

Reflexives in Universal Dependencies



FACULTY
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Charles University

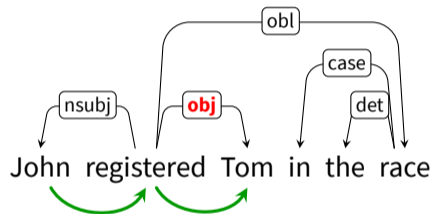


Sonja Marković, **Daniel Zeman**

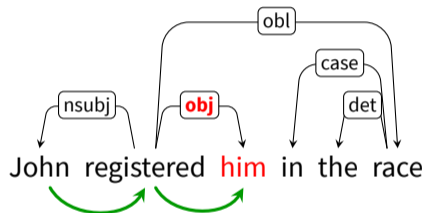
{markovic,zeman}@ufal.mff.cuni.cz

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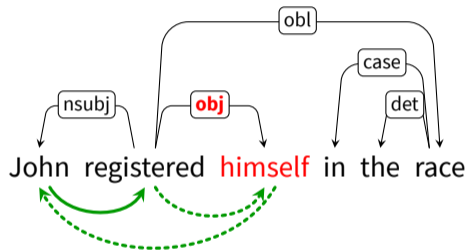
Reflexivity



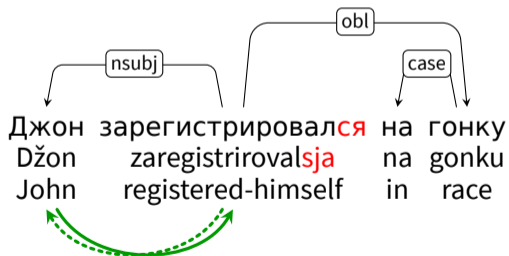
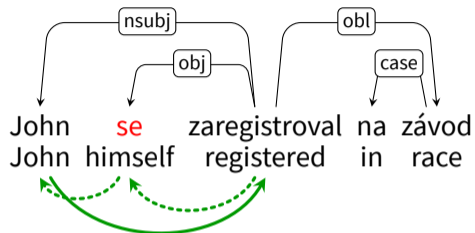
Reflexivity



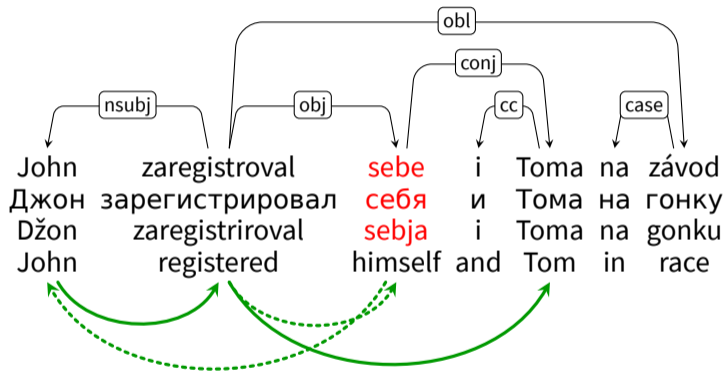
Reflexivity



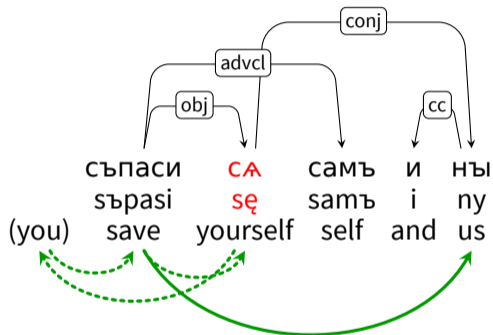
Reflexive Clitic/Suffix in Slavic



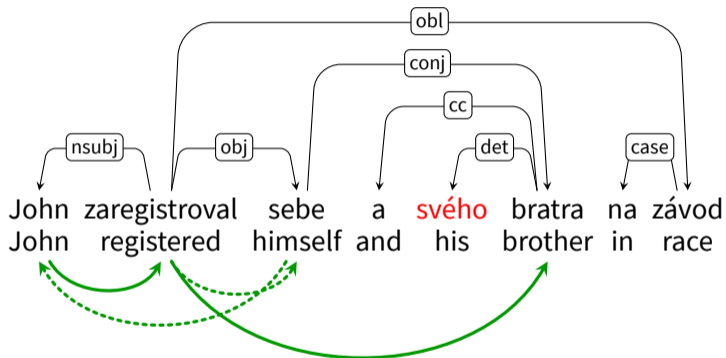
Full Reflexive Pronoun in Slavic



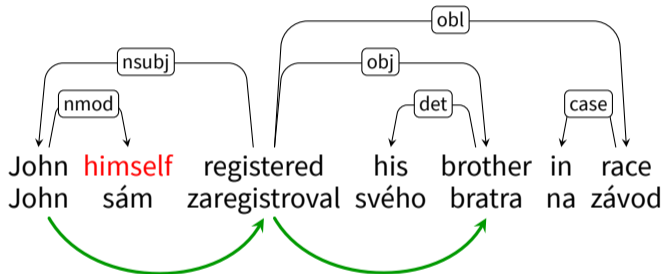
Old Church Slavonic: Only Short Accusative



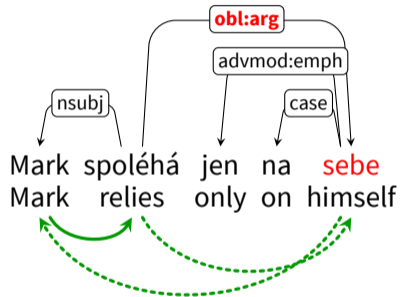
Possessive Reflexive: Out of Our Focus Today!



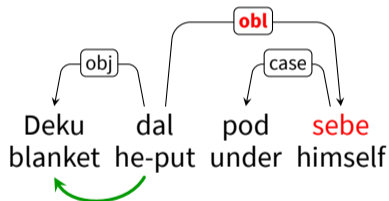
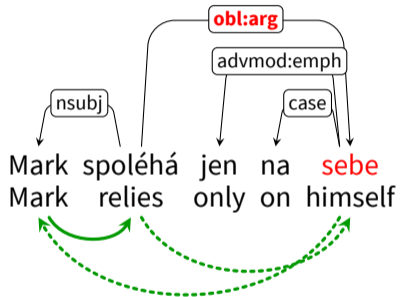
Emphasizing Reflexive: Out of Our Focus Today!



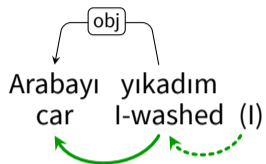
Oblique Reflexives



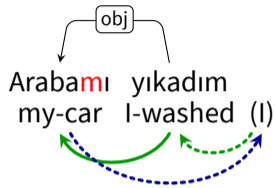
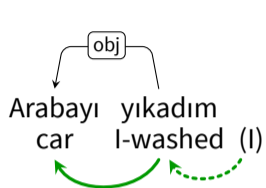
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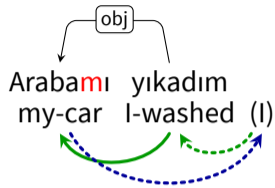
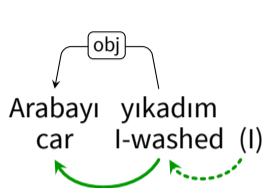
Reflexive Voice in Turkish



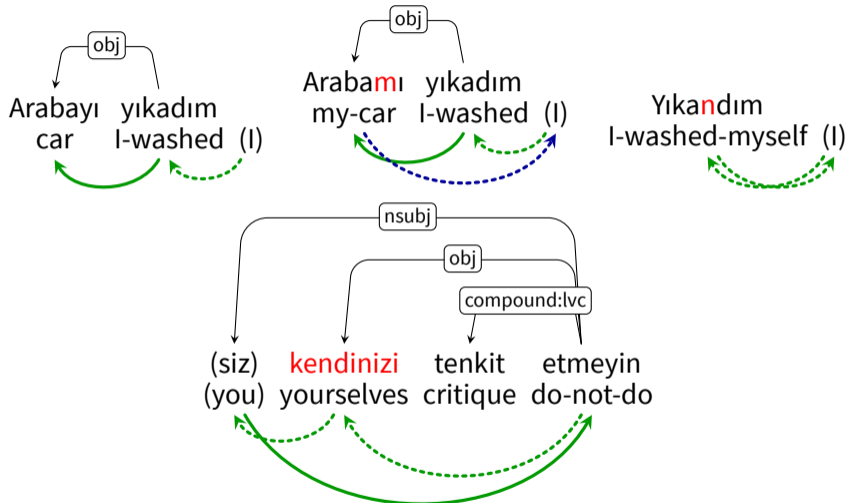
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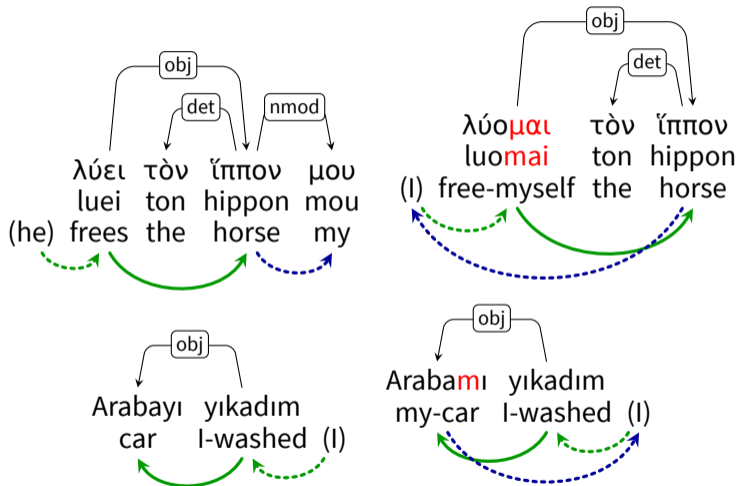
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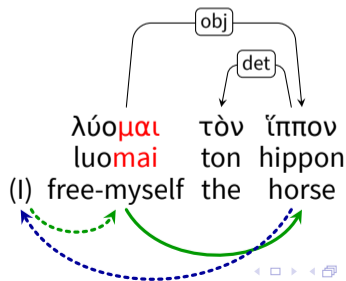
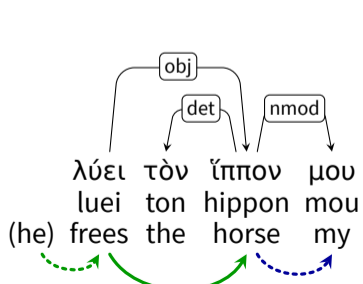
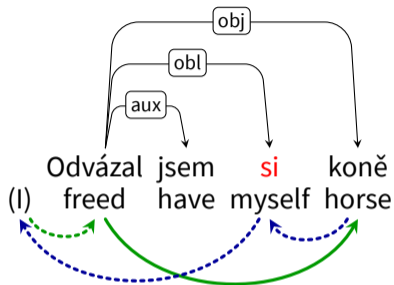
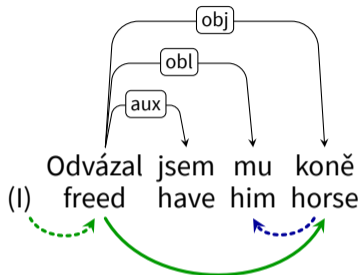
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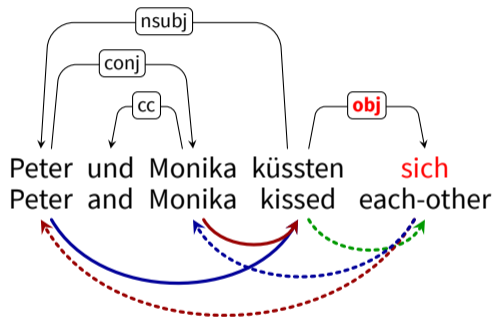
Middle Voice in Ancient Greek



“Middle Voice” / “Possessive Dative”



Reciprocally Used Reflexives

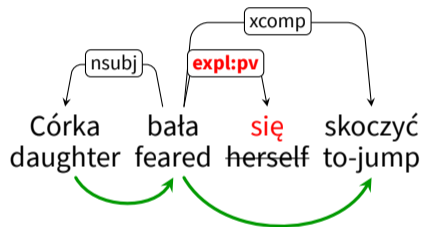


Inherently Reflexive Verbs

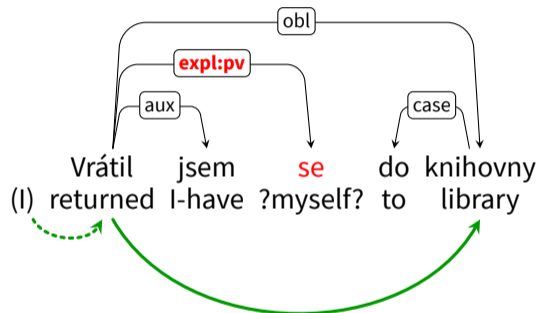
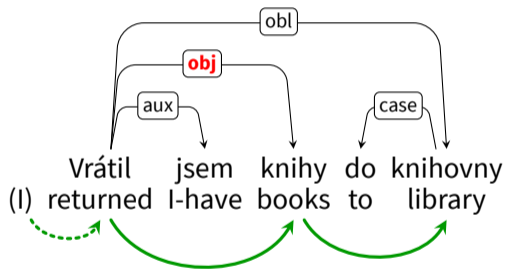
- Czech: *smát se* “laugh”, *bát se* “fear”
- Polish: *śmiać się* “laugh”, *bać się* “fear”
- Russian: *смеяться* (*smejat'sja*) “laugh”, *бояться* (*bojat'sja*) “fear”
- Slovenian: *smejati se* “laugh”, *bati se* “fear”
- Bulgarian: *смея се* (*smeja se*) “laugh”, *боя се* (*boja se*) “fear”
- Old Church Slavonic: *смиѣти сѧ* (*smijati sę*) “laugh”, *боѣти сѧ* (*bojati sę*) “fear”

- In contrast: **optionally** reflexive in Spanish:
 - ▶ *reír(se)* “laugh”

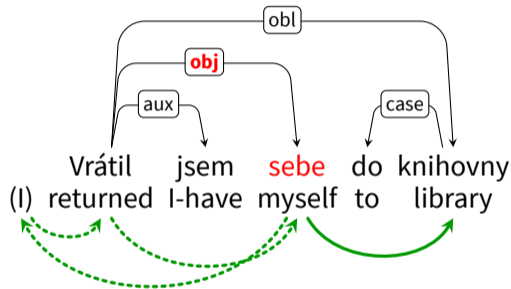
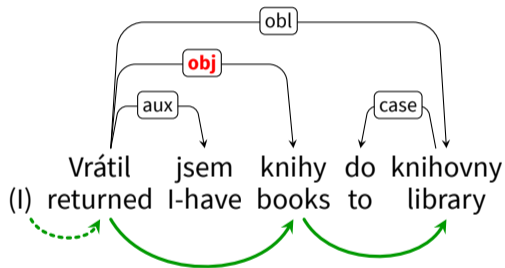
Inherently Reflexive Verbs



Derived Reflexive Verbs



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Romance Pronominal Verbs

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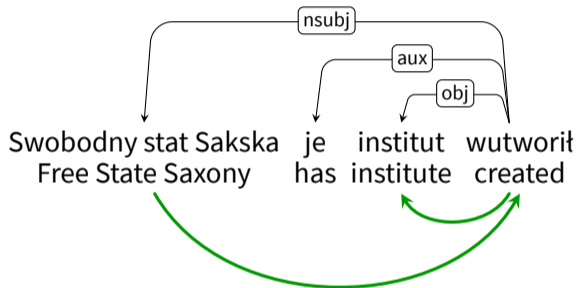
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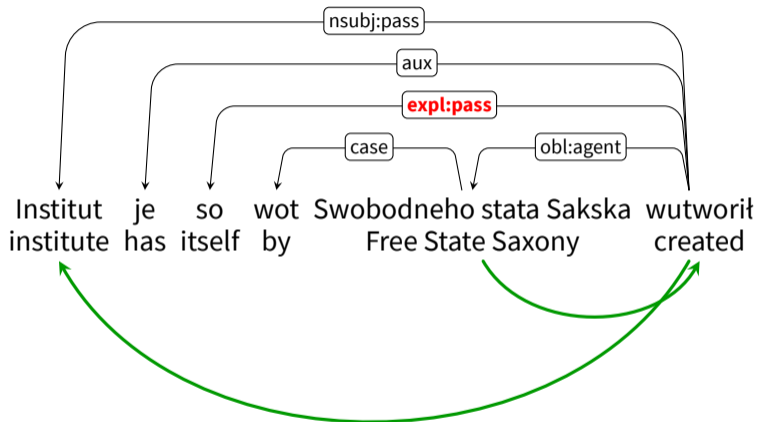
Romance Pronominal Verbs

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- True reflexives:
 - ▶ *lavar* “to wash” → *lavarse* “to wash oneself”
 - ▶ **Se** *lavó con agua fría*. “He washed himself with cold water.”
 - ▶ **BUT:** *lavarse las manos* “to wash one’s hands” (middle?)

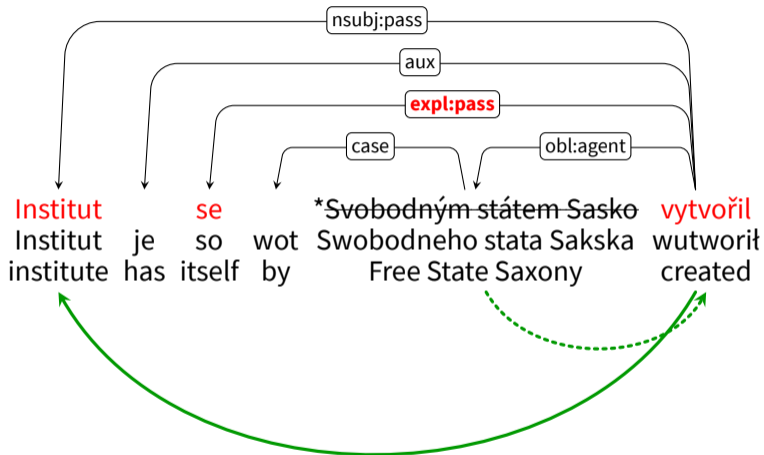
Active → Reflexive Passive



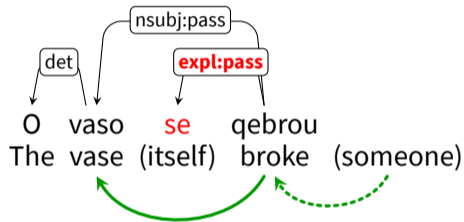
Reflexive Passive



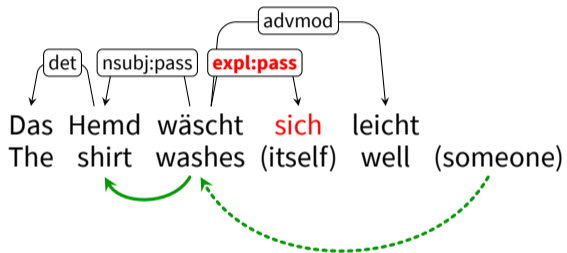
Reflexive Passive



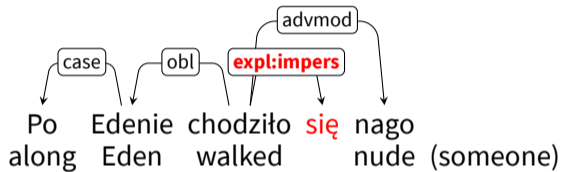
Inchoative / Decausative / Anticausative



German Middle

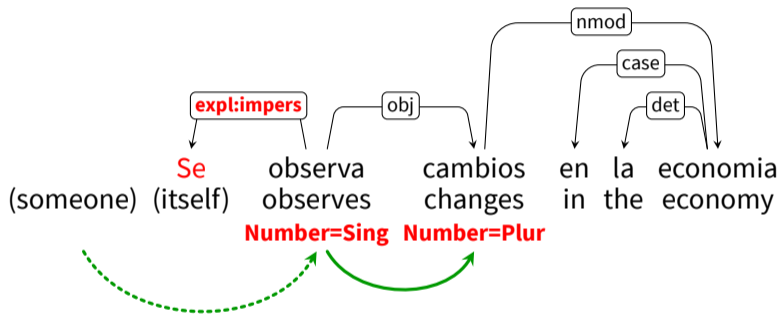


Impersonal Intransitive



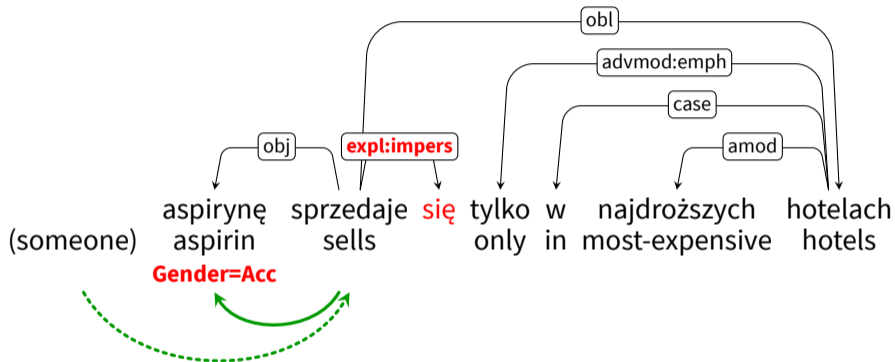
“One would walk nude in Eden”

Impersonal Transitive



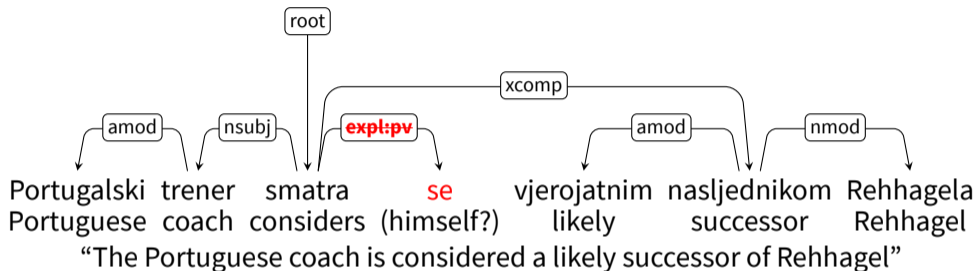
“Changes are observed in the economy”

Impersonal Transitive



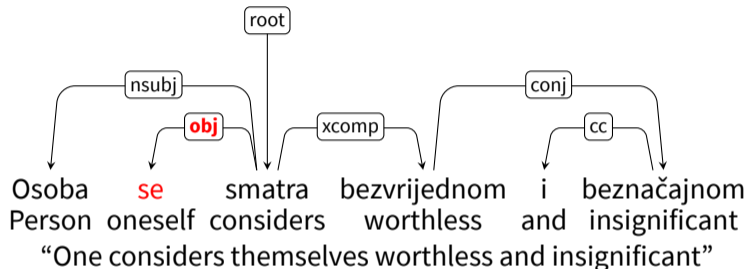
“Aspirin is sold only in the most expensive hotels”

Difficult and Borderline Cases



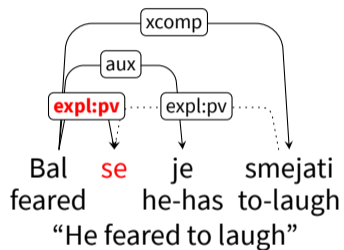
- Currently annotated `expl:pv` (inherent), which is wrong.
- It could be `obj` (true reflexive).
- In this context, it is actually `expl:pass`.

Difficult and Borderline Cases

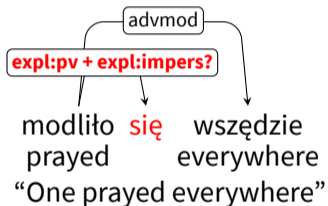
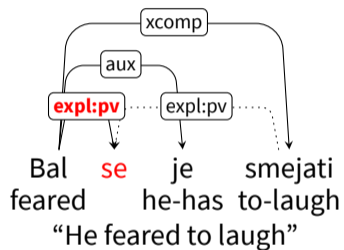


- Context: *Osoba ne nalazi nikakvo uporište u sebi samoj, ne vjeruje u sebe, dapače, smatra se bezvrijednom i beznačajnom.* “The person does not find any strength in herself, does not believe in herself, in fact, considers herself worthless and insignificant.”

Double Function / Haplogy



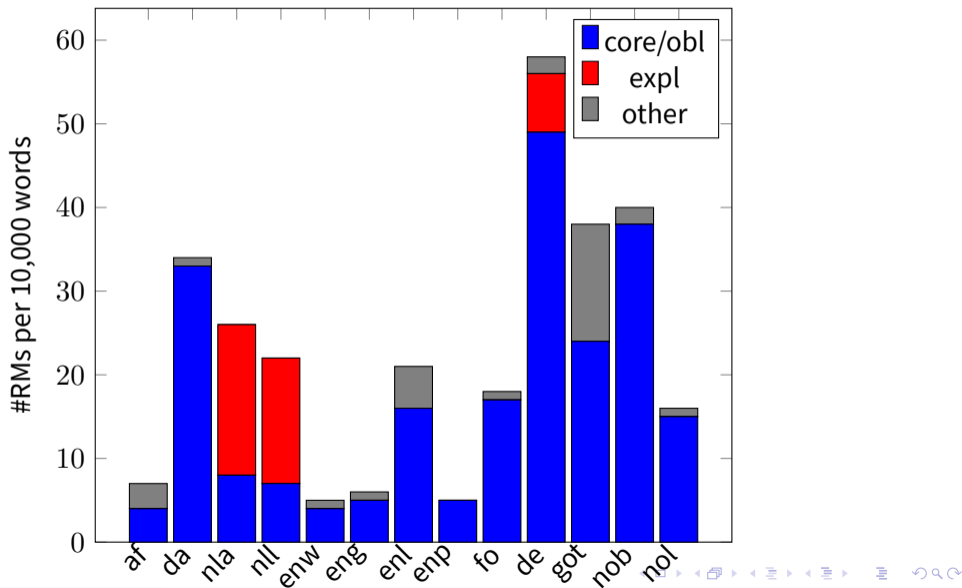
Double Function / Haplogy



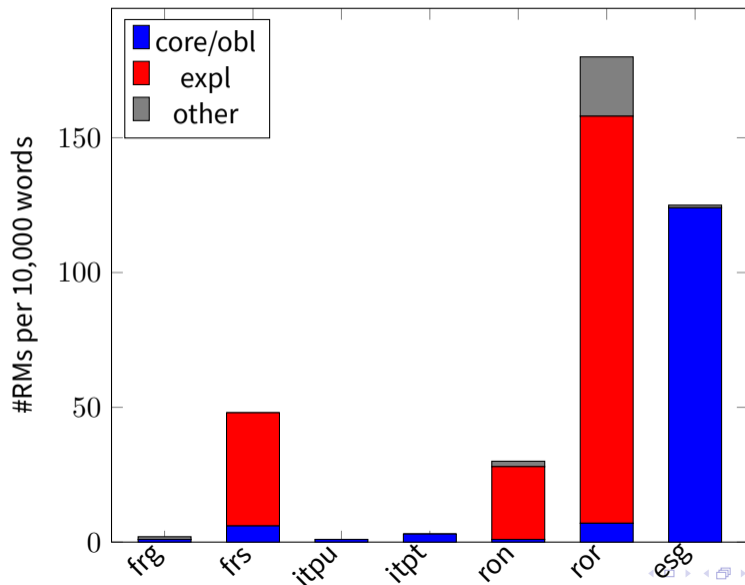
Statistics from UD Czech PDT 2.3

- **1534 lemmas** with **expl:pv**, e.g.: *stát se*, *podařit se*, *snažit se*, *zdat se*, *dostat se*, *zabývat se*, *objevit se*, *rozhodnout se*, *vrátit se*, *domnívat se*, *týkat se*, *myslit si*, *podílet se*, *pohybovat se*, *zúčastnit se*, *pokusit se*, *dohodnout se*, *stávat se*, *jednat se*, *vracet se*, *konat se*, *ptát se*, *sejít se*, *změnit se*, *věnovat se*, *zvýšit se*, *setkat se*, *uvědomit si*, *dozvědět se*, *lišit se*, ...
- **951 lemmas** with **expl:pass**, e.g.: *dát se*, *mít se*, *uskutečnit se*, *hrát se*, *moci se*, *muset se*, *počítat se*, *předpokládat se*, *uvádět se*, *očekávat se*, *mluvit se*, *prodávat se*, *říkat se*, *začít se*, *konat se*, *zvýšit se*, *hovořit se*, *platit se*, *najít se*, *změnit se*, *používat se*, *psát se*, *nabízet se*, *prodat se*, *jednat se*, *připravovat se*, *dostat se*, *rozhodnout se*, *ukázat se*, *dostávat se*, ...
- **659 lemmas** with **truly reflexive** or **reciprocal obj**, e.g.: *představit se*, *seznámit se*, *koupit si*, *říci si*, *prosadit se*, *přečíst si*, *nechat se*, *klást si*, *dát si*, *připomenout si*, *připsat si*, *spojit se*, *nechat si*, *položít si*, *střídat se*, *říkat si*, *zajistit si*, *ponechat si*, *poradit si*, *prezentovat se*, *vysvětlovat si*, *připravit se*, *učit se*, *znát se*, *bránit se*, *protnout se*, *považovat se*, ...

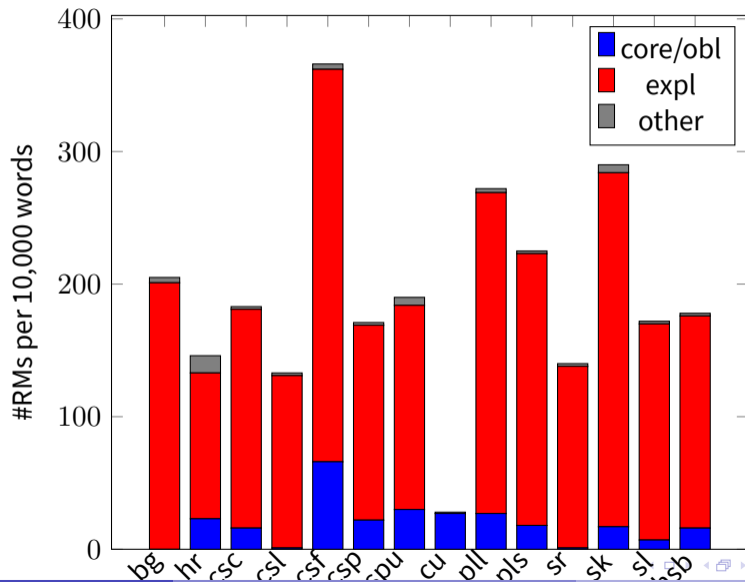
Germanic Treebanks



Romance Treebanks



Slavic Treebanks



Future Work

- Cross-lingual comparison of individual verbs, e.g.
- “to thank”
 - ▶ cs: *děkovat* (intransitive)
 - ▶ sk: *ďakovať* (intransitive)
 - ▶ pl: *dziękować* (intransitive)
 - ▶ hsb: *dźakować* **so** (reflexive)

Thanks!
Děkuji!

Z diskuse

- JPa: Není tak úplně pravda, že reflexivní “pasivum” v češtině vylučuje agentivní frázi. U některých sloves (a v některých situacích) lze použít předložku *mezi*: *Mezi lidmi se hovoří o...*, což sice nemá tvar klasické agentivní fráze v opisném pasívu (tedy instrumentál bez předložky), ale asi to v zásadě je taky agentivní fráze.
- JPa: *léčí se na první interně ...* Kopečný tomu říká “podníčené pasivum” (Kopečný 1954). Sémanticky je to ještě další typ, i když pro nás asi pořád $expl : pass$.
- Pojem “odvozené reflexivum” zřejmě zavedla už Květa Králíková někdy v 80. letech.
- MŠevč: *odvázal jsem si koně* je ambiguitní, ten kůň může být můj a nemusí (pak jsem jen benefaktor); části těla a někteří rodinní příslušníci nejsou ambiguitní: *obvázal jsem si ruku*.
- MŠevč: *košile se (už) pere* není totéž jako *ta košile se pere dobře*. V tom druhém případě se může objevit agent v dativu.

- MMik: na tekto-rovině PDT se dají najít se, o která se perou dvě slovesa (protože budou dva tekto-uzly, které ukazují na analytickou rovinu na stejné se). (Ale: odkazy do analytické roviny se při anotaci tektogramtické roviny ručně anotovaly až v PDTSC a PCEDT. V PDT to oanotováno nebude. V těch dalších korpusech zase není ruční analytická rovina...)
- Saša: S haplogií bude větší problém, když nastane konflikt mezi argumentálním a expletivním se, např.: *Bál se umýt.*