CLSINFRA COMPUTATIONAL LITERARY STUDIES INFRASTRUCTURE

Universal Dependencies, UDPipe and UD Morphology

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101004984

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UDPipe

A Multilingual tagger, parser, lemmatizer

https://lindat.mff.cuni.cz/services/udpipe/

LINDAT Search Catalogue Education Projects Tools Services About

LINDAT/CLARIN / Services / UDPipe

UDPipe

About | Run | REST API Documentation

UDPipe is a trainable pipeline for tokenization, tagging, lemmatization and dependency parsing of CoNLL-U files. UDPipe is language-agnostic an
data in CoNLL-U format. Trained models are provided for nearly all UD treebanks. UDPipe is available as a binary for Linux/Windows/OS X, as a li
C#, and as a web service. Third-party R CRAN package also exists.

UDPipe is a free software distributed under the Mozilla Public License 2.0 and the linguistic models are free for non-commercial use and distribute
although for some models the original data used to create the model may impose additional licensing conditions. UDPipe is versioned using Sema

Copyright 2017 by Institute of Formal and Applied Linguistics, Faculty of Mathematics and Physics, Charles University, Czech Republic.

Description of the available methods is available in the API Documentation and the models are described in the UDPipe 2 models list and UDPipe

Service

The service is freely available for testing. Respect the CC BY-NC-SA licence of the models – **explicit written permission of the authors is r
exploitation of the system**. If you use the service, you agree that data obtained by us during such use can be used for further improvements
comments and reactions are welcome.

Model: UD 2.6 (description) EvaLatin20 (description)

czech-pdt-ud-2.6-200830

Actions: Tag and Lemmatize Parse

Advanced Options

A Input Text

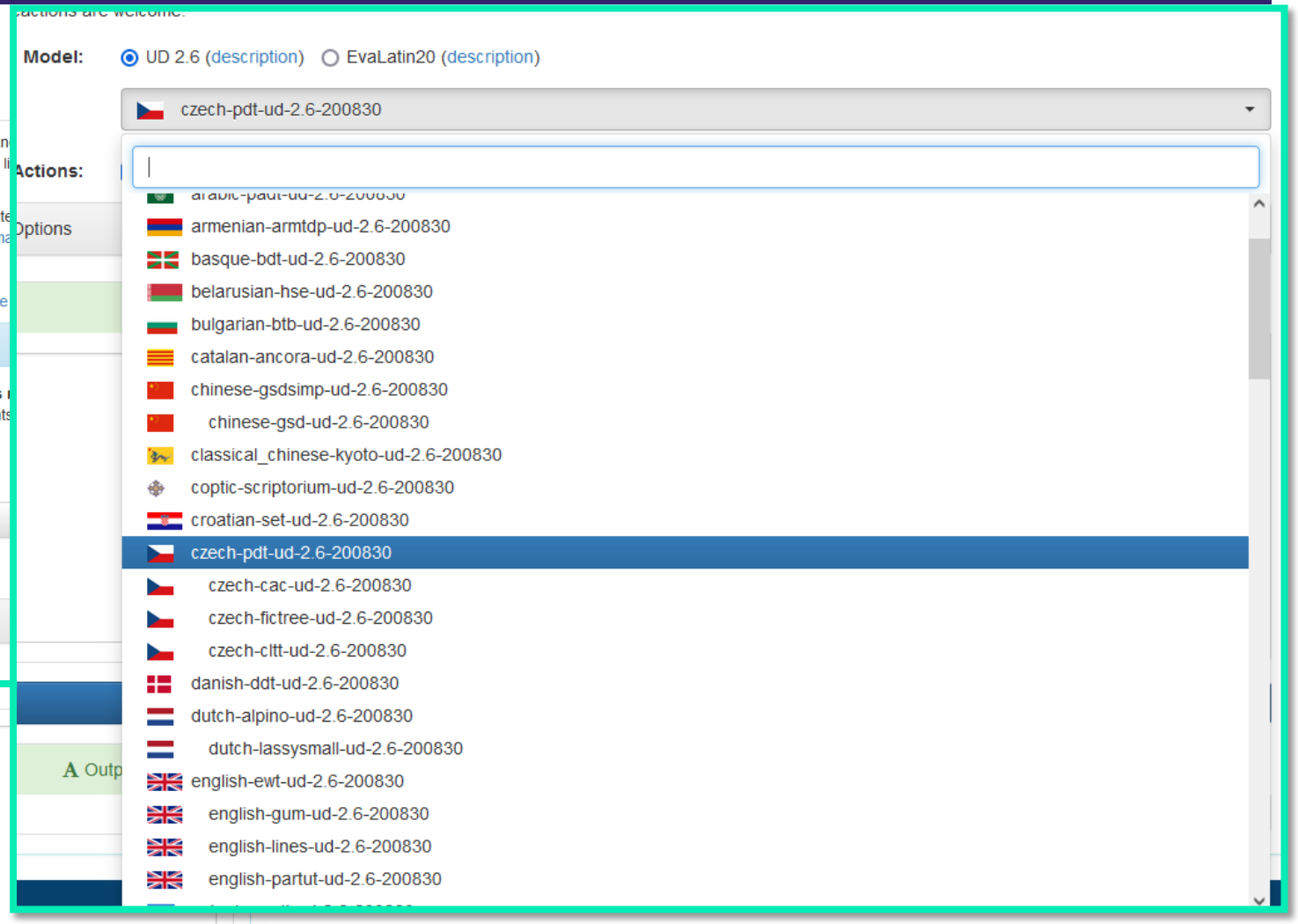
Input File

Process Input

A Output Text

Show Table

Show Trees



Model: UD 2.6 (description) EvaLatin20 (description)

czech-pdt-ud-2.6-200830

Actions: Tag and Lemmatize Parse

Advanced Options

A Input Text | Input File

I have heard her reported to be a woman of an invincible spirit.

Process Input

A Output Text | Show Table | Show Trees

A Input Text | Input File

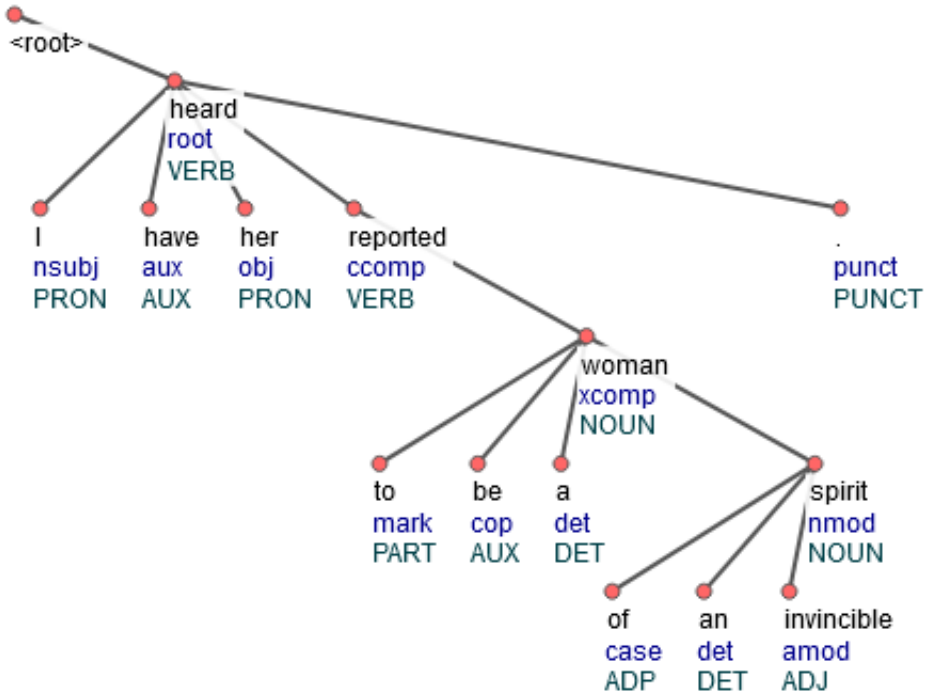
I have heard her reported to be a woman of an invincible spirit.

Process Input

A Output Text | Show Table | Show Trees

Save Tree as SVG

I have heard her reported to be a woman of an invincible spirit .

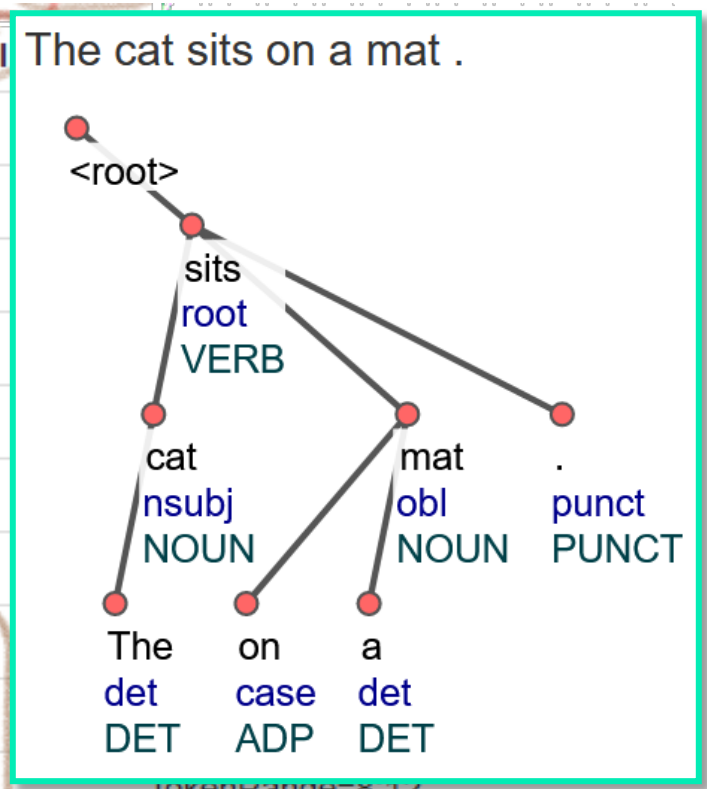


Save Output File

Conll-u format

Id	Form	Lemma	UPosTag	XPosTag	Feats	Head	DepRel	Deps	Misc
# generator = UDPipe 2, https://lindat.mff.cuni.cz/services/udpipe									
# udpipe_model = english-ewt-ud-2.6-200830									
# udpipe_model_licence = CC BY-NC-SA									
# newdoc									
# newpar									
# sent_id = 1									
# text = I have heard her reported to be a woman of an invincible spirit.									
1	I	I	PRON	PRP	Case=Nom|Number=Sing|Person=1|PronType=Prs	3	nsubj	_	TokenRange=0:1
2	have	have	AUX	VBP	Mood=Ind|Tense=Pres|VerbForm=Fin	3	aux	_	TokenRange=2:6
3	heard	hear	VERB	VBN	Tense=Past|VerbForm=Part	0	root	_	TokenRange=7:12
4	her	she	PRON	PRP	Case=Acc|Gender=Fem|Number=Sing|Person=3|PronType=Prs	3	obj	_	TokenRange=13:16
5	reported	report	VERB	VBD	Mood=Ind|Tense=Past|VerbForm=Fin	3	ccomp	_	TokenRange=17:25
6	to	to	PART	TO	_	9	mark	_	TokenRange=26:28
7	be	be	AUX	VB	VerbForm=Inf	9	cop	_	TokenRange=29:31
8	a	a	DET	DT	Definite=Ind|PronType=Art	9	det	_	TokenRange=32:33
9	woman	woman	NOUN	NN	Number=Sing	5	xcomp	_	TokenRange=34:39
10	of	of	ADP	IN	_	13	case	_	TokenRange=40:42
11	an	a	DET	DT	Definite=Ind|PronType=Art	13	det	_	TokenRange=43:45
12	invincible	invincible	ADJ	JJ	Degree=Pos	13	amod	_	TokenRange=46:56
13	spirit	spirit	NOUN	NN	Number=Sing	9	nmod	_	SpaceAfter=No|TokenRange=57:63
14	.	.	PUNCT	.	_	3	punct	_	TokenRange=63:64

Id	Form	Lemma	UPosTag	XPosTag	Feats	Head	DepRel		
# generator = UDPipe 2, https://lindat.mff.cuni.cz/services/udpipe									
# udpipe_model = english-ewt-ud-2.6-200830									
# udpipe_model_licence = CC BY-NC-SA									
# newdoc									
# newpar									
# sent_id = 1									
# text = The cat sits on a mat.									
1	The	the	DET	DT	Definite=Def|PronType=Art	2	det	_	TokenRange=0:3
2	cat	cat	NOUN	NN	Number=Sing	3	nsubj	_	TokenRange=4:7
3	sits	sit	VERB	VBZ	Mood=Ind|Number=Sing|Person=3|Tense=Pres|VerbForm=Fin	0	root	_	TokenRange=8:12
4	on	on	ADP	IN	_	6	case	_	TokenRange=13:15
5	a	a	DET	DT	Definite=Ind|PronType=Art	6	det	_	TokenRange=16:17
6	mat	mat	NOUN	NN	Number=Sing	3	obl	_	SpaceAfter=No|TokenRange=18:21
7	.	.	PUNCT	.	_	3	punct	_	TokenRange=21:22



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Universal Dependencies

universaldependencies.org

Consistent grammar annotation across languages

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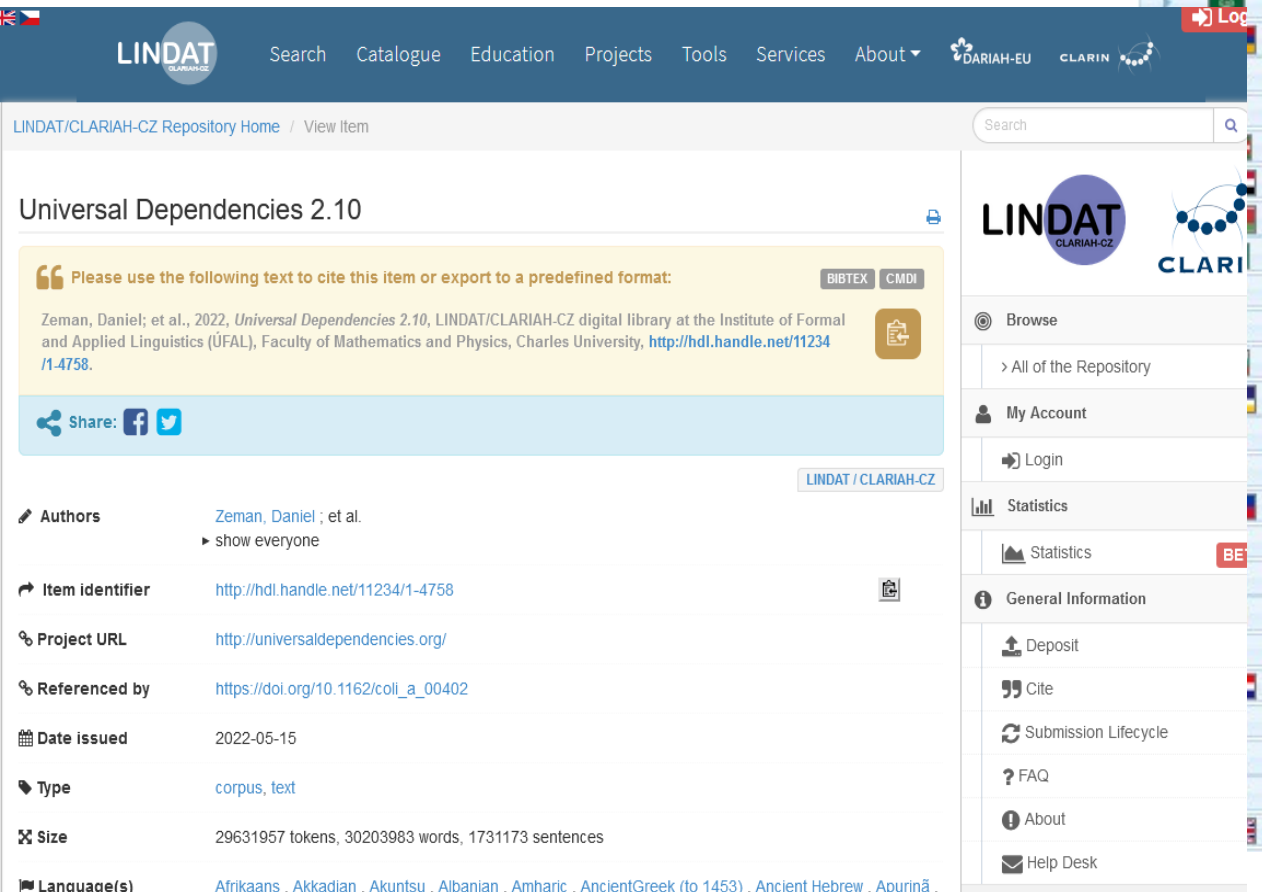
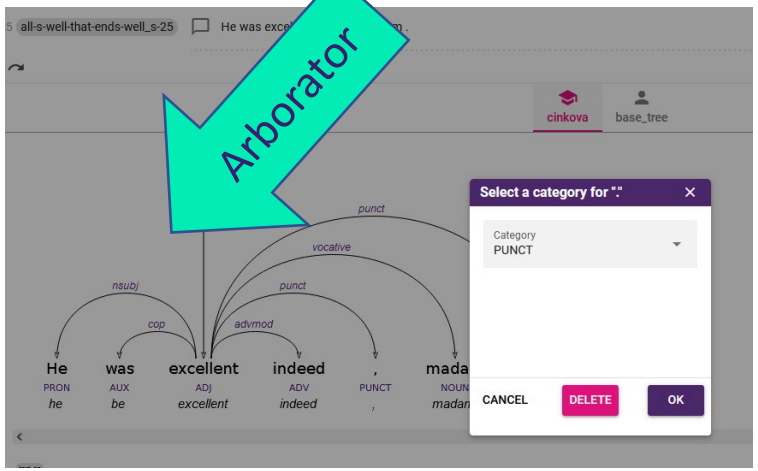
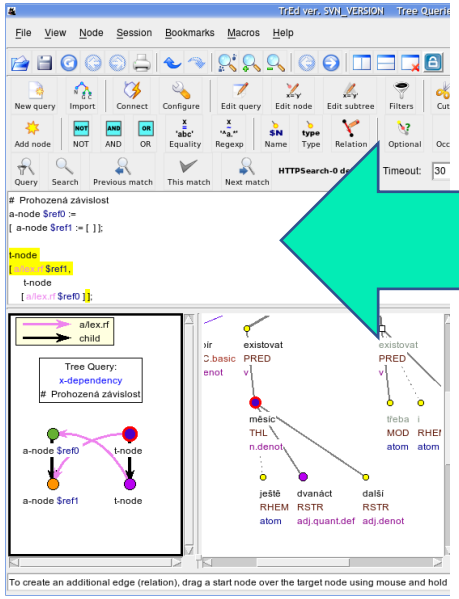
- over 300 contributors
- nearly 200 treebanks (corpora w. syntax annotation)
- over 100 languages
- publicly available

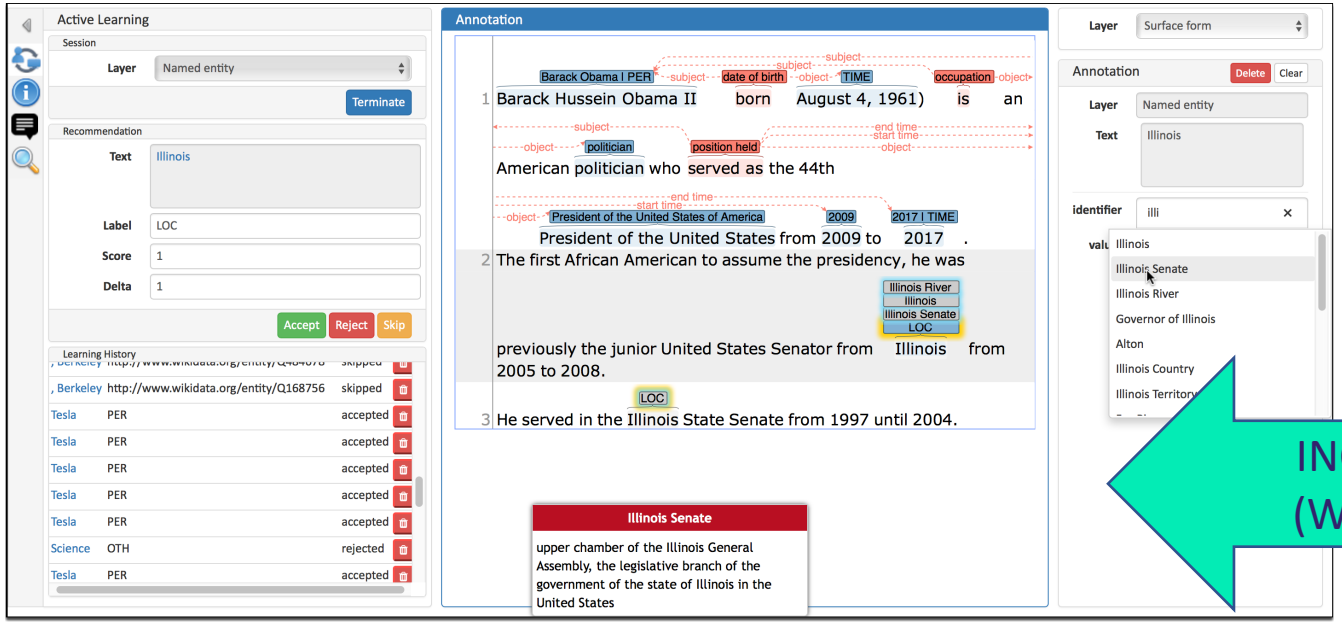


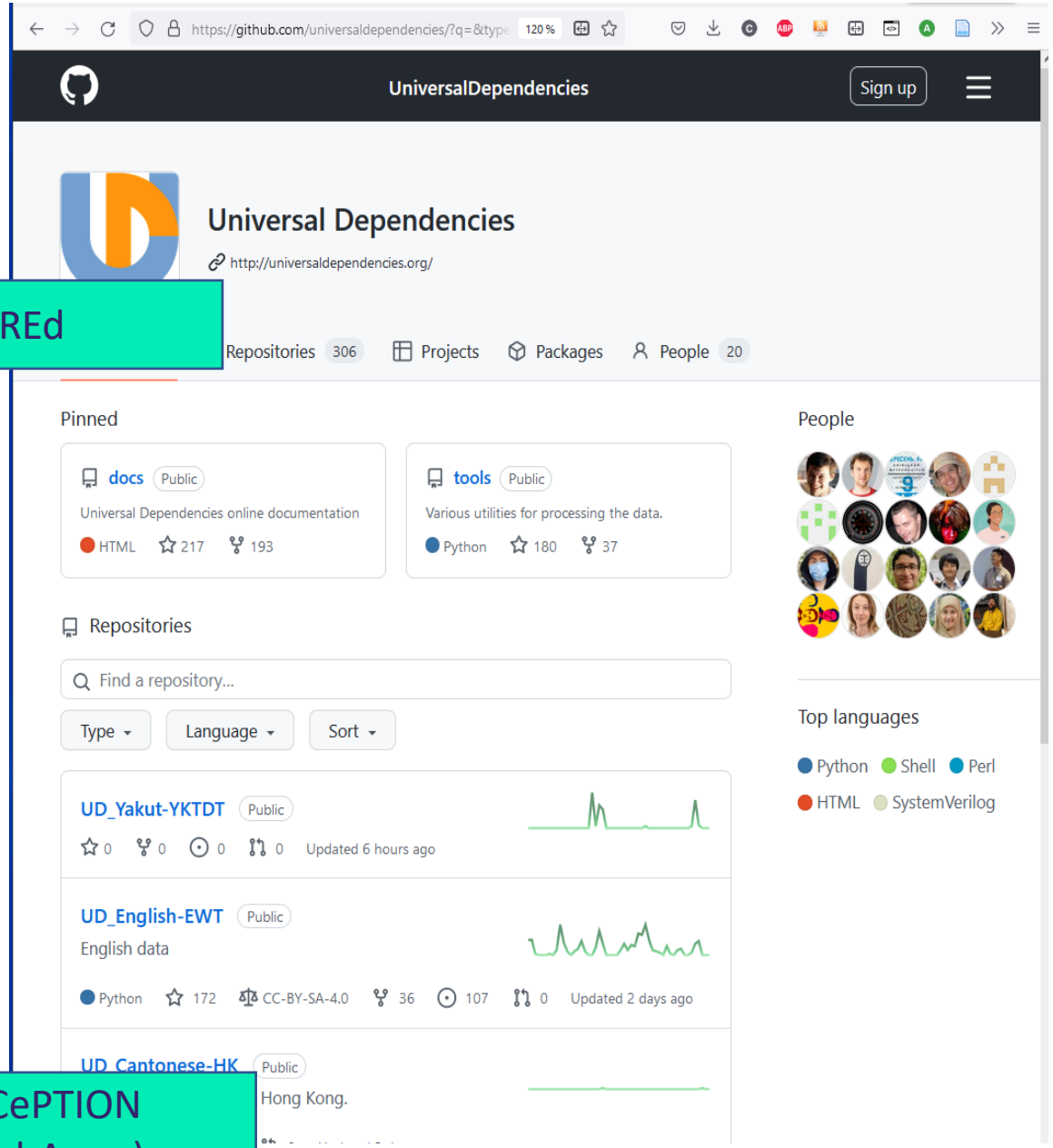
Akkadian	2	25K		Afro-Asiatic, Semitic
Akuntsu	1	1K		Tupian, Tupari
Albanian	1	<1K	W	IE, Albanian
Amharic	1	10K		Afro-Asiatic, Semitic
Ancient Greek	2	416K		IE, Greek
Ancient Hebrew	1	39K		Afro-Asiatic, Semitic
Apurina	1	<1K		Arawakan
Arabic	3	1,042K	W	Afro-Asiatic, Semitic
Armenian	2	94K	W	IE, Armenian
Assyrian	1	<1K		Afro-Asiatic, Semitic
Bambara	1	13K		Mande
Basque	1	121K		Basque
Beja	1	<1K		Afro-Asiatic, Cushitic
Belarusian	1	305K	W	IE, Slavic
Bengali	1	<1K		IE, Indic
Bhojpuri	1	6K		IE, Indic
Breton	1	10K	W	IE, Celtic
Bulgarian	1	156K		IE, Slavic
Buryat	1	10K		Mongolic
Cantonese	1	13K		Sino-Tibetan
Catalan	1	553K		IE, Romance
Cebuano	1	1K		Austronesian, Central P
Chinese	5	285K	W	Sino-Tibetan
Chukchi	1	6K		Chukotko-Kamchatkan
Classical Chinese	1	289K		Sino-Tibetan
Coptic	1	52K		Afro-Asiatic, Egyptian
Croatian	1	199K	W	IE, Slavic
Czech	5	2,227K	W	IE, Slavic
Danish	1	100K		IE, Germanic
Dutch	2	306K	W	IE, Germanic
English	9	762K	W	IE, Germanic

Contribute to Universal Dependencies









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Universal Parts of Speech (upos)

UD Morphology

Morphological categories

- Universal Parts of Speech (**upos**)
  - NOUN, PROPN
  - VERB, AUX
  - ADJ, ADV
  - PRON, DET, NUM
  - SCONJ, CCONJ, ADP
  - PART, INTJ
  - PUNCT, SYM, X
- Universal Features (**feats**)
  - morphological categories relevant to the given upos

NOUN vs. PROPN vs. neither

strawberries	

NOUN vs. PROPN vs. neither

strawberries	NOUN
cat	

NOUN vs. PROPN vs. neither

strawberries	NOUN
cat	NOUN
small	

NOUN vs. PROPN vs. neither

strawberries	NOUN
cat	NOUN
small	neither
Peter	

NOUN vs. PROPN vs. neither

strawberries	NOUN
cat	NOUN
small	neither
Peter	PROPN
butter	

NOUN vs. PROPN vs. neither

strawberries	NOUN
cat	NOUN
small	neither
Peter	PROPN
butter	NOUN
beer	

NOUN vs. PROPN vs. neither

strawberries	NOUN
cat	NOUN
small	neither
Peter	PROPN
butter	NOUN
beer	NOUN
Dutchman	

NOUN vs. PROPN vs. neither

strawberries	NOUN
cat	NOUN
small	neither
Peter	PROPN
butter	NOUN
beer	NOUN
Dutchman	PROPN
until	

NOUN vs. PROPN vs. neither

strawberries	NOUN
cat	NOUN
small	neither
Peter	PROPN
butter	NOUN
beer	NOUN
Dutchman	PROPN
until	neither

VERB vs. AUX vs. neither

are	

VERB vs. AUX vs. neither

are	AUX
can	

VERB vs. AUX vs. neither

are	AUX
can	AUX
(He) did (it)	

VERB vs. AUX vs. neither

are	AUX
can	AUX
(He) did (it)	VERB
Do (you smoke?)	

VERB vs. AUX vs. neither

are	AUX
can	AUX
(He) did (it)	VERB
Do (you smoke?)	AUX
(be) flying	

VERB vs. AUX vs. neither

are	AUX
can	AUX
(He) did (it)	VERB
Do (you smoke?)	AUX
(be) flying	VERB
(He) used (to swim)	

VERB vs. AUX vs. neither

are	AUX
can	AUX
(He) did (it)	VERB
Do (you smoke?)	AUX
(be) flying	VERB
(He) used (to swim)	VERB
(She is) going (to win.)	VERB
(You) ought (to smile).	VERB

VERB vs. AUX vs. neither

(a) winning (strategy)	

VERB vs. AUX vs. neither

(a) winning (strategy)	VERB
(a) rotting (tooth)	

VERB vs. AUX vs. neither

(a) winning (strategy)	VERB
(a) rotting (tooth)	VERB
(a) lost (war)	

VERB vs. AUX vs. neither

(a) winning (strategy)	VERB
(a) rotting (tooth)	VERB
(a) lost (war)	VERB
(a) rotten (tooth)	

VERB vs. AUX vs. neither

(a) winning (strategy)	VERB
(a) rotting (tooth)	VERB
(a) lost (war)	VERB
(a) rotten (tooth)	neither (adjective)
Let(‘s dance.)	

VERB vs. AUX vs. neither

(a) winning (strategy)	VERB
(a) rotting (tooth)	VERB
(a) lost (war)	VERB
(a) rotten (tooth)	neither (adjective)
Let(‘s dance.)	VERB
(She) wants (food)	

VERB vs. AUX vs. neither

(a) winning (strategy)	VERB
(a) rotting (tooth)	VERB
(a) lost (war)	VERB
(a) rotten (tooth)	neither (adjective)
Let(‘s dance.)	VERB
(She) wants (food)	VERB
(She) wants (to win)	VERB
(He) became (professor)	

VERB vs. AUX vs. neither

(a) winning (strategy)	VERB
(a) rotting (tooth)	VERB
(a) lost (war)	VERB
(a) rotten (tooth)	neither (adjective)
Let(‘s dance.)	VERB
(She) wants (food)	VERB
(She) wants (to win)	VERB
(He) became (professor)	VERB

ADJ vs. ADV vs. neither

green	

ADJ vs. ADV vs. neither

green	ADJ
happily	

ADJ vs. ADV vs. neither

green	ADJ
happily	ADV
my	

ADJ vs. ADV vs. neither

green	ADJ
happily	ADV
my	neither
many	

ADJ vs. ADV vs. neither

green	ADJ
happily	ADV
my	neither
many	ADJ
oldest	

ADJ vs. ADV vs. neither

green	ADJ
happily	ADV
my	neither
many	ADJ
oldest	ADJ
(the) third (year)	

ADJ vs. ADV vs. neither

green	ADJ
happily	ADV
my	neither
many	ADJ
oldest	ADJ
(the) third (year)	ADJ
(the) poor	

ADJ vs. ADV vs. neither

green	ADJ
happily	ADV
my	neither
many	ADJ
oldest	ADJ
(the) third (year)	ADJ
(the) poor	ADJ
where	

ADJ vs. ADV vs. neither

green	ADJ
happily	ADV
my	neither
many	ADJ
oldest	ADJ
(the) third (year)	ADJ
(the) poor	ADJ
where	ADV

ADJ vs. ADV vs. neither

twice	ADV
(take) off (phrasal verb)	

ADJ vs. ADV vs. neither

twice	ADV
(take) off (phrasal verb)	neither
(write) down	

ADJ vs. ADV vs. neither

twice	ADV
(take) off (phrasal verb)	neither
(write) down	ADV
sometime	

ADJ vs. ADV vs. neither

twice	ADV
(take) off (phrasal verb)	neither
(write) down	ADV
sometime	ADV
yes	

ADJ vs. ADV vs. neither

twice	ADV
(take) off (phrasal verb)	neither
(write) down	ADV
sometime	ADV
yes	neither
none	

ADJ vs. ADV vs. neither

twice	ADV
(take) off (phrasal verb)	neither
(write) down	ADV
sometime	ADV
yes	neither
none	neither
how	

ADJ vs. ADV vs. neither

twice	ADV
(take) off (phrasal verb)	neither
(write) down	ADV
sometime	ADV
yes	neither
none	neither
how	ADV

ADJ vs. ADV vs. neither

twice	ADV
(take) off (phrasal verb)	neither
(write) down	ADV
sometime	ADV
yes	neither
none	neither
how	ADV
twice	ADV

SCONJ vs. CCONJ vs. neither

(I hope) that (she will come)	

SCONJ vs. CCONJ vs. neither

(I hope) that (she will come)	SCONJ
(good) and (bad)	

SCONJ vs. CCONJ vs. neither

(I hope) that (she will come)	SCONJ
(good) and (bad)	CCONJ
(nobody) but (you)	

SCONJ vs. CCONJ vs. neither

(I hope) that (she will come)	SCONJ
(good) and (bad)	CCONJ
(nobody) but (you)	CCONJ
(this) or (that)	

SCONJ vs. CCONJ vs. neither

(I hope) that (she will come)	SCONJ
(good) and (bad)	CCONJ
(nobody) but (you)	CCONJ
(this) or (that)	CCONJ
(this or) that	

SCONJ vs. CCONJ vs. neither

(I hope) that (she will come)	SCONJ
(good) and (bad)	CCONJ
(nobody) but (you)	CCONJ
(this) or (that)	CCONJ
(this or) that	neither
(I know) which (to take)	

SCONJ vs. CCONJ vs. neither

(I hope) that (she will come)	SCONJ
(good) and (bad)	CCONJ
(nobody) but (you)	CCONJ
(this) or (that)	CCONJ
(this or) that	neither
(I know) which (to take)	neither
(He left,) which (made her sad)	

SCONJ vs. CCONJ vs. neither

(I hope) that (she will come)	SCONJ
(good) and (bad)	CCONJ
(nobody) but (you)	CCONJ
(this) or (that)	CCONJ
(this or) that	neither
(I know) which (to take)	neither
(He left,) which (made her sad)	neither
(Ask) whether (we may leave)	SCONJ

NUM vs. DET vs. PRON

we	

NUM vs. DET vs. PRON

we	PRON
Which kids arrived?	

NUM vs. DET vs. PRON

we	PRON
Which kids arrived?	DET
Say which you like	

NUM vs. DET vs. PRON

we	PRON
Which (kids arrived?)	DET
(Say) which (you like)	PRON
myself	

NUM vs. DET vs. PRON

we	PRON
Which (kids arrived?)	DET
(Say) which (you like)	PRON
myself	PRON
mine	

NUM vs. DET vs. PRON

we	PRON
Which (kids arrived?)	DET
(Say) which (you like)	PRON
myself	PRON
mine, yours	PRON
my, your, his	

NUM vs. DET vs. PRON

we	PRON
Which (kids arrived?)	DET
(Say) which (you like)	PRON
myself	PRON
mine, yours	PRON
my, your, his	PRON
every	

NUM vs. DET vs. PRON

we	PRON
Which (kids arrived?)	DET
(Say) which (you like)	PRON
myself	PRON
mine, yours	PRON
my, your, his	PRON
every	DET
no (man)	

DET vs. PRON

we	PRON
Which (kids arrived?)	DET
(Say) which (you like)	PRON
myself	PRON
mine, yours	PRON
my, your, his	PRON
every	DET
no (man)	DET

DET vs. NUM vs. ADJ vs. ADV

many	

DET vs. NUM vs. ADJ vs. ADV

many	DET
two	

DET vs. NUM vs. ADJ vs. ADV

many	DET
two	NUM

DET vs. NUM vs. ADJ vs. ADV

many	DET
two	NUM
first (minute)	

DET vs. NUM vs. ADJ vs. ADV

many	DET
two	NUM
first (minute)	ADJ
last (minute)	

DET vs. NUM vs. ADJ vs. ADV

many	DET
two	NUM
first (minute)	ADJ
last (minute)	ADJ
one (man)	

DET vs. NUM vs. ADJ vs. ADV

many	DET
two	NUM
first (minute)	ADJ
last (minute)	ADJ
one (man)	ADJ
(Charles) IV	

DET vs. NUM vs. ADJ vs. ADV

many	DET
two	NUM
first (minute)	ADJ
last (minute)	ADJ
one (man)	ADJ
(Charles) IV	NUM
both (men)	

DET vs. NUM vs. ADJ vs. ADV

many	DET
two	NUM
first (minute)	ADJ
last (minute)	ADJ
one (man)	ADJ
(Charles) IV	NUM
both (men)	DET
twice	

DET vs. NUM vs. ADJ vs. ADV

many	DET
two	NUM
first (minute)	ADJ
last (minute)	ADJ
one (man)	ADJ
(Charles) IV	NUM
both (men)	DET
twice	ADV

ADP vs. ADV vs. SCONJ

for (you)	

ADP vs. ADV vs. SCONJ

for (you)	ADP
(forgive me), for (I have done wrong)	

ADP vs. ADV vs. SCONJ

for (you)	ADP
(forgive me), for (I have done wrong)	SCONJ
ago	

ADP vs. ADV vs. SCONJ

for (you)	ADP
(forgive me), for (I have done wrong)	SCONJ
ago	ADV
in	

ADP vs. ADV vs. SCONJ

for (you)	ADP
(forgive me), for (I have done wrong)	SCONJ
ago	ADV
in	ADP
towards	

ADP vs. ADV vs. SCONJ

for (you)	ADP
(forgive me), for (I have done wrong)	SCONJ
ago	ADV
in	ADP
towards	ADP
upwards	ADV
as/like (a teacher)	

ADP vs. ADV vs. SCONJ

for (you)	ADP
(forgive me), for (I have done wrong)	SCONJ
ago	ADV
in	ADP
towards	ADP
upwards	ADV
as/like (a teacher)	ADP
(call) as (you go)	

ADP vs. ADV vs. SCONJ

for (you)	ADP
(forgive me), for (I have done wrong)	SCONJ
ago	ADV
in	ADP
towards	ADP
upwards	ADV
as/like (a teacher)	ADP
(call) as (you go)	SCONJ

Particles (PART)

- *not, n't*
- *to* (infinitive marker)
- *'s* (genitive ending)

Interjections (INTJ)

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- yes, no
- please
- well
- hi
- ok, bravo
- like
- lol
- hey
- oh, ouch

Look it up in the Documentation

- Each treebank has its Documentation
- You get there from the language list at universaldependencies.org
- Look up the very treebank that was used to train the model you use to parse texts in UDPipe – there are (small) differences
- https://universaldependencies.org/treebanks/en_ewt/index.html

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Universal Features

UD Morphology

Universal features - feats (English EWT corpus)

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- lexical & grammatical properties of words beyond upos tags
- Table: the most common feats, each feature has a set of possible values
- Feature labels should be consistent across languages, but each language can add theirs if not covered
- feats: alphabetically concatenated, separated by | (vertical bar)

Lexical features*	Inflectional features*	
	*Nominal**	*Verbal**
PronType	Gender	VerbForm
NumType	Animacy	Mood
Poss	NounClass	Tense
Reflex	Number	Aspect
Foreign	Case	Voice
Abbr	Definite	Evident
Typo	Degree	Polarity
		Person
		Polite
		Clusivity

Features mostly describe only grammatical categories explicitly indicated by morphemes

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- *he **writes*** `Person=3`, but *they **write*** does not have `Person`!
- *is sleeping* ≠ present progressive tense, but 2 verbs
  - *is* `Mood=Ind|Number=Sing|Person=3|Tense=Present|VerbForm=Fin`
  - *sleeping* `Tense=Pres|VerbForm=Part`
- Many inconsistencies:
  - e. g. *be*: parser tries to assign person beside 1st and 3rd singular present tense, other verbs not so much.

Case

- `Nom, Acc`
- with PRON, mostly `PronType=Prs` (Personal pronouns)
  - `Nom`: *I, they, we, he, she...* but also *you, it,*
  - `Acc`: *me, them, him, us, her*... but also *it, you, yourself, myself, themselves*

Gender

- `Fem, Masc, Neut`
- with PRON, `PronType=Prs`
- usually also co-occurs with `Number, Person, Case, Poss`

Person

- `1,2,3`
- with VERB and AUX, mostly with `VerbForm=Fin, Mood=Ind, Number=Sing, Tense=Pres`
- with PRON, mostly with `PronType=Pers, Case, Poss,` and `Number` (any values)

Number

- `Plur, Sing`
- with NOUN and PROPN
- with PRON, mostly with `PronType=Prs, Case, Gender, Poss`
- with DET, mostly with `PronType=Dem`

Tense

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- `Past, Pres`
- with VERB and AUX, mostly with `VerbForm=Fin, Mood=Ind, Number, Person`
- with SCONJ – `Past`: *given, based, provided*

Mood

- `Imp, Ind, Sub`
- with VERB and AUX, mostly with `VerbForm=Fin, Number, Person, Tense`

Voice

- `Pass`
- with VERB, mostly with `VerbForm=Part, Tense=Past`
- This is quite a weird feature in English. It occurs systematically in past participles, when they are combined with be as AUX (*I was invited*). In this case, it considers the context. Cf. (the invited experts: `Voice=Pass` is not there, just `Tense=Past|VerbForm=Part`.
- Perhaps the parser just decided to do this, based on input from some other data?

VerbForm

- `Fin, ~~Ger,~~ Inf, Part`
- with VERB and AUX
- with SCONJ (very little cases, maybe annotation errors)

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Playtime!

https://quizlet.com/_bkoupi?x=1jqt&i=c5q4t
https://quizlet.com/_bkoqmz?x=1jqt&i=c5q4t

PronType

- `Art, Dem, Emp, Int, Prs, Rel`
- with PRON
  - `Dem` (demonstrative): *this, that, those, these*;
  - `Emp` (emphatic): *ourselves/yourselves/themselves, him/her/my/your/itself;*
  - `Int` (interrogative): *what, which, who, whom, whose*
  - `Rel` (relative): *that, who, which, whom, what, whose, whatever, whoever, whomever*
  - `Prs`: *I, you, it, they, my ,we, he, your, me, them, their*
- with DET
  - Art: *the, a, an*
  - Dem: *this, that, these, those*
  - Int: *what, which, whatever*
  - Rel: *what, which*
  - EMPTY: *all, some, any, no, another, every, each, both, such*

PronType - continuation

- with ADV
  - `Dem`: *then, there, here*
  - Int: *how, why, where, when, whenever, however*
  - Rel: *when, where, how, wherein*
  - EMPTY: *so, just, very, also, now, even, only, as, back, well*
- with SCONJ
  - Int: *when, how, where, why, whenever, wherever, who*
  - Rel: *where, when, why*
  - EMPTY: *that, if, as, because, for, of, since, before, like, with*

Definite

- `Def, Ind`
- with DET
  - `Def`: *the*
  - `Ind`: *an, a*
  - `EMPTY`: *this, all, some, any, no, that, these, another, every, such*

NumType

- `Card, Frac, Mult, Ord`
- with NUM:
  - `Card`: *one, two, 1,30...*
- with ADJ:
  - `Frac`: *half*
  - `Ord`: *first, second, third, 16th, ...*
- with ADV:
  - `Frac`: *half*
  - `Mult`: *once, twice*

Degree

- `Cmp, Pos, Sup`
- with ADJ and ADV:
  - `Cmp`: *more, better, less, bigger...*
  - `Pos`: *good, great, new, far, well, soon, late, little, close...*
  - `Sup`: *best, most, least, worst, cheapest, largest...*

Poss (is it possessive?)
Reflex (is it reflexive?)

- `Yes`
- with PRON, mostly with `PronType=Prs, Gender, Number, Person`

Foreign (is it in a foreign language?)
Typo (is it a typo?)
Abbr (is it an abbreviation?)

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- Yes

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Playtime!

https://quizlet.com/_bo1jkz?x=1jqt&i=c5q4t

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Your turn

in groups

Feats and their values in your languages!

- A mind map of features (mainly of verbs) across languages is here:

https://www.orgpad.com/o/DfIEIyUSlBzY6YTaK-pUDf?token=Dp_2WHU1pHFKcAmAsmqLeC&open=all

- The UD documentation page on feats is here:

https://universaldependencies.org/u/feat/all.html

- Create groups and set up a list of words from your languages that would combine features and values not present in English.
- Are there word forms with ambiguous upos, such as participles in adjectival positions? Show us!
- You can consult UDPipe: **https://lindat.mff.cuni.cz/services/udpipe/**
  - Select an appropriate language model
  - Create an example sentence with the candidate and check out the markup.
  - If there are several models for your language, do they disagree?