Hey BERT, can you analyze: “Ik heb een banaan in mijn oor”?

What if we change something arbitrary, like its segment embeddings?, maybe he will be smarter!

Well, they are used as input in BERT-based models to signal to which segment a subword belongs.

More concretely, they are just looked up embeddings, which are summed to the input word embedding. For tasks containing multiple segments, they can signal this difference to the model.

Ah cool!, Lets try alternations of segment embeddings in low-resource setups. Shall we try to just use segment ID’s of 1?

How about using the averages, or just making them empty (0.0)?

We could also randomly initialize them?, or just use ID 0 for all sub-words!

For monolingual BERT, the default of using segment ID 0 performs very poorly for word-level annotations!

But if we use multilingual BERT, we gain 2.5 LAS points on average by simply swapping them to 1!

*This is a work of fiction. Any similarities to persons or actual events is purely coincidental.