NLP - MODULE 5 - CHAPTER 5

Pragmatics

Discourse Reference Resolution

- Problem of AI → Process NLP
- Problem of NLP → Discourse Processing building theories & models of how utterances stick together to form Coherent Discourse

Cohesion

- Refers to linguistic features which link sentences together & are generally easy to identify

Discourse Structure

- Structures that are intended to indicate common experiences & respond to them
- Ex, Research abstracts are intended to inform readers in the same community as the authors & who are engaged in similar work

Discourse Segmentation

- Documents are automatically partitioned into fragments, also known as passages, which are different discourse segments
- Techniques to separate documents into passages include:
  1) Rule-based systems based on clue words & phrases
  2) Probabilistic technique to separate fragments and to identify discourse segments

Cohesive Relations

- Define dependencies between sentences in text. "He said so"
- "He" & "so" presuppose elements in the preceding text for their understanding
- Types of cohesive ties
  1) Grammatical
  2) Reference
  3) Substitution.
  4) Ellipsis
  5) Conjunction
  6) Lexical
  7) Reiteration
  8) Collocation

Coreference Resolution

Types of Reference

- Exophora [Situation - referring to things outside of text - not part of cohesion]
- Endophora [Textual]
  - Anaphora [Textual]
  - Cataphora [Following Text]

Coreference Resolution

Entity Resolution

- Ability of a system to recognize & unify variant references to a single entity

Types of Referring Expression

1) Indefinite Noun Phrase
2) Definite Noun Phrase
3) Pronouns
4) Demonstratives
5) Names

Syntactic & Semantic constraints on Coherence

- Number Agreement in the English Pronomial System

Singular	Plural	Unspecified
She, her, he, him his, it	We, us, they, them	your

- Person & Case Agreement in the English Pronomial System

	First	Second	Third
Nominative	I, We	You	He, She, they
Accusive	Me, us	You	Him, her, them
Genitive	me, our	Your	His, her, their

- Gender agreement in the English Pronomial system

Masculine	Feminine	Non Personal
He, Him, his	She, her	It