Text Simplification

Tom WYSOCKI, Peter PRIBIL,
Margot GUETTIER, Morgan RUIZ-HUIDOBRO

November 2021

Since last time:
 Syntactic simplifications tasks

Passive to Active voice sentences

```
print(1,pass2act("the dog is kept by him "))
print(2,pass2act("the dog is being kept by me"))
print(3,pass2act("the dog was kept by us"))
print(4,pass2act("the dog was being kept by you"))
print(5,pass2act("the dog has been kept by her"))
print(6,pass2act("the dog had been kept by her"))
print(7,pass2act("the dog will be kept by him"))
print(8,pass2act("the dog would be kept by her"))
print(9,pass2act("the dog would have been kept by them"))
```

```
1 He kept the dog.
2 I is keeping the dog.
3 We kept the dog.
4 You is keeping the dog.
5 She have kept the dog.
6 She had kept the dog.
7 He will keep the dog.
8 She would keep the dog.
9 They would have kept the dog.
```

1

Passive to Active voice sentences

```python
print(1,pass2act("the dog is kept by him "))
print(2,pass2act("the dog is being kept by me"))
print(3,pass2act("the dog was kept by us"))
print(4,pass2act("the dog was being kept by you"))
print(5,pass2act("the dog has been kept by her"))
print(6,pass2act("the dog had been kept by her"))
print(7,pass2act("the dog will be kept by him"))
print(8,pass2act("the dog would be kept by her"))
print(9,pass2act("the dog would have been kept by them"))
print(10,pass2act("A movie is going to be watched by us tonight"))
```

```
1 He keeps the dog.
2 I am keeping the dog.
3 We kept the dog.
4 You were keeping the dog.
5 She has kept the dog.
6 She had kept the dog.
7 He will keep the dog.
8 She would keep the dog.
9 They would have kept the dog.
10 A movie is going to be watched by us tonight
```

Tested on 24 sentences
  WER: 14.689%
  But: 19 /24 Sentences are correct and the errors have been identified

- passive to active voice
    Conjugation : future with "going to"
    Coordination: "and"
    Construction: wrong dependency tree

Issues

- Prepositional phrase
    Write rule based system $=$ time consuming
- Relative clauses
    Either splitting or linearization
- Complex sentence
    Mainly neural networks based approach
- Passive to active
    Legality?

Passive
The dog is kept by him.
The dog was kept by him.
The dog will be kept by him.
The dog dog would have been kept by him.
At dinner, six shrimps were eaten by Harry.
The savannah is roamed by beautiful giraffes.
The flat tire was changed by Sue.
A movie is going to be watched by us tonight.
The obstacle course was run by me in record time.
The entire stretch of highway was paved by the crew.
He was fed well.
Jürgen was brutally tortured by his captors.
Karen is asked out both by Peter and Gregor.
I hold you by the hand.
By noon he's bored to death by his mother-in-law.
He is often reprimanded by his father.
This situation was solved by noone else than Sir Buck.
Bambi was captured and eaten after several hours of roasting by a group of hungry hunters.
The problem was obfuscated and unnecessarily overcomplicated for no reason by not a single person.
By definition I agree.

Complex
Did you know that Adam's apple is inedible?
I want you to know that.
She asked me to remain silent for a very long time.
We want to have children and buy expensive clothes for them.
I said that he knows that I'm aware.
He knows that I said that he knows that I'm aware.
The doctor prescribed a medicine that I should take every hour.
That is great.
He was happy and he knew it wasn't going to last for long.
Boom3D is a horrible software that I regret using.
Sandra's mom told her that smoking is bad.
Günther knows if he puts his wet finger in a socket he'll have a bad time.
Felicia likes it when the bubbles are shaken out of a coke.
Tell me that I'm beautiful.
Give me signal so I can start moving.
Tell me why ain't nothing but a mistake.
Give me an example where I can usilite this knowledge.
This person and that person are evil.
And God said, "Let there be light", and there was light.
Rupert knew that he made a mistake and that he would panic.

LDD
Lloyd is easy to talk to.
My sanity, I can't find.
The children, David panickly told us, were nowhere to be found.
Joshua, Mary told Jennifer, is handsome.
Do the right thing you should
This song I'm listening to.
Barbara, you should seek for assistance.
Her, I haven't seen.
Gabor, Peter told Guy to meet with.
Very hard, this software project is.
The person whom I talked with is a very frustrating individual.
Happiness is hard to find.
Barbara, you should seek for assistance. BB
Formally defining happiness is hard.
The person Mary said that she told Harry about.
The treasure the pirates found was empty.
Tell me who you played with.
Everything with more than 8 legs, Sonya is afraid of.
Nothing good I've found.
Who do you think I lied that Tracy hopes that Bob met with?

Corpus for PP

PP			
You, in the front row, are amazing.			
I saw a monkey with a telescope.			
I'm doing this with pleasure.			
The guy with a knife threatened the shopkeeper.			
Gus trash talks about his friends behind their backs.			
The lady in the toilet is taking a lot of time.			
A lady with a pillow hit a man in a wheelchair.			
I was on time.			
The car dealership told his customer with excitement to pay with coins behind the shop.			
With all due respect, I disagree.			
He shouted at his dog with a whistle.			
We decided that we'll rent a car with enthusiasm.			
Karen found her meaning in life in the shower.			
Hold my hand with 6 fingers.			
I went to the cinema.			
Ted crashed his girlfriend's snowman with a car yesterday.			
Under your clothes there's an endless story.			
Behind the University there's a canteen.			
During class is a good time to not be sleepy.			
It is on the table.			

Next Tasks

- Modify the code to consider further simplifications
- Test on existing corpus and propose additional combinations
- Continue with the coding for other syntactic simplifications

Thank you! :)

Questions?