annotation task is to annotate two kinds of entities:

- 1. Subjective phrases
- 2. Aspects of a product

Aspects of a product are everything which is part of it or related to it. For example, a camera might have the aspects interface, weight, size, picture quality, but as well service of the manifacturer or delivery time or the manifacturer itself. The whole product itself is an aspect as well. Examples for aspects are (assuming a washing machine to be the product)

- This washing machine is great.
- The speed is low.
- It was delivered one day after ordering it!
- Ich liebe Miele!

<u>Subjective phrases</u> are expressions of an opinion. This phrase gives you the clue that the sentence is not a statement of a fact. Examples are

- Ich mag das Aussehen.
- The speed is so great.
- This computer is helpful.

Subjective phrases can have arguments: The <u>polarity</u> is always to be set: It can be -1 for a negative phrase (I do not like), 0 for neutral or +1 for positive phrases. We do not take subjective phrases into consideration which are not of a evaluative characteristic (do not annotate 'I think').

The other argument can be one or multiple aspects, which the subjective phrase is about. Eg. in the example

I like the speed and sound.

The phrase like should be assigned the polarity +1 and the two aspects speed and sound. Aspects have one argument, "foreign". This is to be set to "true" if the aspect is something that could be but is not (a proposal, idea how to improve the product) or if it is another product which is not reviewed here. Examples are:

- I prefer Nikon. (in a Canon review)
- The speed could be higher. (speed is a foreign aspect, higher a negative subjective phrase.)

Some general hints:

- It might make sense to go once over the whole text to annotate the entities, and then go over the entities from the beginning to assign the attributes (relation between subjective phrase and polarity).
- In general, please ask yourself, for both kinds of entities, if the annotated phrase is sufficient to get the impression (positive expression about a specific aspect). If not, you might want to annotate a longer phrase. Often, the phrase could be shortened. Please annotate as short as possible!
- Try to avoid overlapping annotations!
- Do not annotate stop words (the, and, etc.)
- Try to annotate as fine-grained as possible.
- In enumerations, each aspect is to be annotated alone, not the whole enumeration as one aspect.
- Not every subjective phrase has a target!
- Not every aspect is a target of a subjective phrase!
- Aspects can occur as target of different subjective phrases (however, that should not happen often).
- Important modifiers of a subjective phrase are to be annotated as well "very fast" instead of very "fast".
- If a subjective phrase is split over the sentence, long annotations might be necessary to denote the relation between the words.
- If something only holds under condition, annotate it nevertheless (In the night, it is too loud. We might want to annotate conditions in a later step.
- If something special catches your eye, please tell me and send the example to the administrator of the the annotation ask.

- Multiple exclamantion marks, smilies, frownies etc. can be expressions of subjectivity as well.
- phrases like "too heavy" or "zu spät" should be annotated with too/zu to be subjective and heavy/spät to be aspect.
- Coreferencing is to be annotated (I like that), but only if a subjective term is referring to it, otherwise not. If an actual aspect is mentioned in the same sentence, prefer the annotation of the actual aspect over the coreferencing term. In other words, anaphoric references should be annotated only in the case that a subjective term refers to the antecedent.
- Comparisons: In a review for a canon camera, you might find: I like Nikon. In that case, Nikon should be seen as aspect and like has a negative polarity, as it is to be judged with respect to the product of the review.
- Verbs like "looks" which are implicitly talking about an aspect are to be annotated as aspect if they do not express an evaluation at the same time. For example "looks great" is to be annotated as looks great.