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| TITLE | PROBLEM | SOLUTION | RECOMMENDATION |
| Question generation via overgeneration transformations and ranking  -Heilman & Smith(2009) | Generate questions for the purpose of  reading comprehension assessment and practice. | Heilman and Smith used modular, three-stage  framework for automatic comprehension question  generation: (1) extract and derive declarative sentences from a source text; (2) transducer declarative sentences into questions using declarative, general-purpose rules; and (3) statistically rank the output of overgenerating stages 1 and 2 for acceptability. | For future work, they recommend to extend the unit tests by examining  the data from the evaluation so it can safely modify and extend the rule set to improve coverage and accuracy. |
| Automatic Factual Question Generation from Text –M.Heilman(2011) | Create a system for question generation that can take as input an article of text  (e.g., a web page or encyclopedia article that a teacher might select to supplement the materials in a  textbook), and create as output a ranked list of factual questions. | Heilman used 3 stages in his system. The first stage is to transform set of sentences into simpler declarative statement. The implementation includes operations for extraction and simplifying complex sentences and for resolving pronouns. The declarative sentence is turn into a set of questions by executing a series of well-defined syntactic transformations (WH-movement, subject-auxiliary inversion, etc.). Last process involved in Heilman’s system is to score and rank questions according to features of the source sentences, input sentences, question, and transformations used in generation | Heilman recommended having an alternative representation for QG, information extraction for QG and other NLP transformations such as sentence compression, sentence fusion, or paraphrase generation in transforming set of sentences into simpler declarative statement. |
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According to Rhos Y Fedwen Primary School (2004), there are 7 types of questions .The first one is, Open questions these are useful in getting another person to speak. They often begin with the words: What, Why, When, Who and Where. Closed questions are questions that require a yes or no answer and are useful for checking facts. Specific questions are used to determine facts. For example “How much did you spend on that”. Probing questions check for more detail or clarification. Hypothetical questions these pose a theoretical situation in the future. For example, “What would you do if…?’. Reflective questions are used to reflect back what you think a speaker has said, to check understanding. And lastly, the Leading questions, these are used to gain acceptance of your view – they are not useful in providing honest views and opinions. If you say to someone ‘you will be able to cope, won’t you?’ they may not like to disagree. There are 3 types of WH questions according to Snyder, Kjesbo et al. namely :

* Personal WH Questions (Who is your best friend?)
* General WH Questions (What do you bring to the beach?)
* Factual WH Questions (When is Independence Day?)

Another type of question is Multiple choice question which is a form of assessment in which respondents are asked to select the best possible answer (or answers) out of the choices from a list based on Wikipedia.

Name Entity Recognition

Named entity recognition (NER) is a subtask of information extraction that seeks to locate and classify atomic elements in text into predefined categories such as the names of persons, organizations, locations, expressions of times, quantities, monetary values, percentages, etc according to Krishnan and Gapapathy (2005). Existing approaches to NER have explored exploiting:

* Word features of the token and the words in its neighborhood.
* The parts of speech of the word in question and its neighbors.
* Features corresponding to certain prefixes and suffixes of the word and its neighbors.
* Features corresponding to the labels of its neighbors.