Syntactic Simplification for reading comprehension and language processing

**Evaluation Issues**

**Extrinsic evaluation**

A preliminary version of the syntactic simplification process was integrated into an information extraction system (Evans, 2011)

**Intrinsic evaluation**

- **MBL method to predict class labels of signs:**
  - Accuracy of 68.7%
- **Automatic simplification of noun post-modifiers:**
  - F1 scores of 24.32% to 59.02%

**Challenges**

- Automatic intrinsic evaluation requires the development of manually simplified documents. This involves:
  - Recognition and preservation of important information
  - Recognition of relevant accessibility issues
- User-focused evaluation may exploit:
  - Reading comprehension testing
  - Tasks such as manual summarisation, MCQ and short answer tests, and document listing
- Instrumental methods
  - Eye tracking and fMRI
- Automatic syntactic simplification may remove one type of complexity but introduce another (Arya et al., 2011)
  - This motivates exploration of methods to re-establish temporal relations, discourse links, and inference chains broken by the simplification process