

# Treebanking SweLL

the Swedish Learner Language Corpus

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Språkbanken Text

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(aka the Swedish Learner Language corpus)

- ❖ **genre:** essays (misc topics)
- ❖ **learners:** adult L2 Swedish learners with various language backgrounds and proficiency levels
- ❖ **annotation:** error tagging, pseudonymization and normalization (minimal edits)

# A look at the data



## Swedish (SweLL)

```
<sentence> <w ref="1">"</w> <w ref="2" target_form="Det"
correction_label="L-Ref">Den</w> <w ref="3">är</w>
<w ref="4">en</w> <w ref="5">tredjedel</w>
<w ref="6">av</w> <w ref="7">din</w> <w ref="8">dag</w>
<w ref="9">!</w> </sentence>
```

# A look at the data



## Swedish (SweLL)

```
<sentence> <w ref="1">"</w> <w ref="2" target_form="Det"
correction_label="L-Ref">Den</w> <w ref="3">är</w>
<w ref="4">en</w> <w ref="5">tredjedel</w>
<w ref="6">av</w> <w ref="7">din</w> <w ref="8">dag</w>
<w ref="9">!</w> </sentence>
```

## English (FCE)

I also suggest that more plays and films should  
<ns type="RV"> <ns type="FV"><i>be taken</i><c>take</c>  
</ns> place</ns>.

## Italian (VALICO)

Finse <MC><i>aveva paura</i><c>che aveva paura</c>  
</MC> di un <DN><i>rapito</i><c>rapimento</c></DN>.

# The problems



- ❖ lack of interoperability between corpora
- ❖ lots of manual annotation needed
- ❖ coarse-grained error labels
- ❖ exclusive focus on errors

# The solution: UD



## Universal Dependencies

- ❖ a **cross-lingually consistent grammatical annotation scheme**, designed to be
  - ❖ human- *and* machine-readable
  - ❖ suitable for both mono- *and* multilingual use cases
- ❖ a growing multilingual collection of dependency treebanks (160+ languages and 600+ contributors!)

# The solution: UD



- ❖ adopting a **shared data format** grants basic interoperability between corpora
- ❖ **parsers** help bootstrapping the annotation process
- ❖ **fine-grained morphosyntactic annotation** allows moving beyond error detection/tagging
- ❖ **cross-linguistic consistency**\* enables comparisons between:
  - ❖ L1 and L2
  - ❖ different L2s
  - ❖ L2 and TL<sup>1</sup>

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<sup>1</sup> especially with **parallel learner treebanks**

# UD treebanks of learner language



language	name	sentences	status
Chinese	CFL	451	released
English	ESL	5124	retired
English	ESLSpok	2320	released
Greek	GLCII		in progress
Italian	Valico	398	released
Korean	KSL	12977	released
Russian		500	in progress
<b>Swedish</b>	<b>SweLL</b>	<b>~5000</b>	<b>in progress</b>





UD guidelines do **not** cover all relevant interlanguage phenomena and are **not** universally adopted across learner treebanks

Learn more:

Arianna Masciolini, Aleksandrs Berdicevskis, Maria Irena Szawerna, and Elena Volodina. *Annotating second language in Universal Dependencies: a review of current practices and directions for harmonized guidelines* (2025)

# TL;DR - literal vs. “distributional”



en

lång

**bus**

**resa**

# Literal annotation



NUM/DET/... ADJ

en lång

NOUN

**bus**

NOUN/VERB

**resa**

# Literal annotation



DET

en

*a*

ADJ

lång

*long*

NOUN

**bus**

*?*

NOUN

**resa**

*trip*

# Correction-aware annotation



DET

en

*a*

ADJ

lång

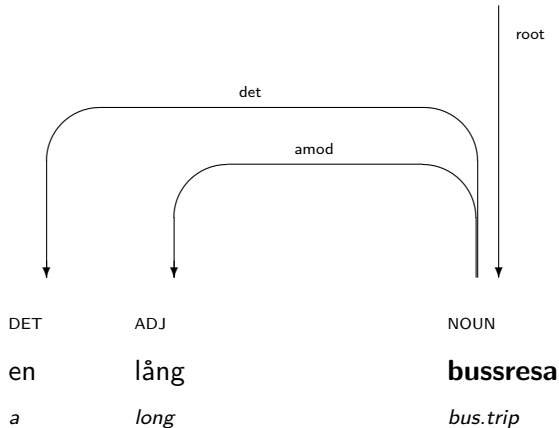
*long*

NOUN

**bussresa**

*bus.trip*

# Correction-aware annotation



# Correction-aware annotation



DET

en

*a*

ADJ

lång

*long*

NOUN

**bus**

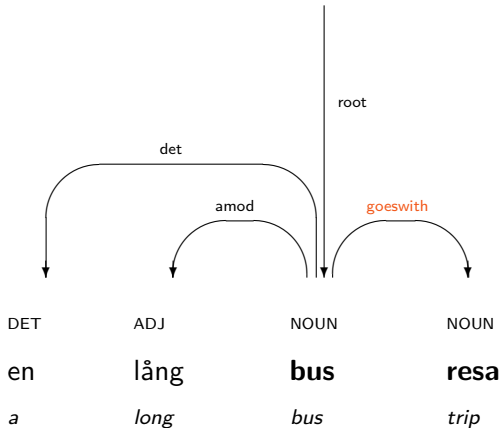
*bus*

NOUN

**resa**

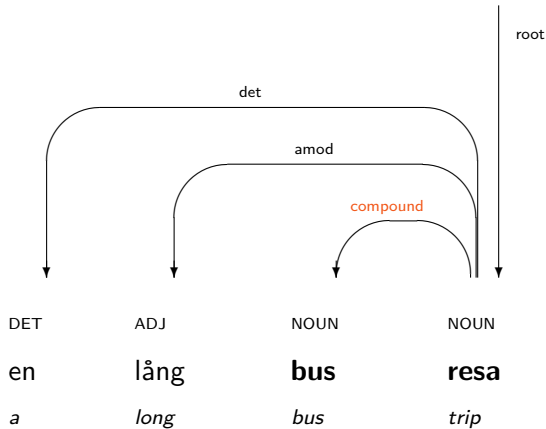
*trip*

# Correction-aware annotation





# Correction-aware annotation



# Transfer-aware annotation



PRON    AUX    PRON/DET  
**det**    **är**    **det**

ADJ  
**samma**

PRON/ADP/...    ADP    PROPN  
**som**    **i**    **Sverige**

# Transfer-aware annotation



PRON    AUX    PRON    X  
det    är    det    samma

goeswith

A red curved arrow labeled 'goeswith' connects the 'PRON det' token to the 'X samma' token.

PRON/ADP/...    ADP    PROPN  
som    i    Sverige

# Transfer-aware annotation

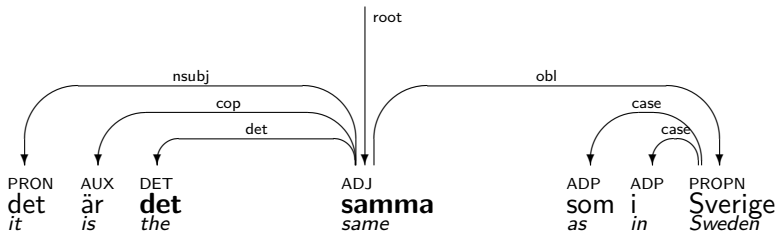


PRON	AUX	DET
<b>det</b>	<b>är</b>	<b>det</b>
<i>it</i>	<i>is</i>	<i>the</i>

ADJ
<b>samma</b>
<i>same</i>

ADP	ADP	PROPN
<b>som</b>	<b>i</b>	<b>Sverige</b>
<i>as</i>	<i>in</i>	<i>Sweden</i>

# Transfer-aware annotation



- ❖ Sasha (L1: Russian)
- ❖ Maria (L1: Polish)
- ❖ Arianna (L1: Italian)

And soon:

- ❖ Caroline (L1: French)

# Where?



`github.com/UniversalDependencies/UD_Swedish-SweLL2`

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<sup>2</sup> just not yet!

# When?



- ❖ test set (500 sentences): first release hopefully on November 15 as part of UD 2.17
- ❖ dev set (another 500 sentences): as part of UD 2.18
- ❖ train set (4000 sentences!): we'll see about that



Tackar *all* som hjälpte oss!



SPRÅKBANKENT TEXT

UniDive