



Text Simplification

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Advancement

- Adjustments in the code
- Automatic evaluation
- Manual evaluation
- Website interface



Adjustments in the code

Syntax simplification:

- PP

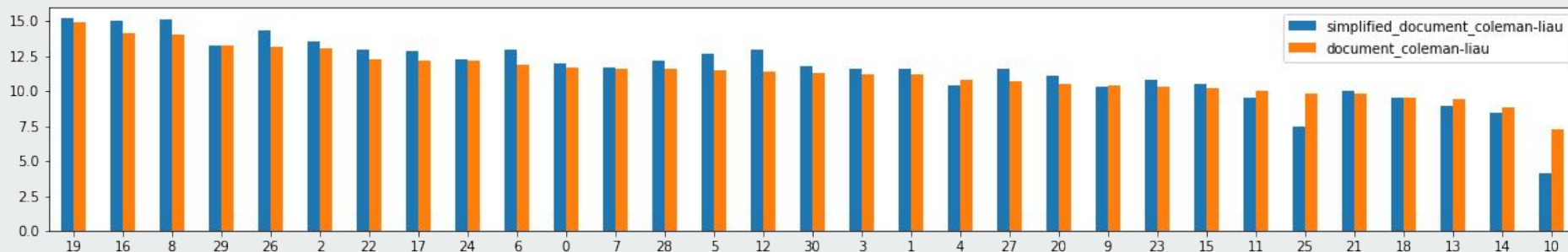
Lexical simplification:

- Adjectif comma Noun

Automatic evaluation

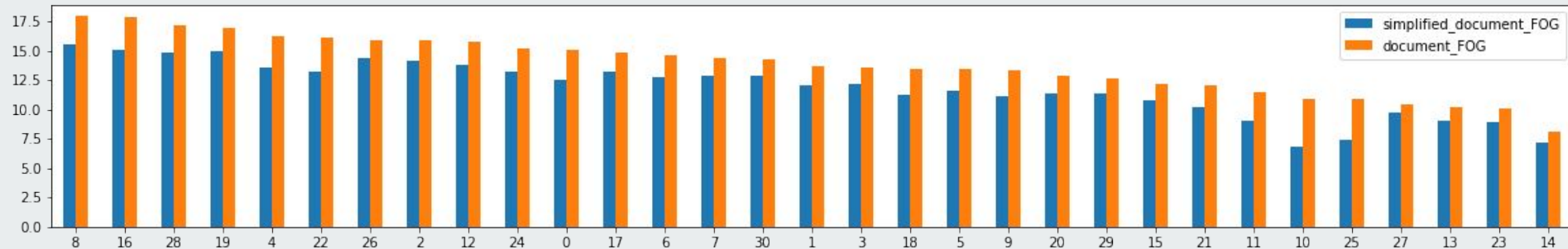
- 31 articles ([Wikipedia Data Sets](#))
- 2922 sentences
- 3 readability score

Coleman-Liau Index: difficulty based on number of character per word

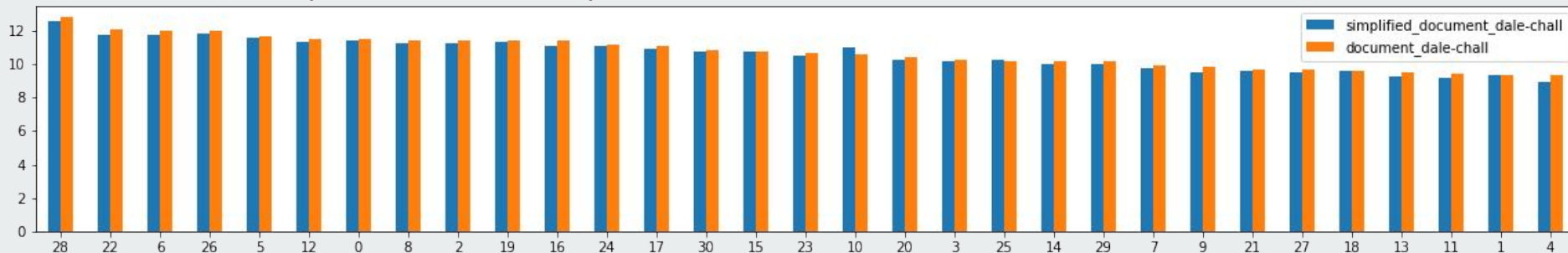




Gunning FOG formula: difficulty based on number syllables per word (3 or more)



Dale-Chall readability formula: difficulty based on list of 3000 common words





Manual Evaluation



Process

- Sample 100 pairs of sentences
- Distributed in 5 forms
- 2 questions for each pairs :
 - Is the simplified sentence grammatically correct ?
 - How did the simplification do ?



A new Japanese government that came to power in 2009 froze the relocation plan, but in April 2010 indicated their interest in resolving the issue by proposing a modified plan.

Description (facultative)

A new Japanese government that came to power froze the relocation plan, but indicated their interest in resolving the issue by proposing a modified plan.

Description (facultative)

Is the second sentence grammatically correct ? *

☐ Yes

☐ No

How did the simplification do ? *

☐ Simplification caused ungrammaticality

☐ Oversimplified

☐ Simplified a bit

☐ Simplified just enough to your liking

☐ Autre...

Results (on a very (very) few answers)

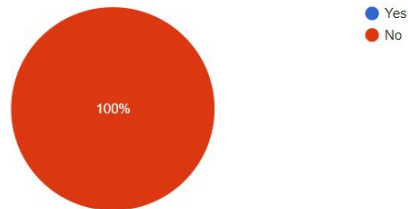
- Simplification caused ungrammaticality sometimes

To the very end of its existence, the Nazi Party claimed to respect the traditional government of Germany and, to that that end, local and state governments were allowed to exist side-by-side with regional Nazi leaders.

To the very end of its existence, the Nazi Party claimed to respect the traditional government of Germany and, to that that end, local and state governments were allowed to exist side-.

Is the second sentence grammatically correct ?

6 réponses



Results

- Some sentences are better suited to some people than others

Is the second sentence grammatically correct ?

6 réponses



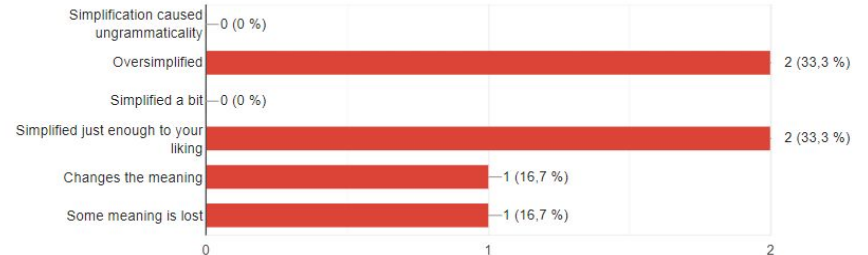
● Yes
● No

50 Cent later claimed that if Graduation were to sell more records than Curtis, he would stop releasing solo albums.

50 Cent later claimed that if Graduation were to sell more records, he would stop releasing solo albums.

How did the simplification do ?

6 réponses





Website interface

Your Text:

The scapula is a wide, flat bone lying on the thoracic wall that provides an attachment for three groups of muscles: intrinsic, extrinsic, and stabilising and rotating muscles. The intrinsic muscles of the scapula include the muscles of the rotator cuff—the subscapularis, teres minor, supraspinatus, and infraspinatus. These muscles attach to the surface of the scapula and are responsible for the internal and external rotation of the shoulder joint, along with humeral abduction.

SIMPLIFY

SimplifiedText:

The bone is a wide, flat bone lying. The thoracic wall provides an attachment for three groups of muscles: intrinsic, extrinsic, and stabilising and rotating muscles. The intrinsic muscles of the bone include the muscles of the rotator cuff— the subboneris, muscle, supraspinatus, and infraspinatus. These muscles include the surface of the bone and are responsible for the internal and external rotation of the shoulder joint,.



Text simplification project

This project saw the light of day during the Software project course of Nancy NLP Master.

The goal was to create a rule-based text simplification system. This method present some limitation (notably taking into account sentences context). Nevertheless, the result produced if studied further could be interesting.

Our system is composed of multiple modules:

- Syntactic simplification
- Lexical simplification

Our contact



Team:

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Project link

[Github project page](#)

University program:

[NLP Master](#)



Thank you

Questions?