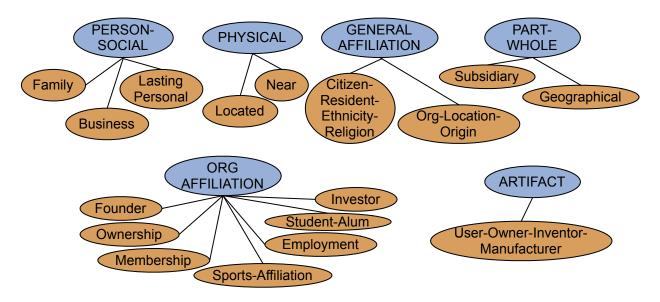
5.3 RAT

 Which one of the following ACE relations best describes the relationship of the words in caps: "NICOLA TESLA created the COIL TRANSFORMER?"



- 2. Which of the following would represent a good use case for using hand-written patterns to extract relations? (Select all that apply)
 - a) Finding the number of bids on items on eBay
 - Finding who are a particular person's friend through reading his/her biography
 - c) Finding all the names and associated numbers in a phone directory
 - d) Finding who person follows on Twitter

- 3. Assume we are trying to extract the relation of the words in caps using a Max-Ent classifier that we have trained on the entire internet. In which of the following examples would the feature combining entity heads (such as the feature "Airlines-Wagner" described in the lecture) prove very helpful if the sentence appeared in our test set? (Select all that apply)
 - a) BILL works at MICROSOFT
 - b) THE VATICAN is in ROME, ITALY
 - c) JIM DETERS is a co-founder of GALVANIZE
 - d) FRANK drinks PABST BLUE RIBBON
- 4. How does the bootstrapping method differ from supervised methods for relation extraction previously described? (Select all that apply)
 - a) The bootstrap does not require a human selected set of features.
 - b) The bootstrap method will work across languages.
 - c) The bootstrap method is nondeterministic (it will give different outputs for the same corpus and seed).
 - d) The bootstrap iteratively expands its feature set.