## Week 2 Research Notebook

The subject and it's different facets are defined. A cautionary note which I found interesting from the notes: "As in any science, the individuation of fundamental particles is a nontrivial exercise. At a pre-theoretical level, it is trivial to see that English is not French or German. However, it is non-trivial to specify the necessary and sufficient conditions that determine what amounts to a language and without providing a circular definition."

Mode of analysis is another important facet to think about carefully while dealing with languages. Also cautionary note: "It is seldom edifying to race machine learning models against each other to know which one, in which setting, has greatest accuracy, and it is never edifying to do so without quantifying the statistical significance of any such differences reported."

Text analysis of people's writings, essays or their posts on social media convey deeper insights into their thoughts, and these thoughts can be evaluated using text analysis which is actually an analysis on their thinking patterns and using these metrics their personality traits can be identified. There are numerous features like emotions, feelings, cognitive processes, sensory and social processes, relativity and personal concerns that can be deciphered from texts.

There is a big element of psychology in analysis of personality traits in the language. And AI algorithms have come a long way in figuring out the mood and sentiment of words and sentiments. This can be used to determine the personality of a person which can have many advanced use-cases. Tools like LIWC 2015, General Inquirer helps in analysing the text and providing deeper insights into text analysis.

The paper "Using linguistic cues for the automatic recognition of personality in conversation and text" and "Predicting Personality from Twitter" talks deeply about the analysis of text, essay corpuses and linguistic styles to predict personality traits.