Text Simplification

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Since last time:
　Syntactic simplifications tasks and cognitive research

Prepositional phrase

Simplification when the preposition is attached to a noun

Example when link to **verb**:
- Dana was looking into the mirror.
- Richard loves to travel around the world.

Example when link to **noun**:

```
We are on the way to California.
('We are on the way.', [(way, 'to California')])
Please pass me the book with green cover.
('Please pass me the book.', [(book, 'with green cover')])
Look at the man in the red shirt; he is looking suspicious.
('Look at the man; he is looking suspicious.', [(man, 'in the red shirt')])
We can reach this decision by the light of the discussion.
('We can reach this decision by the light of the discussion.', [])
the man with the red shirt is pretty
('the man is pretty', [(man, 'with the red shirt')])
```

Issues:

> The parser create errors. We need to test it with another one.

Example of parser errors:

Gus	NNP	compound
trash	NN	compound
talks	NNS	ROOT
about	IN	prep
his	PRP$	poss
friends	NNS	pobj
behind	IN	prep
their	PRP$	poss
backs	NNS	pobj
.	.	punct

Relative Clause

Detection issue:

- She lives in New York, which she **likes**. $\longrightarrow$ advcl
- She lives in New York, which she **hates**. $\longrightarrow$ ccomp

Linearization:

- I see a man **that is tall**. $\longrightarrow$ I see a **tall** man.
- The treasure **the pirates found** was empty $\longrightarrow$ **the pirates found** the empty treasure

Question: linearize? split? remove information?

System Evaluation

Human Evaluation:

- rate from 0 to 5 (original + simplify) and compare the results
- ask questions about small text (original + simplify) and compare the number of good answers

Hierarchical Organization

Hierarchy:

- Fronting/Topicalization (Maybe Relative clauses) (LDD)
- PP removal of non-bi-transitives and non passive by-phrases
- Complex sentence separation
- Passive-Active conversion
- (Maybe Relative clauses)
- **Lexical Simplification** (to be continued)

Next Tasks

- Continue syntax simplification
- Begin lexicon simplification
- Find a large dataset to improve our model
- Prepare the software platform

Thank you! :)

Questions?