Technical guidelines for annotating non-standard language corpora in WebAnno

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Overview

1. Goals and method
2. Tokenisation
3. Sentence segmentation
4. Normalisation
5. Combinations and table

Goals

„Kaće nam podele ruske zastavice“

1. Difficult to search in corpus: „kaće “
2. Low quality tagging and lemmatisation

Therefore:

- Normalisation (standardisation) of word forms: *„Kada će“*

Additional goal: what is a word, what is a sentence?

„utakmica ***Dinamo-Partizan***“

„moj ***deb .*** *brat me opet gnjavi“*

- Automatic tokenisation sometimes makes errors in assigning boundaries between tokens
- Similarly, there are errors in segmentation into sentences

- We need a „gold“ corpus, so we can improve tokenisation and sentence segmentation programs.

Manual annotation

- We have chosen tweets of different non-standardness levels
- The tweets are already automatically tokenised and sentence segmented
- Manual annotation:
  - **Technical guidelines**
  - Linguistic guidelines
  - Practical
  - Annotation…

Overview

Annotation Layer	Use
Corrections	Tokenisation corrections
Sentences	Sentence segmentation
Normalisations	Normalised word

Special chars	Use
\	No space after word
$0	Deletion
$.	End of sentence

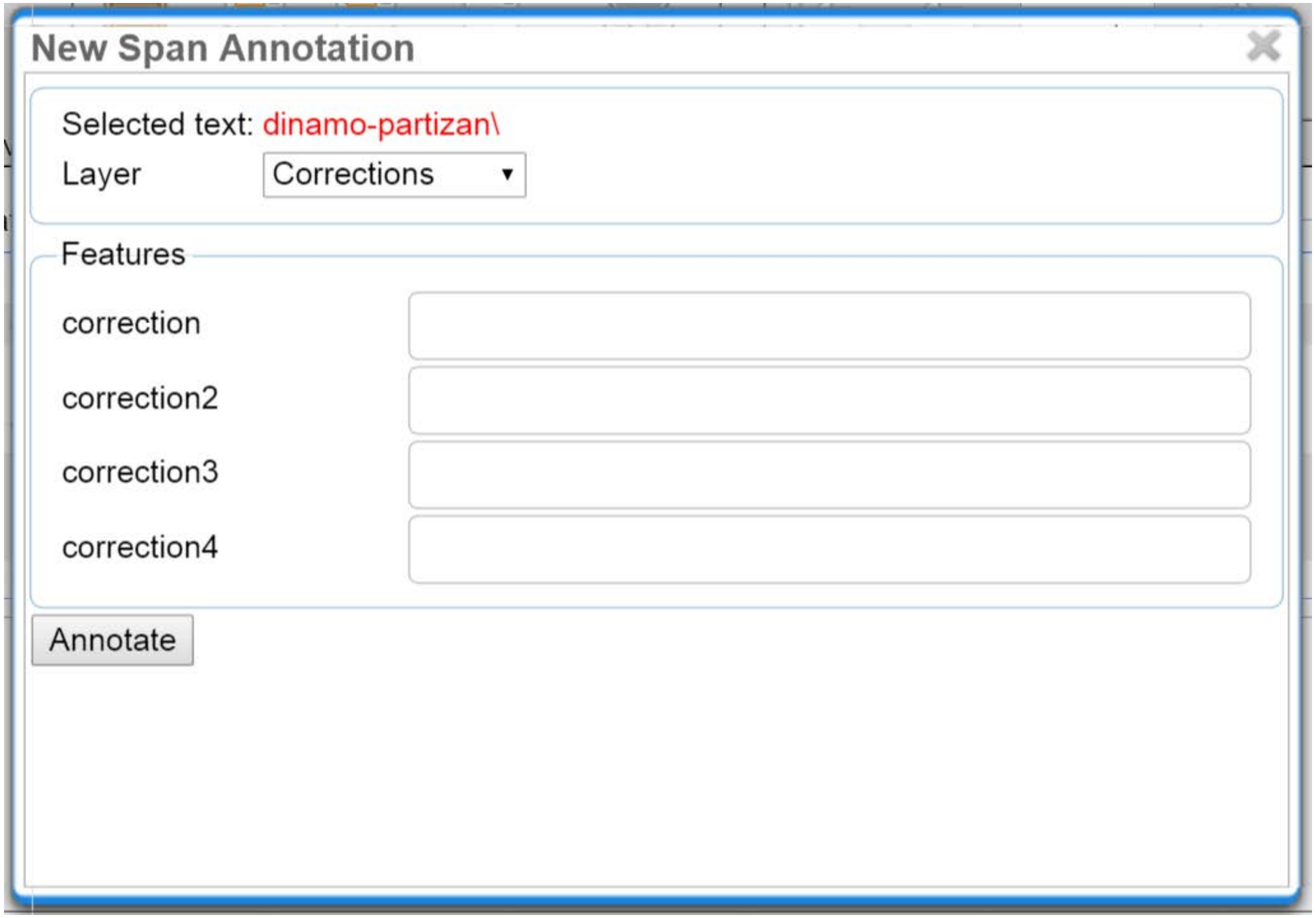
Spacing: \

- Tokens in WebAnno end in backslash if there is no space after it in the source tweet
- This char helps us to reconstruct how the original tweet was written, including spacing
- Added only for information; we do not need to write it in our annotations

- *Da, trebalo bi.* → *Da\ , trebalo bi \.*
- *Javim ti se danas/sutra.* → *Javim ti se danas\ /\ sutra .*
- *više njih? :\ brrr...* → *više njih\ ? :\$0 brrr\ ...*

Tokenisation correction

- Annotation layer: *Corrections* (4 values)



New Span Annotation

Selected text: dinamo-partizan\

Layer Corrections

Features

correction

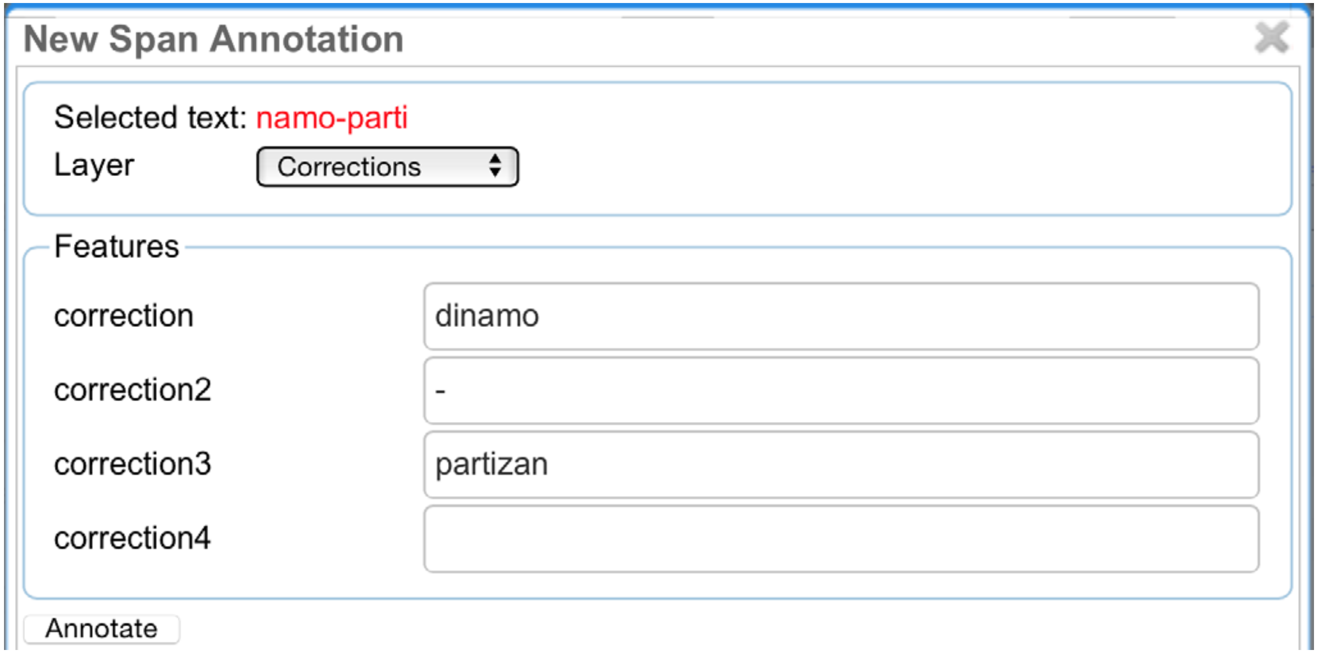
correction2

correction3

correction4

Tokenisation: splitting tokens

Ne mogu gledati ovaj dinamo-partizan\ ...

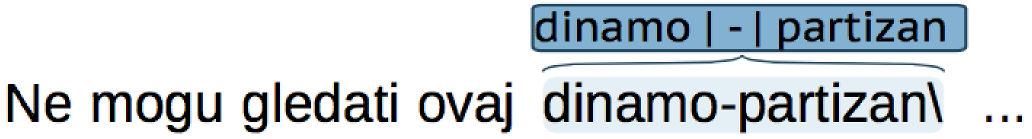


Selected text: namo-parti

Layer: Corrections

Features

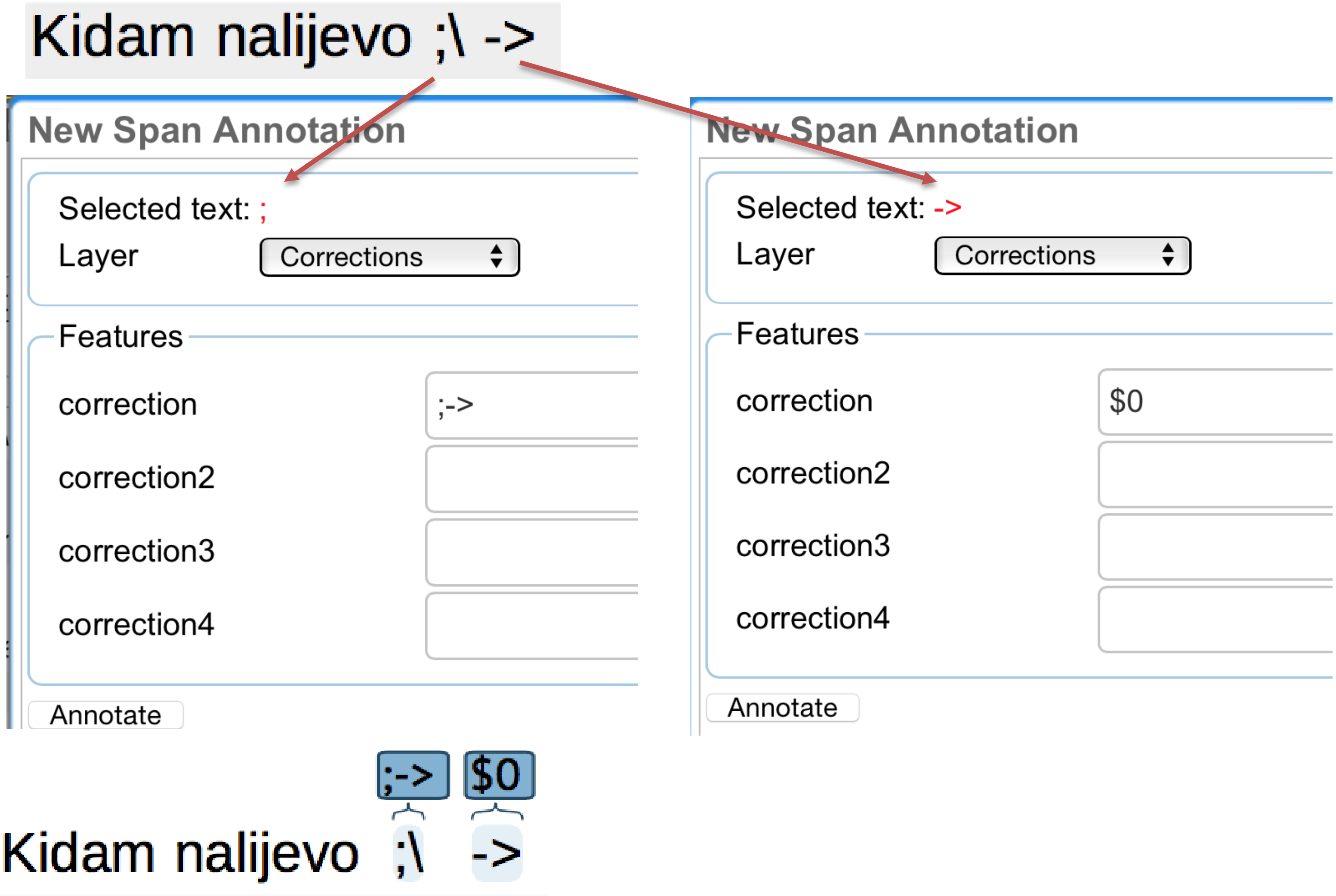
correction	dinamo
correction2	-
correction3	partizan
correction4	



dinamo | - | partizan

Ne mogu gledati ovaj dinamo-partizan\ ...

Tokenisation: merging tokens: ;->



Kidam nalijevo ;\ ->

New Span Annotation

Selected text: ;

Layer Corrections

Features

correction ;->

correction2

correction3

correction4

New Span Annotation

Selected text: ->

Layer Corrections

Features

correction $0

correction2

correction3

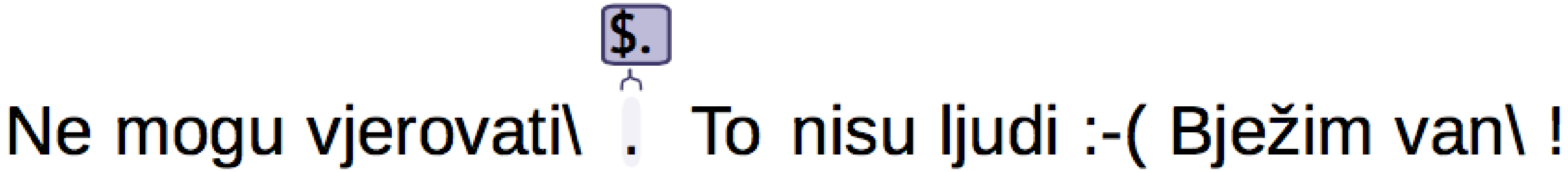
correction4

;-> $0

Kidam nalijevo ;\ ->

Sentence segmentation

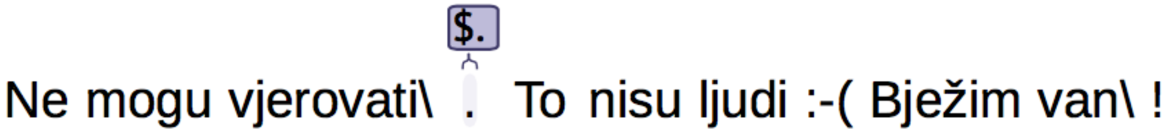
- Layer *Sentences*
- Value: only *$.* (end of sentence)
- Not marked at end of tweet



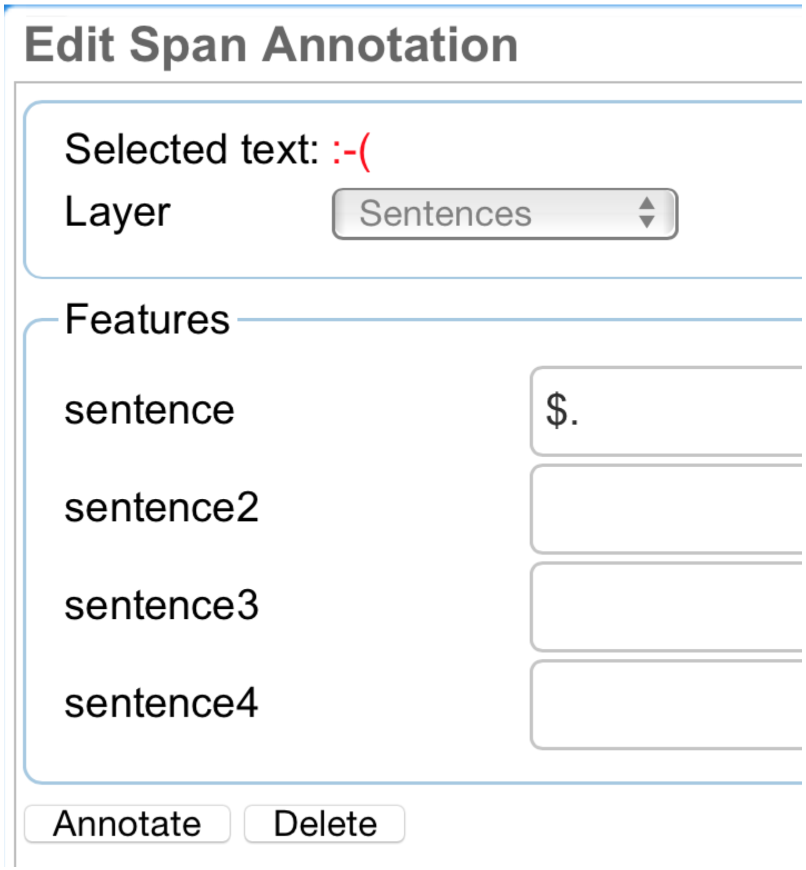
$.

Ne mogu vjerovati\ . To nisu ljudi :-(Bježim van\ !

Adding a sentence boundary



Ne mogu vjerovati\ . To nisu ljudi :-(Bježim van\ !



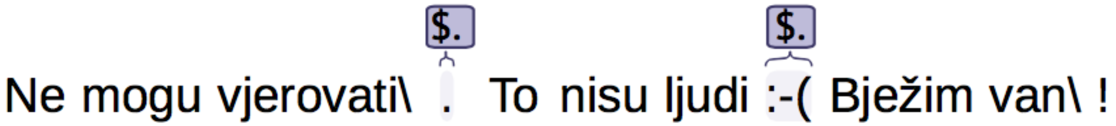
Edit Span Annotation

Selected text: :-(

Layer: Sentences

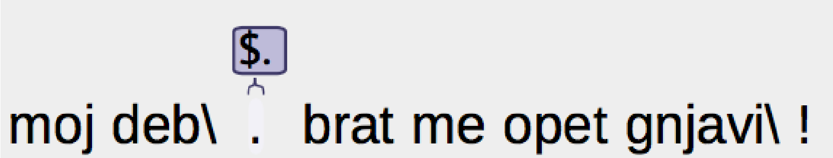
Features

sentence	$.
sentence2	
sentence3	
sentence4	

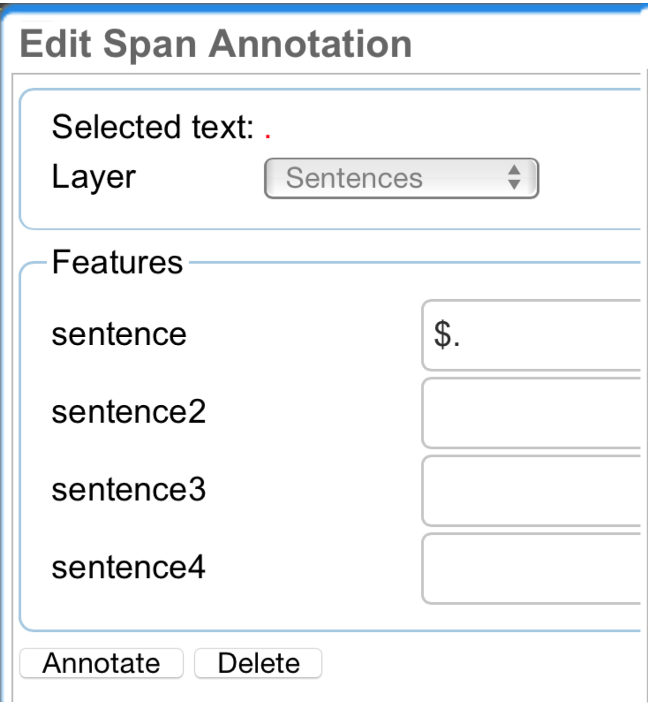


Ne mogu vjerovati\ . To nisu ljudi :-(Bježim van\ !

Deleting a sentence boundary

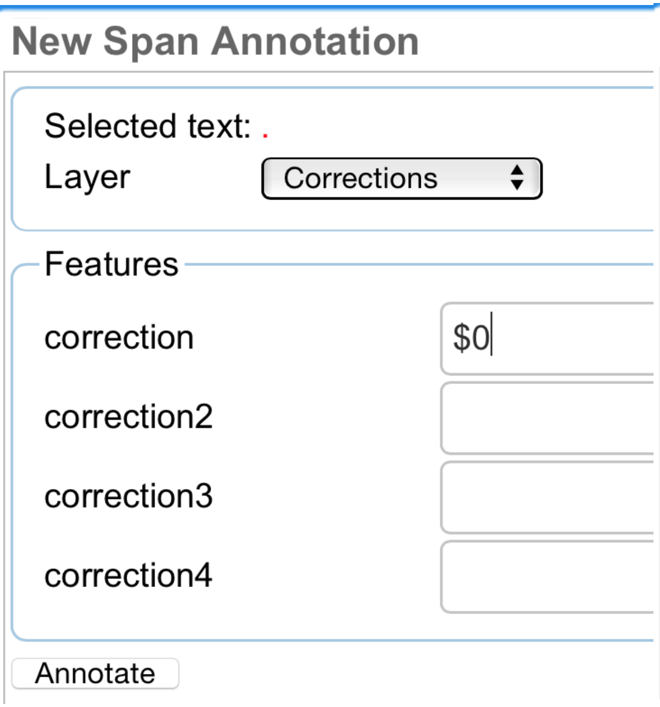


moj deb\ . brat me opet gnjavi\ !


Edit Span Annotation

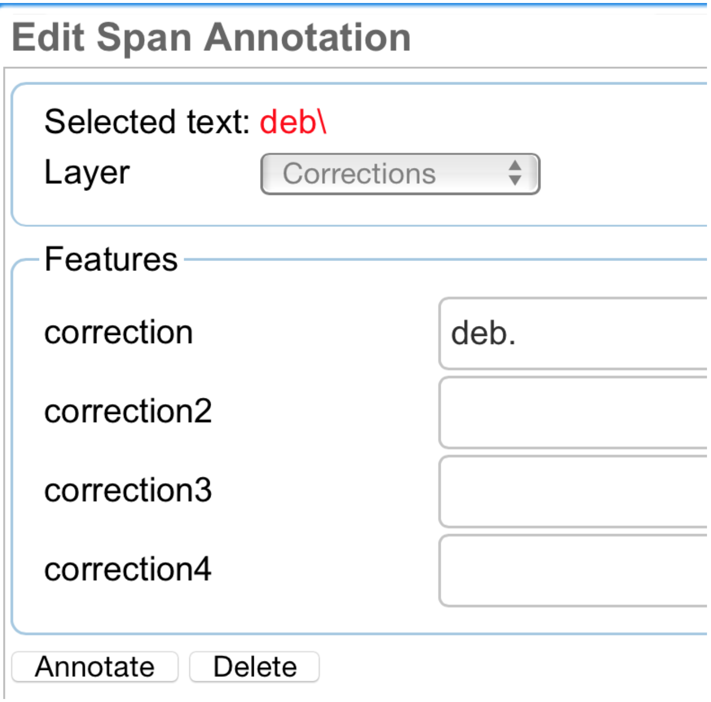
Selected text: .
Layer Sentences

Features
sentence $.
sentence2
sentence3
sentence4


New Span Annotation

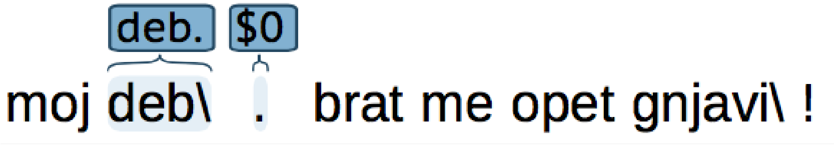
Selected text: .
Layer Corrections

Features
correction $0
correction2
correction3
correction4


Edit Span Annotation

Selected text: deb\
Layer Corrections

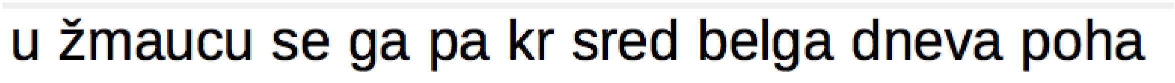
Features
correction deb.
correction2
correction3
correction4



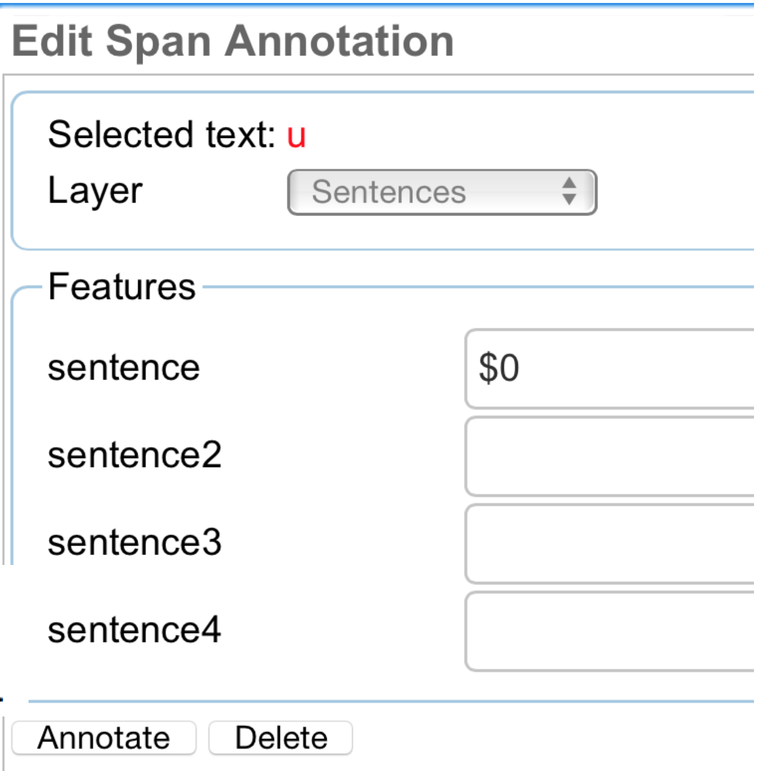
moj deb\ . brat me opet gnjavi\ !

Deleting a tweet

- If it makes no sense to annotate a tweet
- The first token should be annotated with *$0* on the layer „Sentences“



u žmaucu se ga pa kr sred belga dneva poha



Edit Span Annotation

Selected text: u

Layer: Sentences

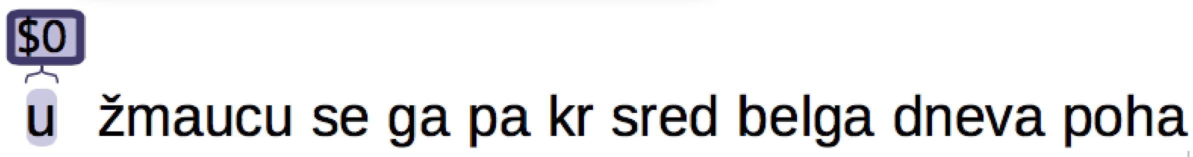
Features

sentence: $0

sentence2:

sentence3:

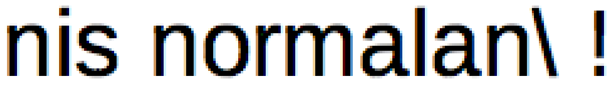
sentence4:



u žmaucu se ga pa kr sred belga dneva poha

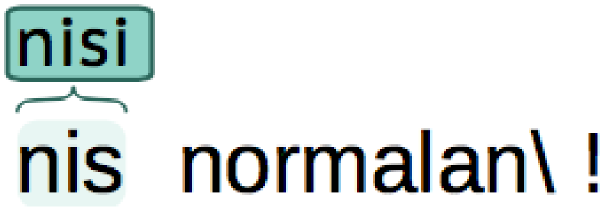
Normalisation

- Layer *Normalisations*
- Original:



nis normalan\ !

- Corrected:

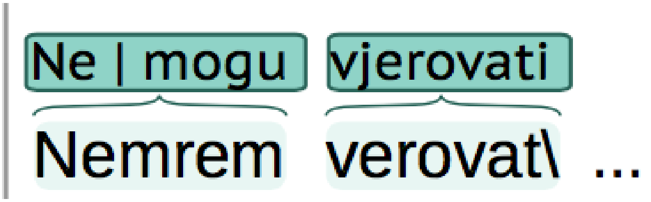


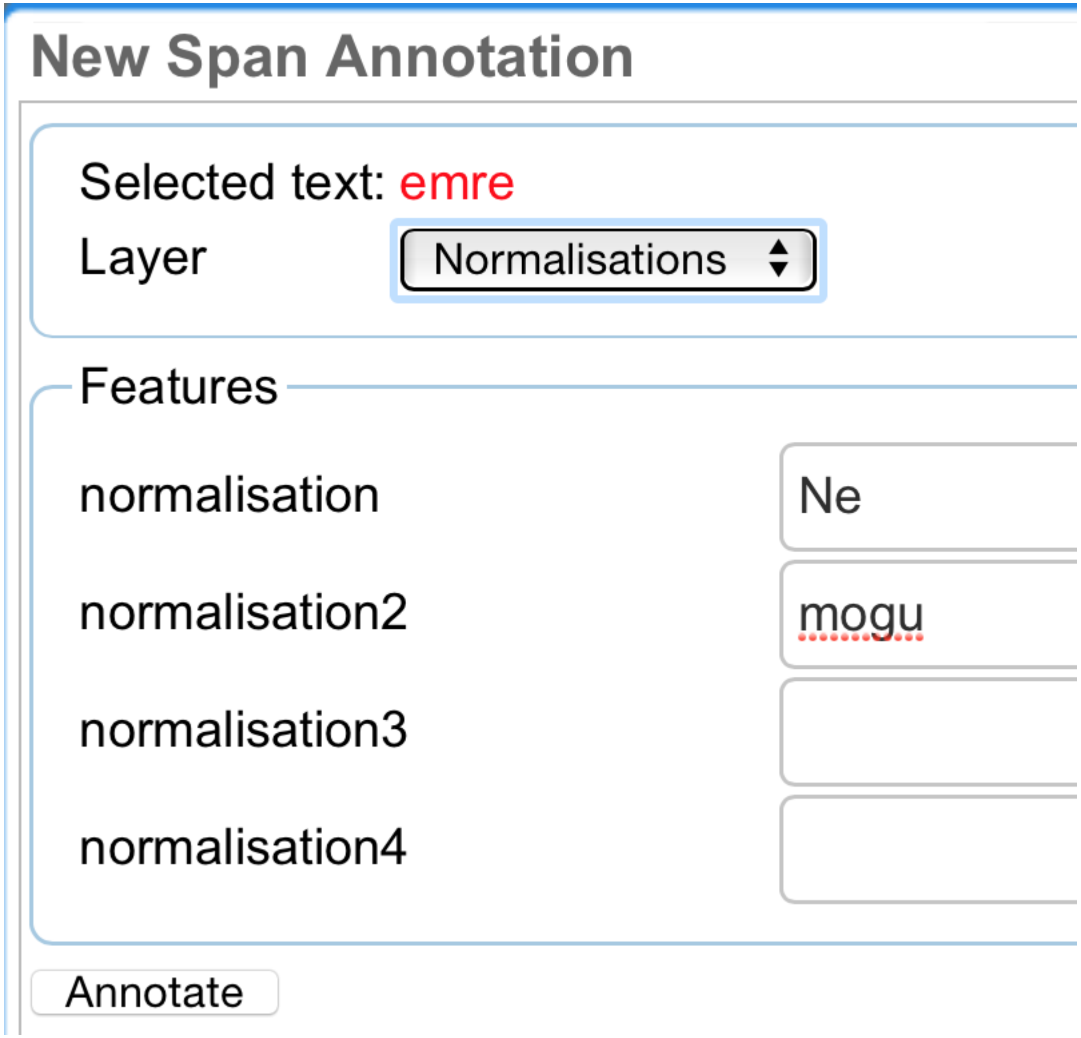
nisi

nis normalan\ !

Normalisation: splitting tokens

Nemrem verovat\ ...


Ne | mogu vjerovati
Nemrem verovat\ ...


New Span Annotation

Selected text: emre

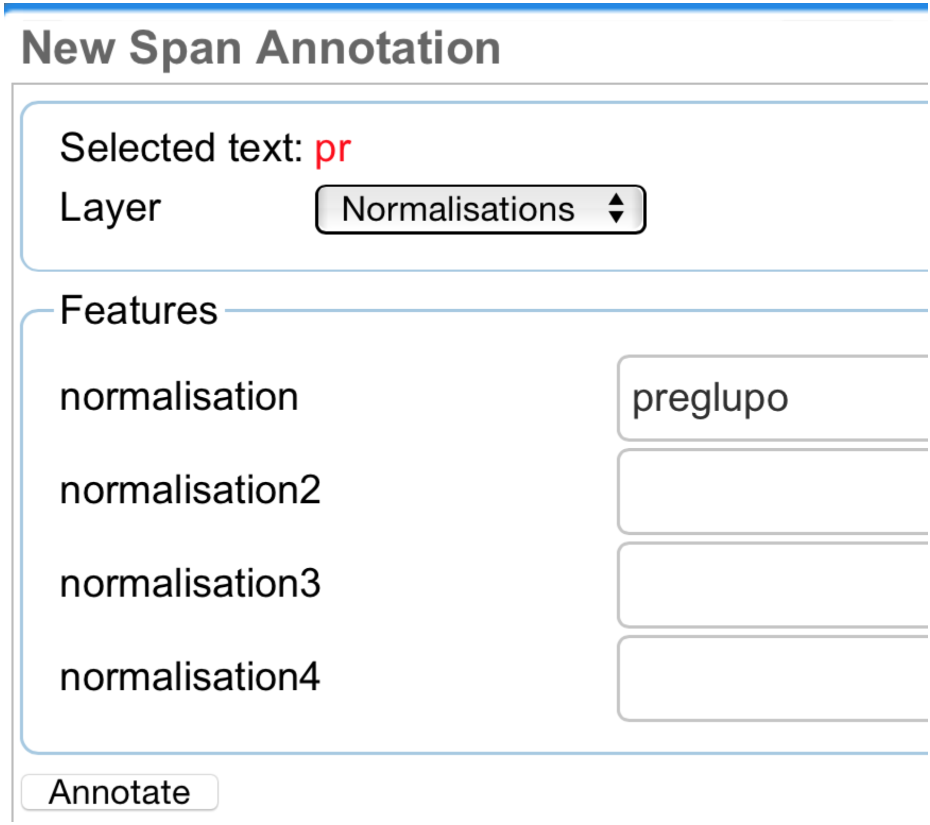
Layer: Normalisations

Features

normalisation	Ne
normalisation2	mogu
normalisation3	
normalisation4	

Normalisation: merging tokens

pre glupo buraz\ !



New Span Annotation

Selected text: pr

Layer: Normalisations

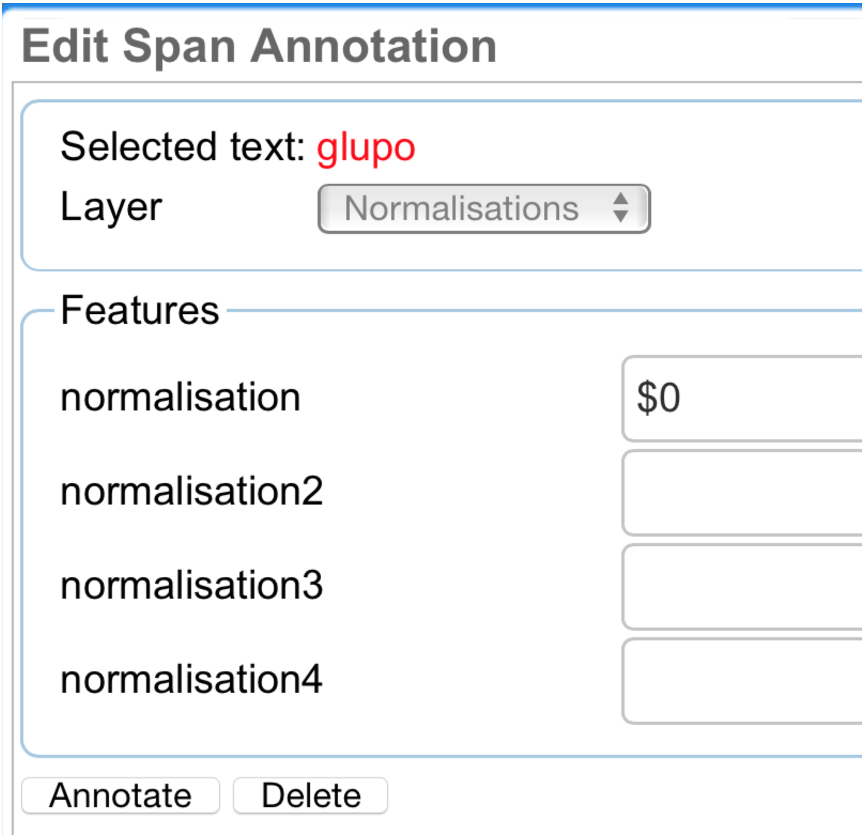
Features

normalisation: preglupo

normalisation2:

normalisation3:

normalisation4:



Edit Span Annotation

Selected text: glupo

Layer: Normalisations

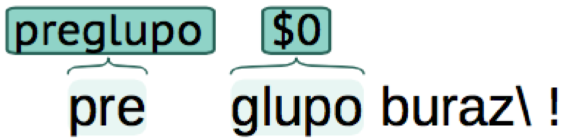
Features

normalisation: $0

normalisation2:

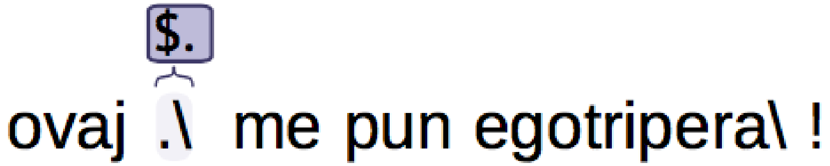
normalisation3:

normalisation4:

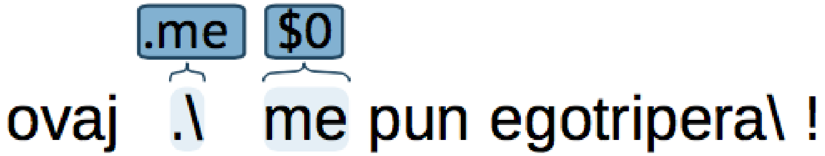


Combined corrections

- One error in automatic annotation causes others:



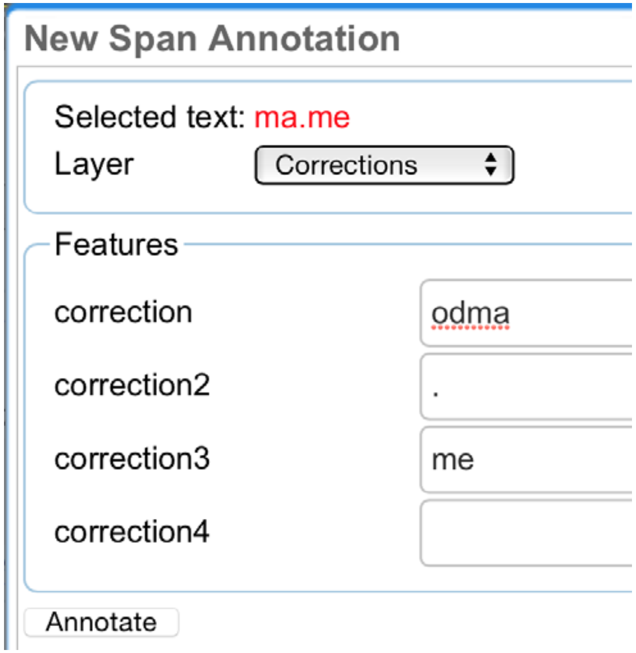
ovaj .\ me pun egotripera\ !



ovaj .\ me pun egotripera\ !

Annotating split tokens

ne odma.me kasnije pingni\ ...



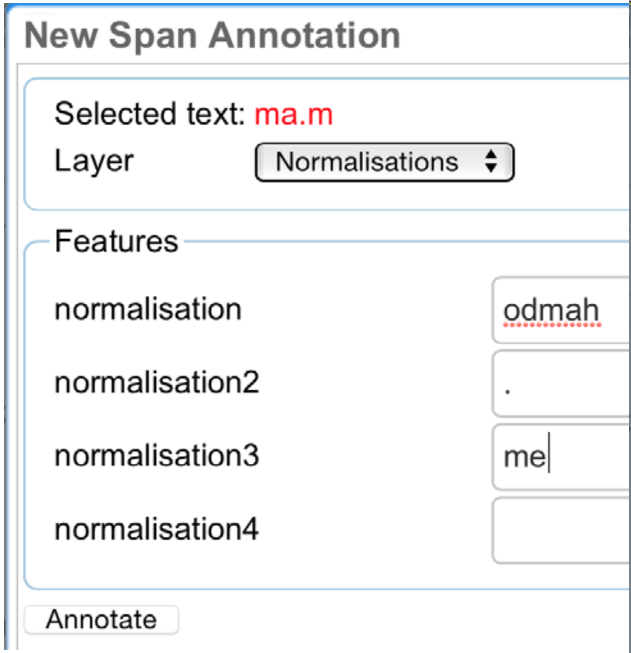
New Span Annotation

Selected text: ma.me

Layer: Corrections

Features

correction	odma
correction2	.
correction3	me
correction4	



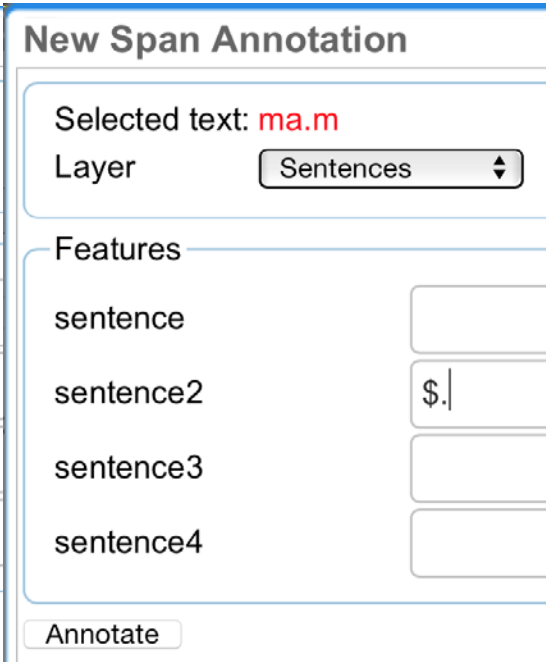
New Span Annotation

Selected text: ma.m

Layer: Normalisations

Features

normalisation	odmah
normalisation2	.
normalisation3	me
normalisation4	



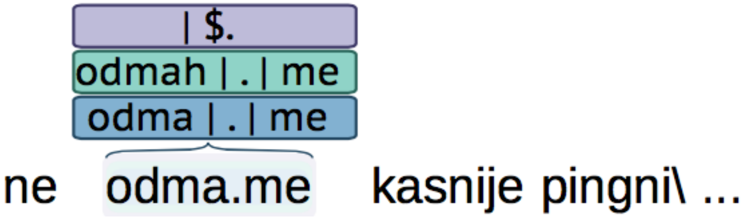
New Span Annotation

Selected text: ma.m

Layer: Sentences

Features

sentence	
sentence2	$.
sentence3	
sentence4	



| $.

odmah | . | me

odma | . | me

ne odma.me kasnije pingni\ ...

Overview

Annotation Layer	**Use**
Corrections	Tokenisation corrections
Sentences	Sentence segmentation
Normalisations	Normalised word

Char	**Layer**	**Use**
\	Tokens	No space after word
$0	Corrections	Deletion of (merged) token
$0	Sentences	Deletion of complete tweet (on first token)
$0	Normalisations	Normalisation merged on previous token
$.	Sentences	End of sentence (on token that ends the sentence)