16th May'13

Progress

1. Annotation of the triplets
   Each of the three *phrases* of the triplet were annotated with an alignment scale of 1 to 3, which basically checked the identifiability of that phrase in the description. Tags:
   1. **1** denotes that the *phrase* was exactly identified as it is in the sentence of the description where the corresponding triplet was found.
   2. **2** denotes that the different words of the *phrase* could be identified in the sentence of the triplet but not the complete phrase as it is.
   3. **3** denotes that one or more of the words of the *phrase* were not identified in the sentence of the triplet.

   This helped getting familiar with the complexity of the interpretability of the triplets in a description. The more **3**s you have, the more difficult would it be to interpret a triplet out of the description.

2. Sentence labels
   An extra field was added in the triplets data containing the *sentence_id* which was the counter index of the sentence in which the triplet was found.
   This helped in understanding the depth of the connections between the sentences. If a phrase of the triplet occurs as **RO** in a number of sentences, then we know how far the context gets carried.

Future Work

The difficulty in identifiability is expected to be taken care of by the parser. So, it would be worthwhile to go through the sample outputs of the parser provided by Felix and check the extent upto which it takes care of the identifiability, esp. of the prepositions (in). Also to be looked at is whether the context is carried foe.

Carrying the context with DFS

It was observed that the contexts used in human descriptions goes in a depth-first fashion to describe path intersections. It is natural to describe one path as far as you could and then come back to the others, rather than providing path descriptions in a parallel fashion. For example, in the desctiption , "[..] *there are three main alternative paths that you can use to head north. The central one is up some stairs* [..]. *The path will take you to the* [..] *where there is* [..] *and a little to the east, the Union House. Union House is a large building containing* [..]". And then the context ends and the describer switches back to the other branch to explore a new depth, "*The second path* [..] *from the south entrance takes you a little bit to the west and then switches north* [..]. *Near this* [..]*, you find a crepes stand. From this path* [..]". (Here, words like "this path" , "the road" represent the current context). And then again it switches back, "*The third path* [..]*"*.
Hence, it gives rise to an idea of parsing in a depth-first fashion so that the context is taken care of by the tree. It also provides a way to resolve the demonstrative pronouns like "this building" where it would mean the current context, i.e. the root of the subtree in progress.
Sample runs of such a tree were studied and it was found to resolve some indirect descriptions but on the whole, its success depends upon the parsing of the human descriptions