The Role of the Reflexives in Valency:
Evidence from Czech

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Reflexives in Czech

- Long and short (clitic) forms: *se/sebe, si/sobě/sebou*
- Ambiguity: various functions

    A. Reflexive personal pronoun: *se/sebe, si/sobě/sebou*

    B. Grammatical (inflectional) morpheme: only *se*

    C. Lexical (derivational) morpheme: only clitic forms *se* or *si*

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- Functional Generative Description (FGD) (Sgall et al. 1986)
- Valency theory of FGD (Panevová 1994)
- VALLEX (Lopatková et al. 2016)   http://ufal.mff.cuni.cz/3.5

A. Reflexive personal pronoun

- Forms analogous syntactic structures as other personal pronouns

> *Petr*   *přemýšlí*   *o*   *nich.*
> Peter   thinks   about   LOC
> 'Peter thinks about them.'
>
> *Petr*   *přemýšlí*   *o*   *sobě*.
> Peter   thinks   about   REFL.LOC
> 'Peter thinks about himself.'

A. Reflexive personal pronoun

- Forms analogous syntactic structures as other personal pronouns
- Clitic and long forms
    - sensitive to changes in TFA
    - clitic forms available only in DAT (*si*) and ACC (*se*)

Partneři   *se*   *nařkli*   *z nevěry.*
partners   RECP.ACC accused   from infidelity
'These partners accused each other from infidelity.'

Sebe   *by*   *z*   *nevěry*   *nikdy nenařkli.*
RECP.ACC COND   from   infidelity   never accused.
'These partners would never accuse each other from infidelity.'

A. Reflexive personal pronoun

- Forms analogous syntactic structures as other personal pronouns

- Clitic and long forms

  - sensitive to changes in TFA

  - clitic forms available only in DAT (*si*) and ACC (*se*)

- Marks reflexivity and/or reciprocity: coreference

Petr$_i$ přemýšlí o   sobě$_i$.
Peter   thinks   about   REFL.LOC
'Peter thinks about himself.'

Partneři$_i$ se$_i$ nařkli   z nevěry.
parents   RECP.ACC accused   from infidelity
'Partners accused each other from infidelity.'

A. Reflexive personal pronoun

- Forms analogous syntactic structures as other personal pronouns
- Clitic and long forms
  - forms sensitive to changes in TFA
  - clitic forms available only in DAT (*si*) and ACC (*se*)
- Marks reflexivity and/or reciprocity: coreference
- Source of ambiguity btw reflexivity and reciprocity

Žáci *si*   *věří.*
pupils REFL/RECP.DAT believe
'The pupils believe themselves/each other.'

A. Reflexive personal pronoun

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- König – Gast (2008), Evans et al. (2011), Frajzyngier – Walker (2000a, 2000b), Faltz (1985), Nedjalkov (2007), Kemmer (1993), König – Kokutani (2006), Haspelmath (2007), Siloni (2001,2008), Reinhart – Siloni (2005), Reinhart – Reuland (1993), Dalrymple et al. (1998), Heim et al. (1991), Langendoen (1992), …

B. Grammatical (inflectional) morpheme *se*

- Part of reflexive verb form in deagentive diathesis (reflexive passive)
- Reflexive verb form: 3rd person of a verb + *se*
- ACTor is shifted from subject, its surface expression is blocked
- Human actor is presupposed

V	*této*	*vědecké*	*oblasti*	*se*	*dosáhlo*	*velkého*	*pokroku.*
in	this	research	area	REFL	achieved	big	progress

'Great progress has been achieved in this research area.'

C. Lexical (derivational) morphemes *se* and *si*

- Distant morpheme deriving reflexive verb lemmas from irreflexive ones
- Only clitic forms are available
- Part of reflexive verb lemmas → derived reflexive verbs

Ruce	*se*	*mu*	*třásly*	*zimou.*
hand	REFL	him	trembled	cold

'His hands were trembling with cold.'

| **Sebe*	*ruce*	*mu*	*třásly*	*zimou.*
REFL	hands	him	trembled	cold

C. Lexical (derivational) morphemes *se* and *si*

- Middle marker (Kemmer, 1993)
- Typically systemic changes in meaning and valency of verbs
- Four main types reflecting a relation btw. irreflexive and reflexive verb
  - decausative, reciprocal, conversive, intransitive
- Most of them represent metaphorical or metonymical shifts
  - related to reflexive verbs

Example of the verb *třást se* 'to tremble'

1. ~ *třást* 'to shake'

Matka	*mu třásla*	*rukama.*
mother	him shook	hands

'His mother shook his hands.'

related

1. ~ *třást se* 'to tremble'

Ruce	*se*	*mu*	*třásly.*
hands	REFL	him	trembled

'His hands were trembling.'

related

related

2. ~ *třást se* 'to be afraid'

Jan	*se*	*třese*	*o*	*peníze.*
John	REFL	trembles	about	money

'John is afraid of losing his money.'

3. ~ *třást se* 'to be eager'

Jan	*se*	*třese*	*jen*	*na*	*peníze.*
John	REFL	trembles	only	for	money

'John is eager only to have money.'

Frequency of derived reflexive verbs
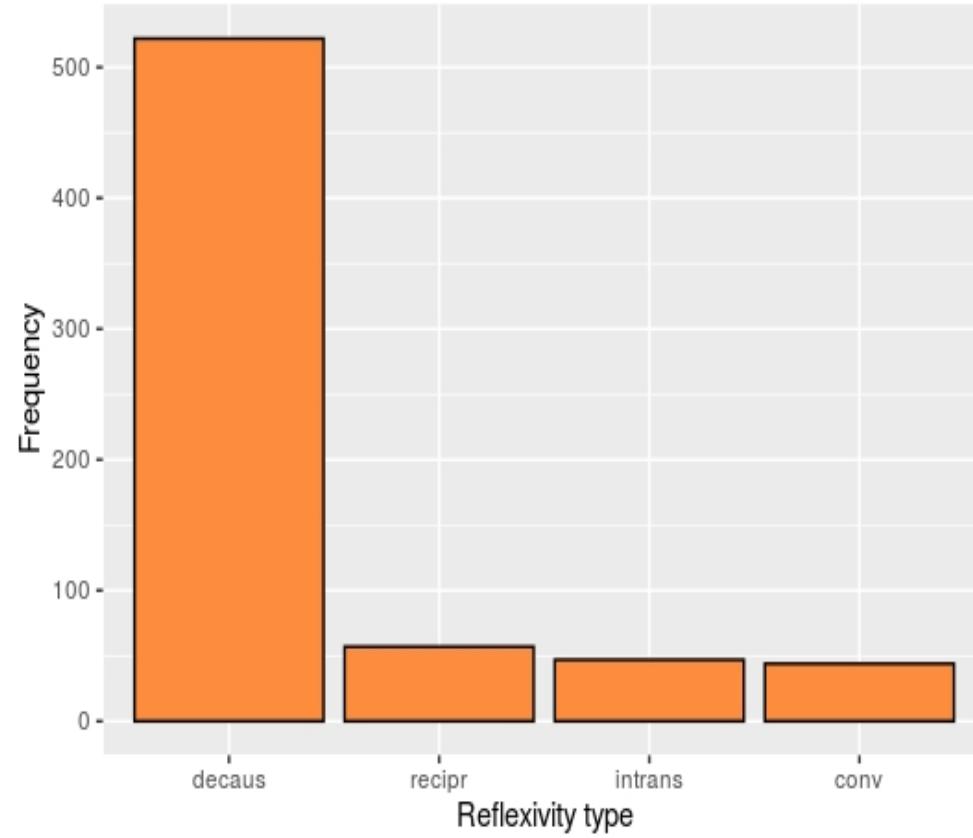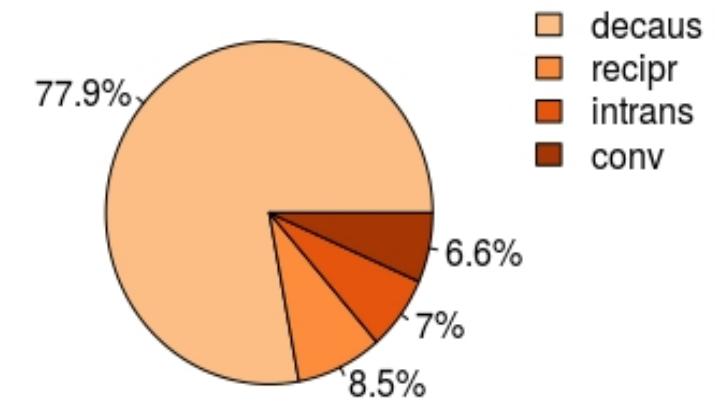
Decausative type

- Both reflexive derivational morphemes *se* and *si*
- An entity affected by an action of irreflexive verbs is shifted to subject
- Initiating and affected entities conflated
- The valency position of the affected entity is dropped from valency frames
  → valency frames of reflexive verbs reduced by one position
- Other valency positions are preserved in valency frames

Decausative type with *se*

Type	decausative *se*
Action	Irreflexive verb lemma + *SE* $X_{acc|instr|s+instr} \rightarrow Y_{nom}$

X … PAT, Y … ACT
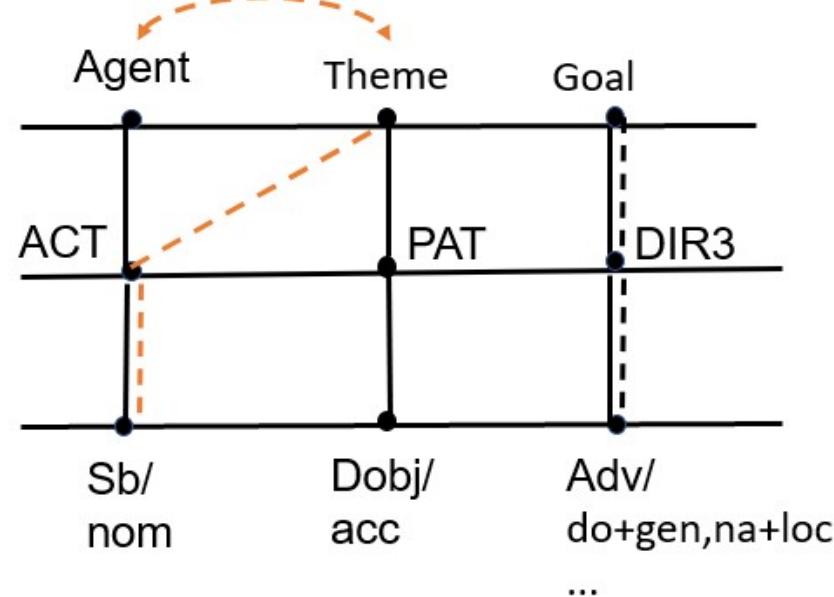
nalepit 'to stick': $ACT_1\ PAT_4\ DIR3_{do+2,\ldots}$

Matk-a	*nalepovala*	*fotk-y*	*do*	*alb-a.*
mother-NOM	stuck	photos-ACC	to	album-GEN

'Mother stuck photos to the album.'

SE

nalepit se 'to stick': $ACT_1\ DIR3_{na+4,\ \ldots}$

Odstřižk-y	*se*	*nalepily*	*na*	*kabát.*
Clippings-NOM	REFL	stuck	to	coat-ACC

'Clippings stuck to his coat.'

Decausative type with *si*

Type	decausative *si*
Action	Irreflexive verb lemma + *SI* $X_{dat} \rightarrow Y_{nom}$

X … ADDR|PAT, Y … ACT

ulevit 'to relieve': $ACT_1 \ PAT_3 \ ORIG_{na+6,od+2}$

Akupunktur-a	*ulevuje*	*pacient-ům*	*od*	*bolest-i.*
acupuncture-NOM	relieves	patients-DAT	from	pain-GEN

'Acupuncture relieves patients from pain.'

SI

ulevit si 'to relieve': $ACT_1 \ PAT_{od+2}$

Během	*si*	*Jan-Ø*	*ulevoval*	*od*	*stres-u.*
Jogging	REFL	John-NOM	relieved	from	stress-GEN

'Jogging relieved John from stress.'
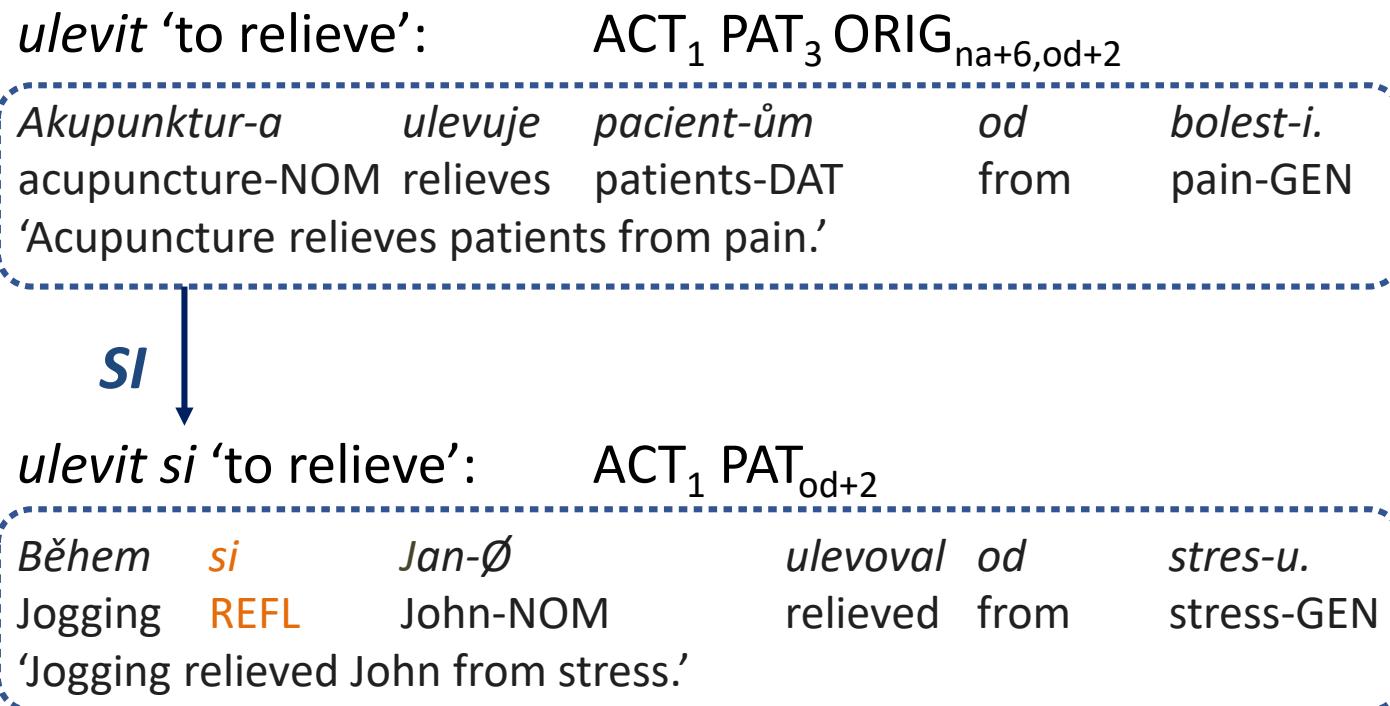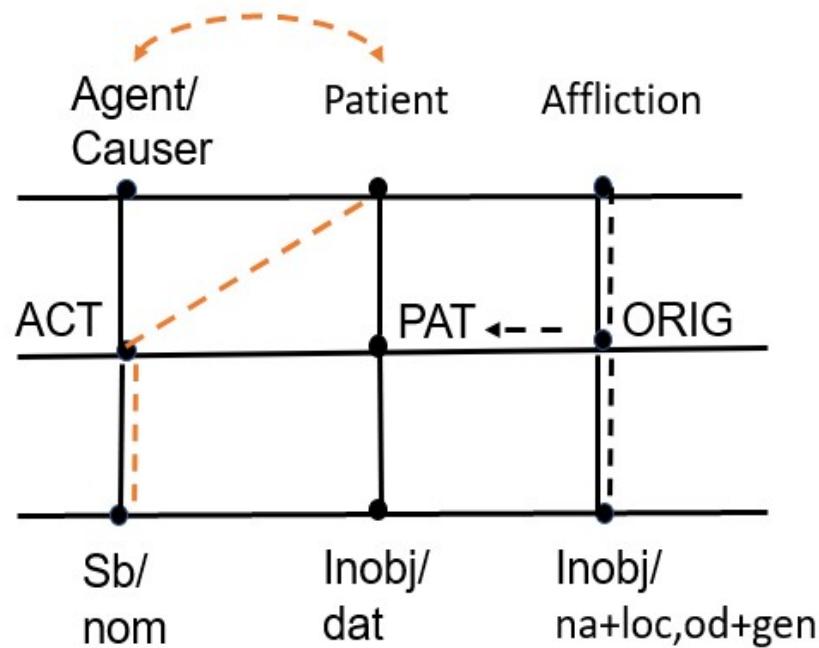
Decausative semantic types

522 LUs represented by 723 verb lemmas, contained in 411 lexemes
150 out of them manually analyzed

Decausative type	Number of LUs	Example
Spontaneous events	85	*polepšit se* 'to change one's ways' ← *polepšit* 'to reform'
Translational motion	35	*hnát se* 'to hurry' ← *hnát* 'to rush sb into'
Nontranslational motion	17	*položit se* 'to lie down' ← *položit* 'put down'
Change in body posture	12	*opřít se* 'to lean' ← *opřít* 'to lean'
Grooming	1	*připravit se* 'to get ready' ← *připravit* 'to prepare'

Decausative semantic types

150 manually analyzed
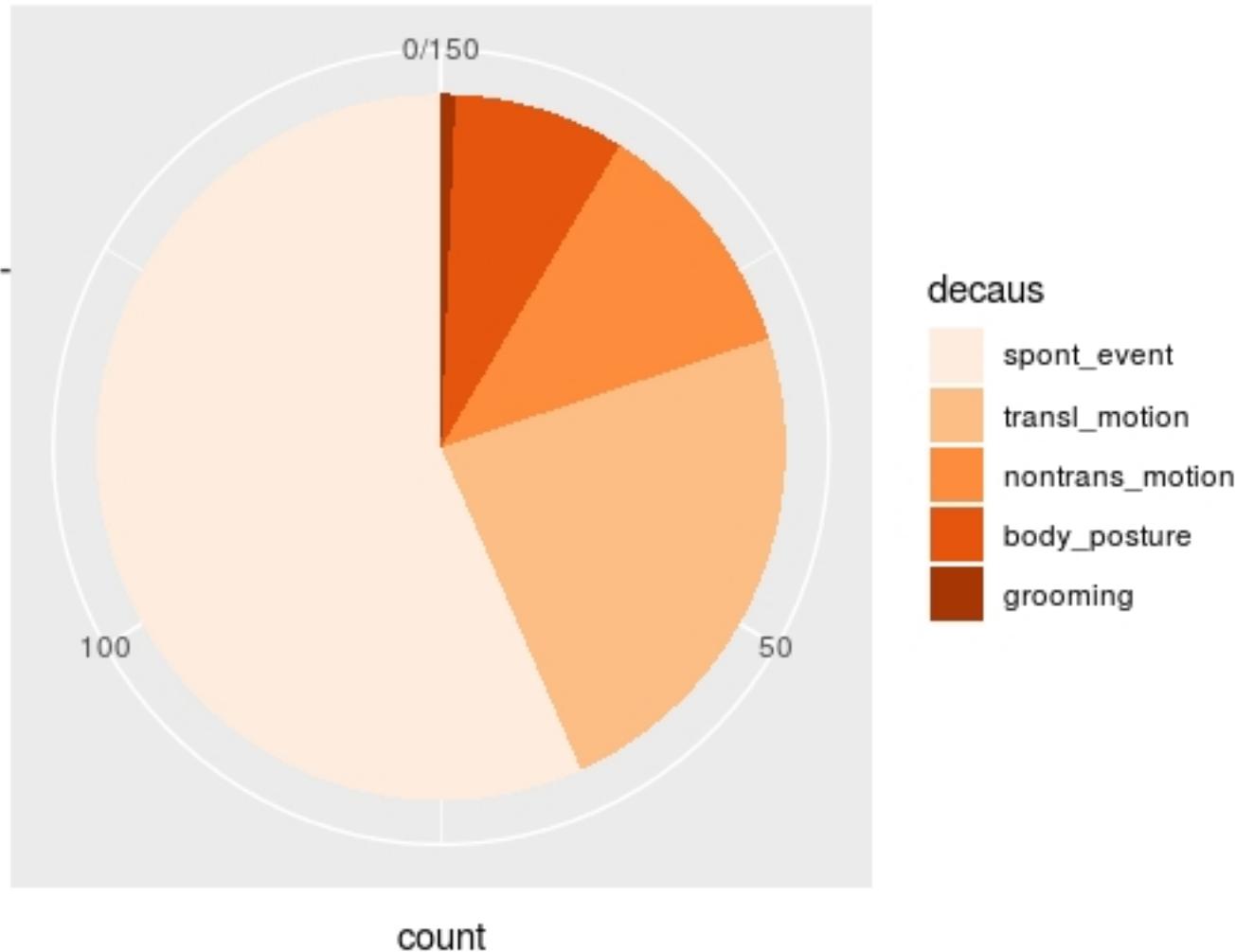
Reciprocal type

- Both reflexive derivational morphemes *se* and *si*
- They derive reflexive verbs with inherent reciprocal meaning from irreflexive verbs with asymmetrical meaning
- A less prominent valency position with irreflexive verbs changes into the prepositional group *s*+INSTR
- Number of valency positions is preserved

Reciprocal type with *se*

Type	reciprocal *se*
Action	Irreflexive verb lemma + *SE* $X_{acc} \rightarrow X_{s+instr}$

X … ADDR|PAT
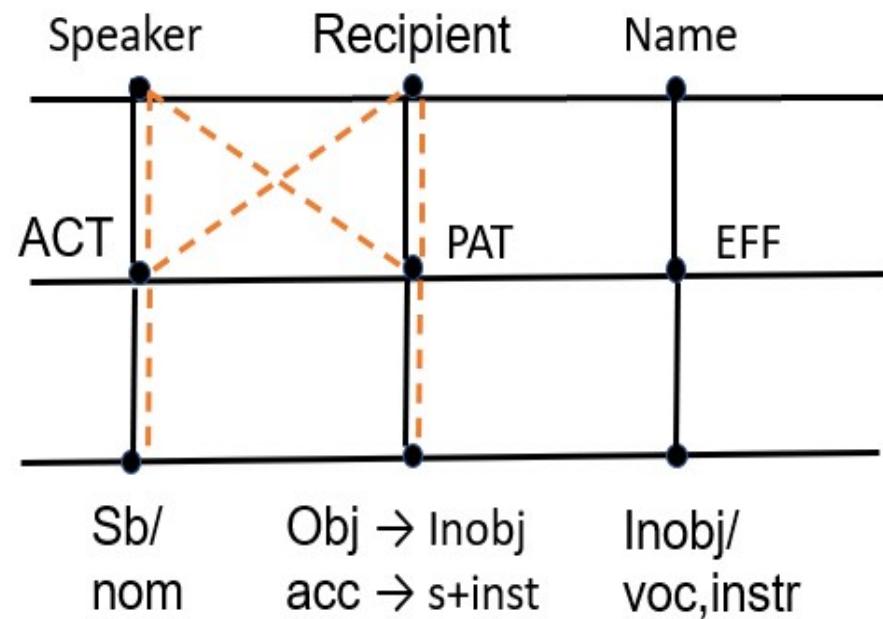
oslovovat 'to call': $ACT_1 PAT_4 EFF_{5,7}$

Jan-Ø		*oslovoval*	*koleg-u*		*křestním jmén-em.*
John-NOM		called	colleague-ACC	first	name-INSTR

'John called his colleague first name.'

SE

oslovovat se 'to call each other': $ACT_1 PAT_{s+7} EFF_{5,7}$

Jan-Ø	*se*	*oslovoval*	*s*	*koleg-ou*	*křestním jmén-em.*
John-NOM	REFL	called	with	colleague-INSTR	first name-INSTR

'John and his colleague called each other with first name.'

Reciprocal type with *si*

Type	reciprocal *si*
Action	Irreflexive verb lemma + *SI* $X_{dat} \rightarrow X_{s+instr}$

X … ADDR|PAT

slíbit 'to promise':　　　　　$ACT_1 \ ADDR_3 \ PAT_{4,inf,dcc}$

> *Petr-Ø*　　　　　*slíbil*　*Mari-i*　　　　*věnost.*
> Peter-NOM　　　promised　Mary-DAT　　fidelity-ACC
> 'Peter promised Mary fidelity.'

SI

slíbit si 'to promise':　　　$ACT_1 \ ADDR_{s+7} \ PAT_{4,inf,dcc}$

> *PetrØ*　　　*si*　*slíbil*　*s*　　*Mari-í*　　　　*věnost-Ø*
> Peter-NOM　REFL　promised　with　　Mary-INSTR　　fidelity-ACC
> 'Peter and Mary promised fidelity to each other.'
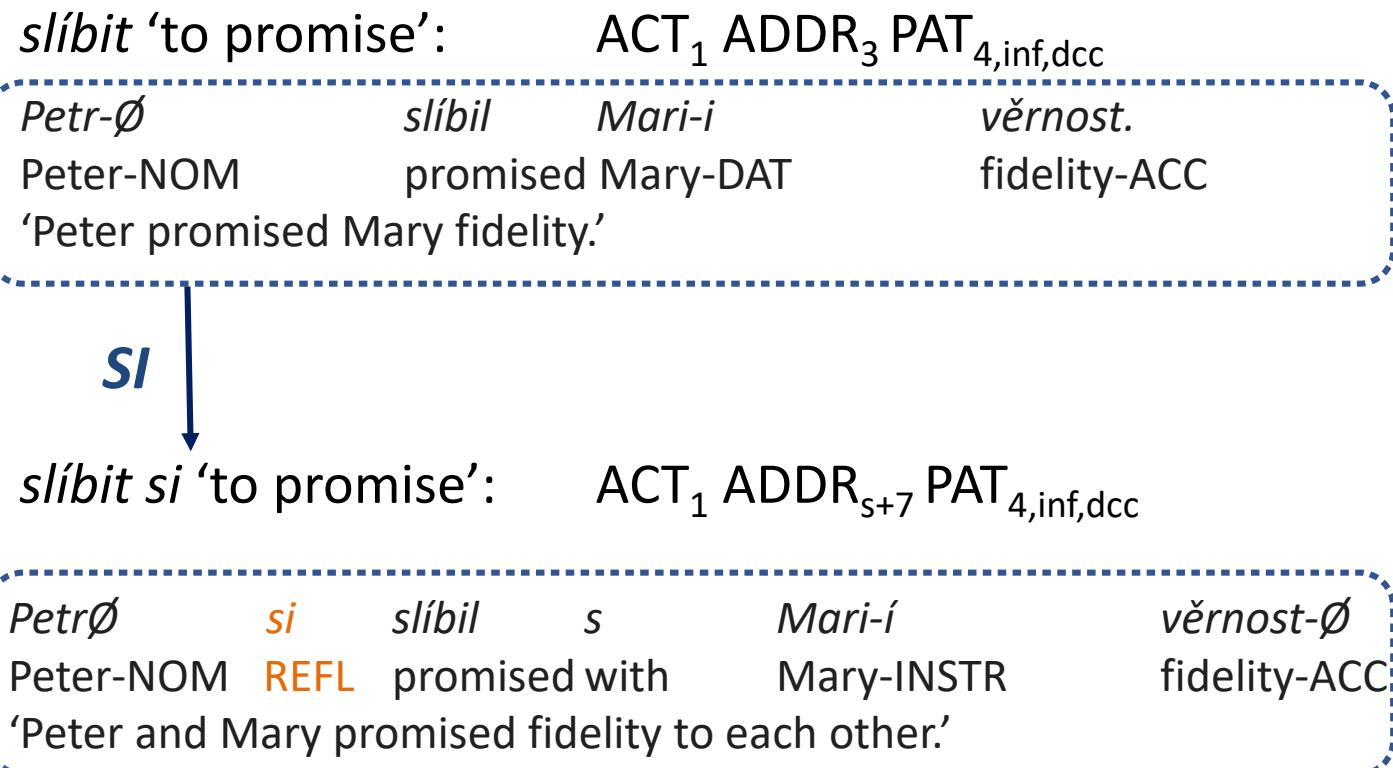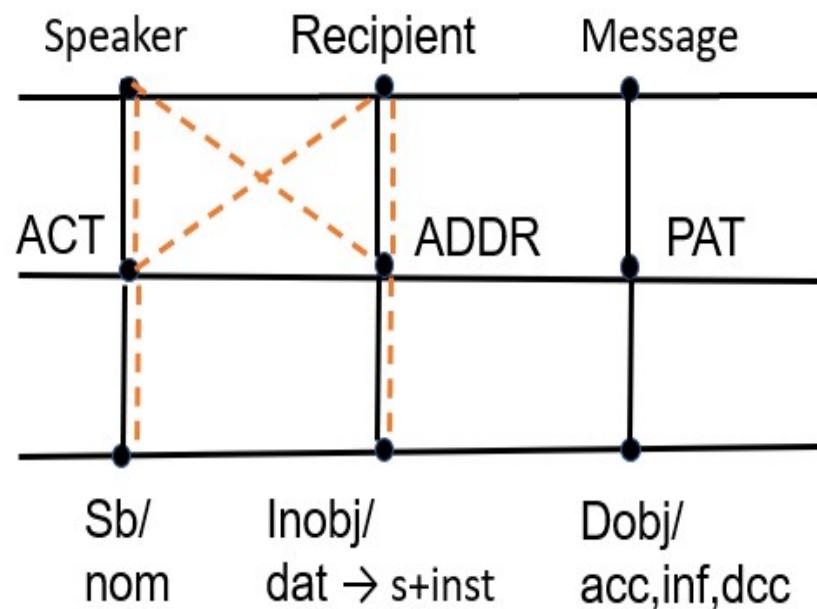
Reciprocal semantic types

57 LUs represented by 77 verb lemmas, contained in 56 lexemes

| Reciprocal type	Number of LUs	Example
Social actions	19	*navštěvovat se* 'to visit each other' ← *navštěvovat* 'to visit'
Communication	12	*povídat si* 'to talk with each other' ← *povídat* 'to say'
Antagonistic actions	8	*bít se* 'to fight' ← *bít* 'beat'
Affectionate actions	6	*líbat se* 'to kiss each other' ← *líbat* 'to kiss'
Exchange	6	*střídat se* 'to change' ← *střídat* 'to change'
Agreement	4	*rozumět si* 'to get along' ← *rozumět* 'to understand'
Physical contact	2	*protínat se* 'to cross each other' ← *protínat* 'to cross'

Reciprocal semantic types
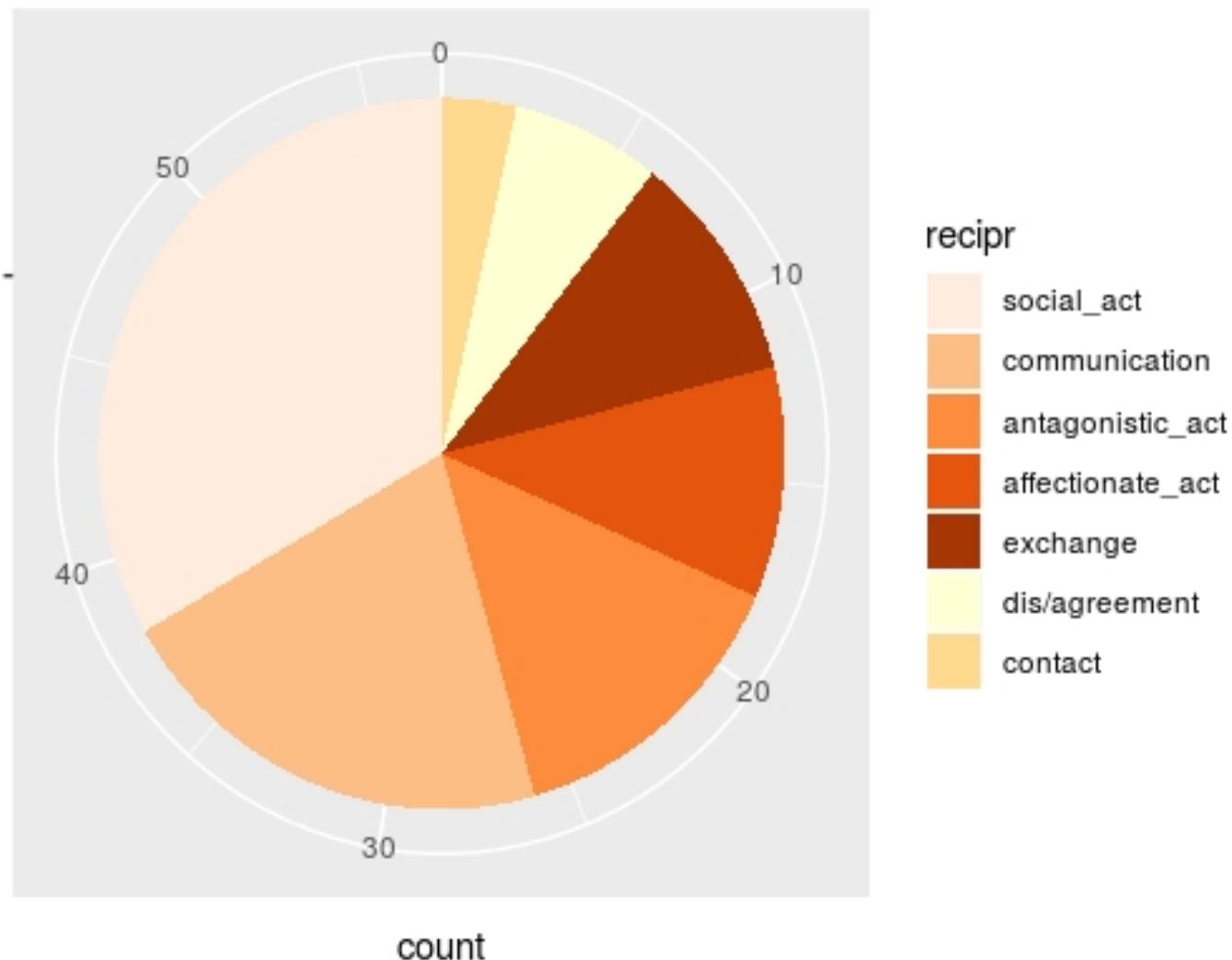
Conversive type

- Reflexive derivational morpheme *se*, sporadically also the morpheme *si*
- It derives reflexive verbs from irreflexive ones
  → the same situation but presented from a different perspective
- Number of valency positions is preserved
- Conversion affects subject

Conversive type with *se*

Type	conversive, verbs of exchange
Action	Irreflexive verb lemma + *SE* $ACT_{nom} \rightarrow X_{od+2,z+2}$ $Y_{acc} \rightarrow ACT_{nom+instr}$

X … PAT|ORIG, Y … ADDR|PAT

informovat 'to inform': ACT_1 $ADDR_4$ $PAT_{o+6,dcc}$

Spoluhráč-i   *Petr-a*   *informovali o*   *průběh-u utkání.*
Teammates-NOM   Peter-ACC   informed   about course-LOC match
'Teammates informed Peter about the course of the match.'

SE

informovat se 'to get information': ACT_1 $PAT_{na+4,o+6,dcc}$ $ORIG_{od+2}$

Petr-Ø   *se*   *informoval od*   *spoluhráč-ů*   *na průběh-Ø*   *utkání.*
Peter-NOM REFL   informed   from   teammates-GEN for course-ACC   match
'Peter got informed from his teammates on the course of the match.'

Conversive type with *si*

Type	conversive, verbs of exchange
Action	Irreflexive verb lemma + *SI* $ACT_{nom} \rightarrow ORIG_{od+2}$ $ADDR_{dat} \rightarrow ACT_{nom}$
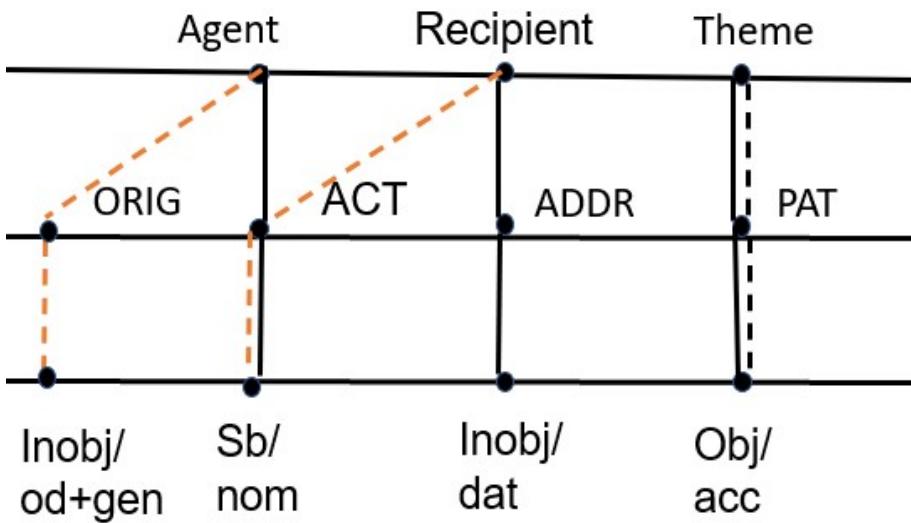
půjčit 'to lend': ACT_1 $ADDR_3$ PAT_4

Rodič-e		*půjčili*	*Petr-ovi*	*aut-o.*
Parents-NOM		lent	Peter-DAT	car-ACC

'Parents lent a car to Peter.'

SI

půjčit si 'to borrow': ACT_1 PAT_4 $ORIG_{od+2}$

| *Petr-Ø*	*si*	*půjčil*	*od*	*rodič-ů*	*aut-o.*
Peter-NOM	**REFL**	borrowed	from	parents-GEN	car-ACC

'Peter borrowed a car from his parents.'

Conversive semantic types

44 LUs represented by 62 verb lemmas, contained in 42 lexemes

| Coversive type	Number of LUs	Example
Emotion	29	*sužovat se* 'to be annoyed' ← *sužovat* 'to annoy '
Moving_in_place	7	*třást se* 'to quiver' ← *třást* 'to shake'
Cognition	4	*zajímat se* 'to be interested in' ← *zajímat* 'to interest'
Exchange	4	*půjčit si* 'to borrow' ← *půjčit* 'to lend'

Conversive semantic types
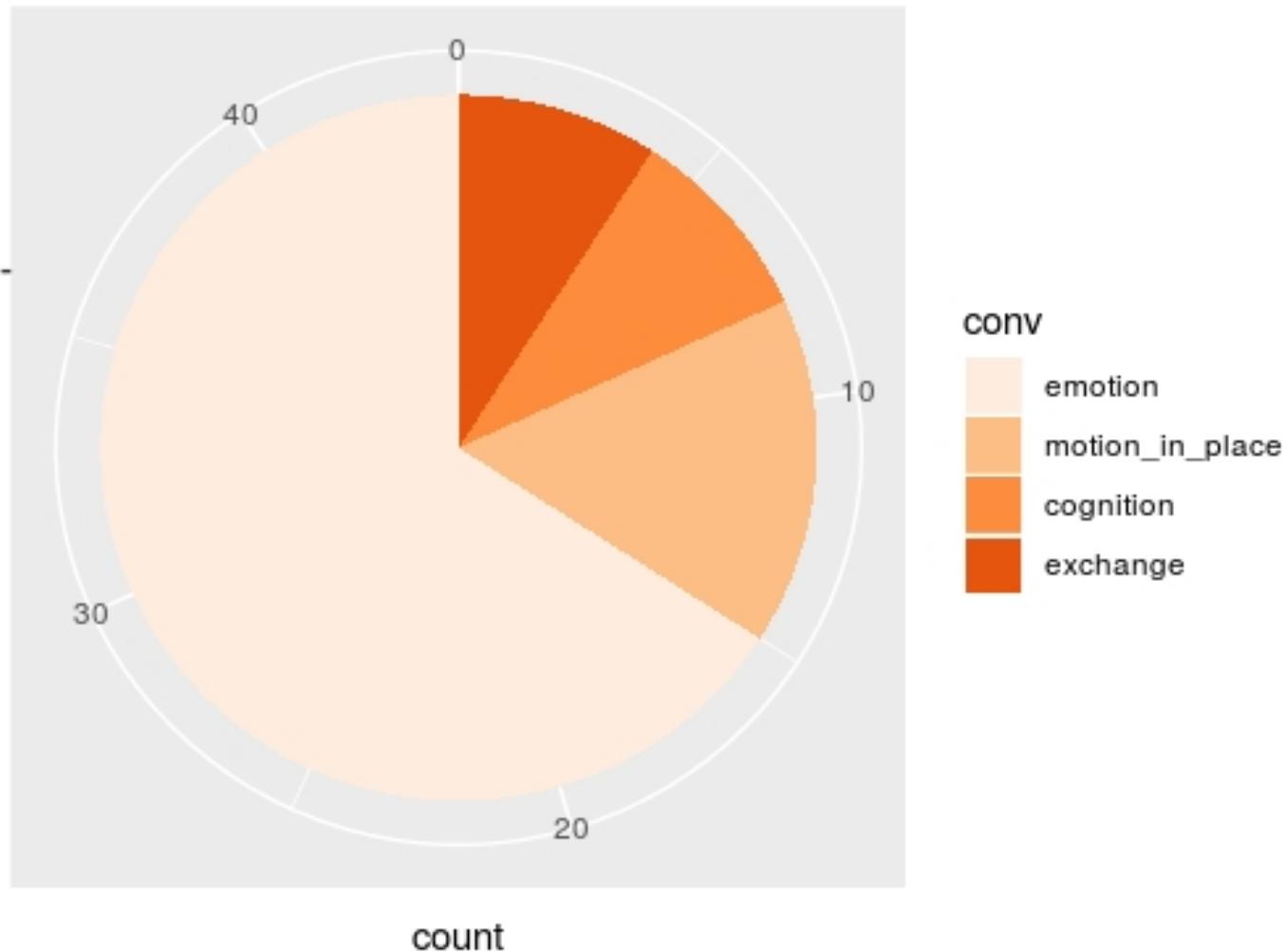
Intransitive type

- Reflexive derivational morpheme *se*
- It derives reflexive verbs from irreflexive ones with the same meaning
- Number of valency positions is preserved
- The same situation is surface syntactically structured in a different way
  → changes affect only surface structure

Intransitive type

Type	intransitive
Action	Irreflexive verb lemma + *SE* $X_{acc} \rightarrow X_{gen|dat|instr|prepositional\_group|\emptyset}$

X … PAT|EFF
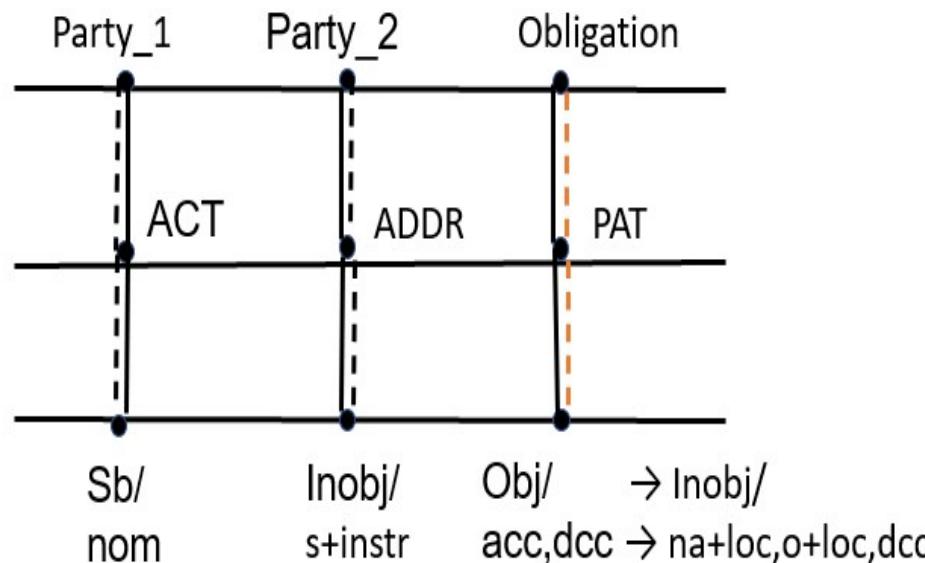
domluvit 'to arrange': ACT_1 $ADDR_{s+7}$ $PAT_{4,dcc}$

Petr-Ø		*domluvil*	*s*	*bank-ou*	*půjčk-u.*
Peter-NOM		agreed	with	bank-INSTR	loan-ACC

'Peter arranged a loan in a bank.'

SE

domluvit se 'to arrange': ACT_1 $ADDR_{s+7}$ $PAT_{na+6,o+6,dcc}$

Petr-Ø	*se*	*domluvil*	*s*	*bank-ou*	*na*	*půjčc-e.*
Peter-NOM	REFL	agreed	with	bank-INSTR	on	loan-LOC

'Peter arranged a loan in a bank.'

# Intransitive type

47 LUs represented by 79 verb lemmas, contained in 44 lexemes

Intransitive type	Number of LUs	Example
Interlocution	15	*zmínit se* 'to mention' ← *zmínit* 'to mention'
Physical_contact	14	*tahat se* 'to pull' ← *tahat* 'to pull'
Cognition	8	*pamatovat se* 'to remenber' ← *pamatovat* 'to remember '
Exchange	7	*odměnit se* 'to reward' ← *odměnit* 'to reward'
Proximity	3	*dotáhnout se* 'to catch up with' ← *dotáhnout* 'to catch up with'

Intransitive type
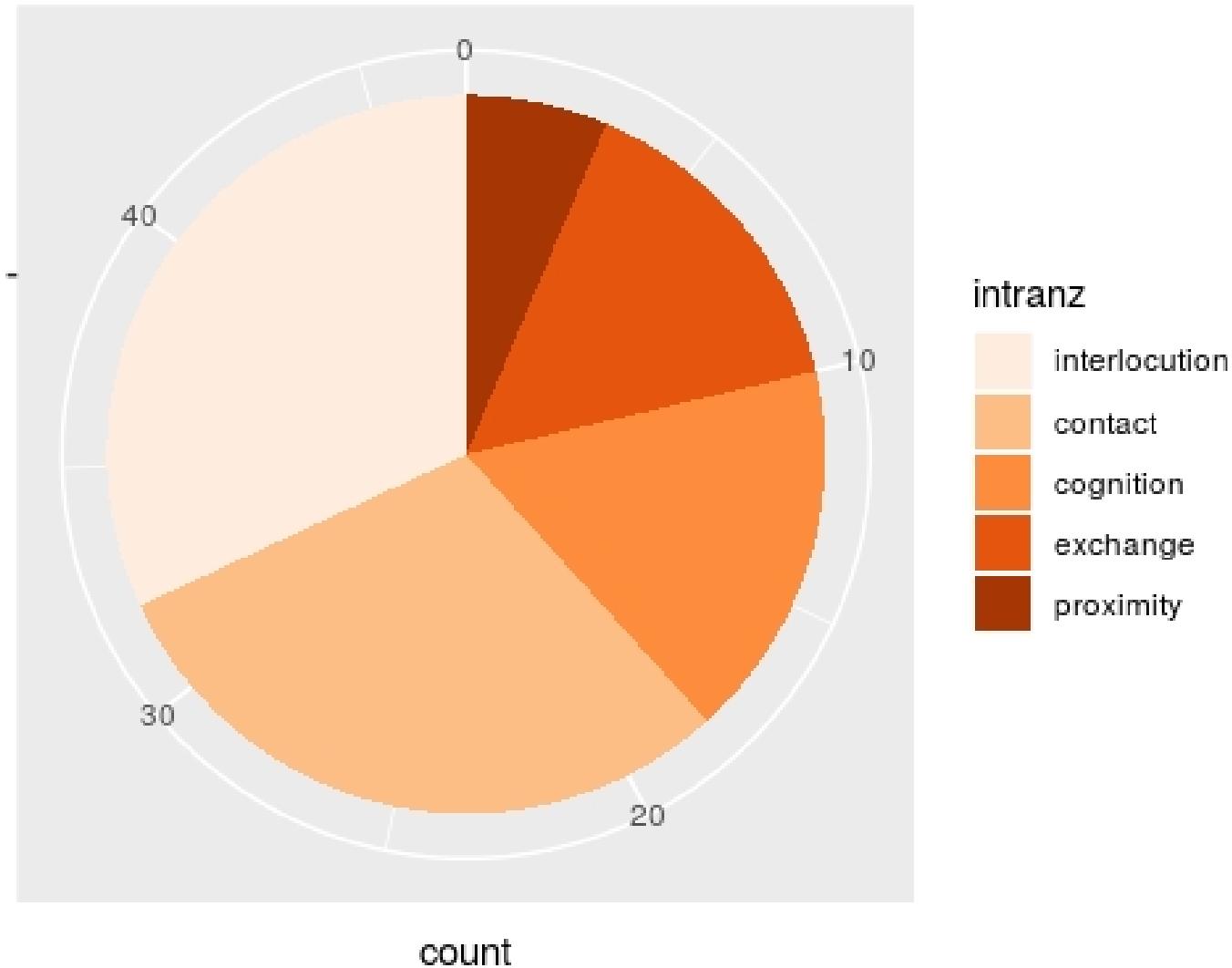
Conclusion

- Four main functions of the reflexives in derivational processes in Czech, with respect to semantic and/or syntactic changes
- Exemplified on the data from the valency lexicon of Czech verbs
- *SE* and *SI* as derivational means associated with systemic syntactic changes, often accompanied with semantic changes
- Syntactic changes can be captured by grammatical rules

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Thank you for your attention!
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