

# Between Reflexivity and Reciprocity: Towards an Analysis of Reflexive and Reciprocal Constructions of Selected Czech Verbs

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# Ambiguity of Reflexive and Reciprocal Constructions



Jiří obviňoval Petra z porážky.

*obviňovat* <sup>impf</sup>, *obvinit* <sup>pf</sup>  
**ACT**(1) **ADDR**(4) PAT(z+2,že;obl)

Jiří a Petr **se** obviňovali z porážky.

≈ Jiří a Petr **se** vzájemně obviňovali z porážky. (reciprocal)

≈ Jiří a Petr sami **sebe** obviňovali z porážky. (reflexive)

⇒ **se / sebe** ... reflexive pronoun

ambiguity: reciprocity vs. reflexivity  
disambiguation: *vzájemně* (reciprocal)  
*sám* (reflexive)

# Ambiguity of Reflexive and Reciprocal Constructions



Jiří se obdivoval Petrovi.

*obdivovat se* *impf*  
**ACT(1) PAT(3)**

Jiří a Petr se **sobě** obdivovali.

≈ Jiří a Petr se **sobě** vzájemně obdivovali.

(reciprocal)

≈ Jiří a Petr se sami **sobě** obdivovali.

(reflexive)

⇒ **sobě** ... reflexive pronoun

ambiguity: reciprocity vs. reflexivity  
disambiguation: *vzájemně* (reciprocal)  
*sám* (reflexive)

# Ambiguity of Reflexive and Reciprocal Constructions



Jiří se obdivoval Petrovi.

*obdivovat se* <sup>impf</sup>  
**ACT(1) PAT(3)**

Jiří a Petr se sobě obdivovali.

≈ Jiří a Petr se sobě vzájemně obdivovali.

(reciprocal)

≈ Jiří a Petr se sami sobě obdivovali.

(reflexive)

Matka se dceři postupně odcizila.

*odcizovat se* <sup>impf</sup>, *odcizit se* <sup>pf</sup>  
**ACT(1) PAT(3)**

**BUT:** Matka a dcera se sobě postupně odcizily.

≈ Matka a dcera se sobě navzájem postupně odcizily.

(reciprocal)

\* Matka a dcera se samy sobě odcizily.

(reflexive)

# Ambiguity of Reflexive and Reciprocal Constructions



Jiří bojoval proti Petrovi.

Jiří a Petr bojovali **proti sobě**.

≈ Jiří a Petr bojovali **proti sobě** navzájem.

≈ Jiří a Petr bojovali sami **proti sobě**.

*bojovat* *impf*

**ACT**(1) **ADDR**(s+7,proti+3)

?PAT(4) ?EFF(o+4)

(reciprocal)

(reflexive)

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*bojovat* *impf*

**ACT**(1) **ADDR**(s+7,proti+3)

?PAT(4) ?EFF(o+4)

(reciprocal)

(reflexive)

Barack Obama nebojuje s Mittem Romneyem férový zápas.

**BUT:** Barack Obama a Mitt Romney nebojují férový zápas.

≈ B. Obama a M. Romney spolu navzájem nebojují férový zápas. (reciprocal)

≠ B. Obama a M. Romney sami **se sebou** nebojují férový zápas. (reflexive)

# Motivation

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- Czech reflexives *se/si, sebe/sobě*:  
ambiguous means expressing reciprocity and reflexivity
- different behavior for different types of verbs
- goal: an analysis of different syntactic functions of the reflexive pronoun for different verb classes in Czech
  
- language material:
  - ~ Czech National Corpus <http://www.korpus.cz/>
  - ~ Valency Lexicon of Czech Verbs VALLEX <http://ufal.mff.cuni.cz/vallex/3.0/>

# Outline

---

- (syntactic) reflexivity vs. reciprocity
- syntactic rule for reflexive constructions in Czech
- types of reciprocal verbs in Czech
  - syntactic reciprocalization rules
- disambiguating means
- conclusion:
  - sources of ambiguity of constructions with the reflexive pronoun



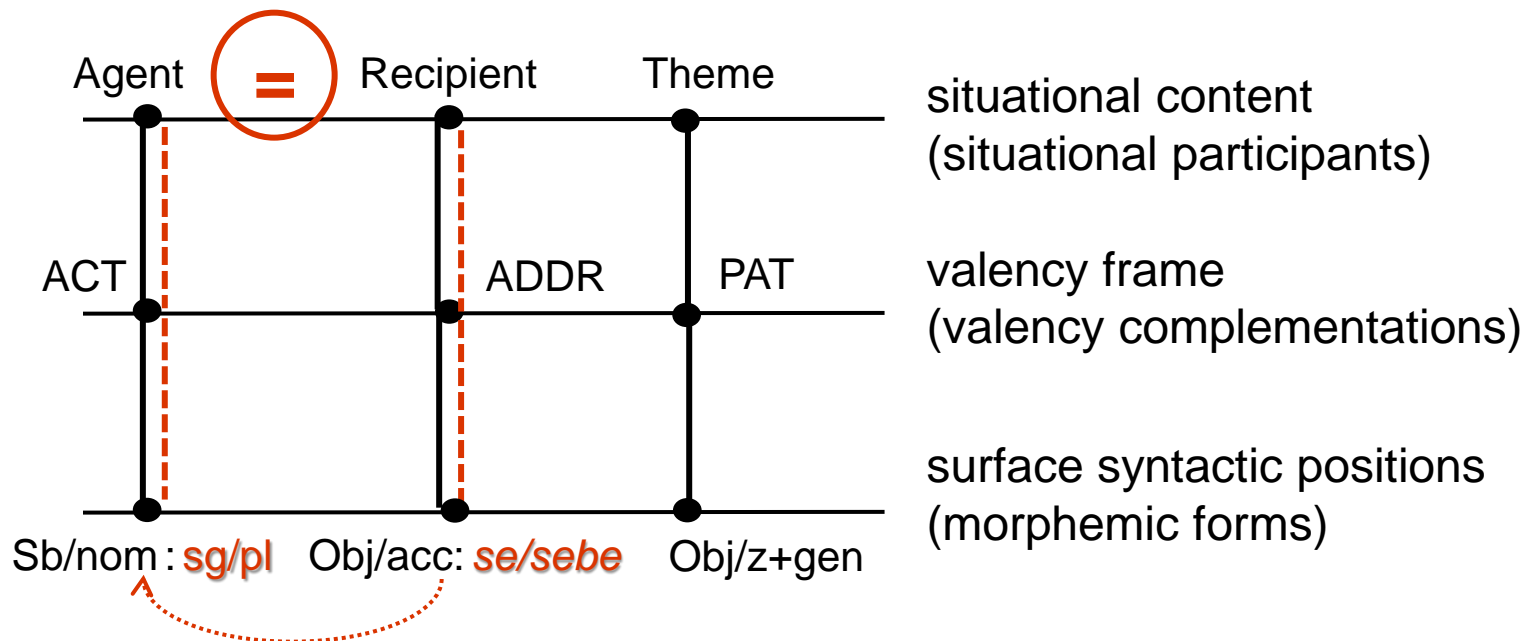
# Syntactic Reflexivity

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- **reflexivity** ~ referential identity of two actants:
  - ~ actant in the subject position
  - ~ actant expressed by the reflexive pronoun

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*Hráč se obviňoval z porážky. (= o. sám sebe)*

*Hráči se obviňovali z porážky. (= o. každý sám sebe)*

*obviňovat*<sup>impf</sup>, *obvinit*<sup>pf</sup>  
**ACT(1) ADDR(4) PAT(z+2,že;obl)**

# Reciprocity

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- **symmetry** ~ semantic property of a word or a construction
- **reciprocity** ~ a complex of forms and patterns  
for expressing symmetry (König, Kokutani, 1996; Haspelmath, 2007)

# Reciprocity

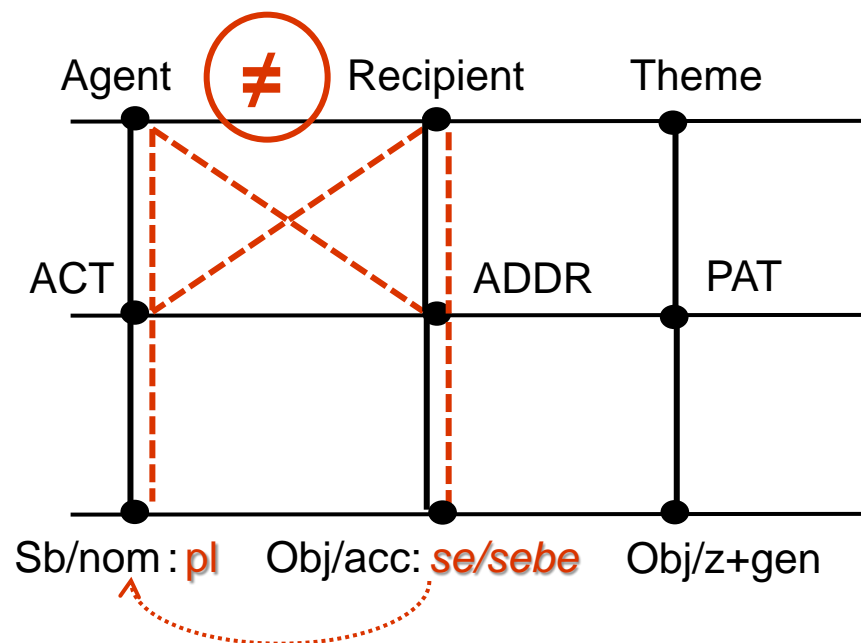
- **symmetry** ~ semantic property of a word or a construction
- **reciprocity** ~ a complex of forms and patterns

for expressing symmetry (König, Kokutani, 1996; Haspelmath, 2007)

situational content  
(situational participants)

valency frame  
(valency complementations)

surface syntactic positions  
(morphemic forms)

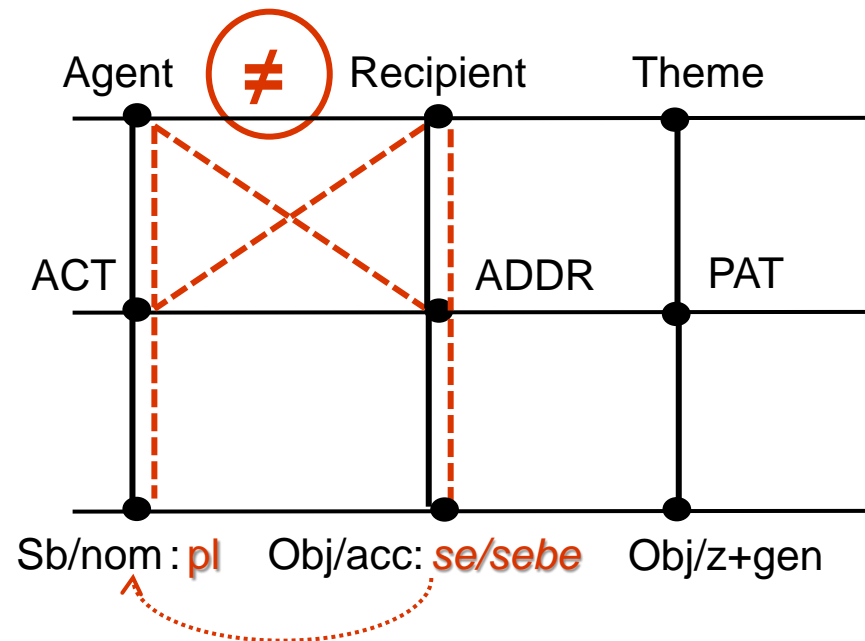
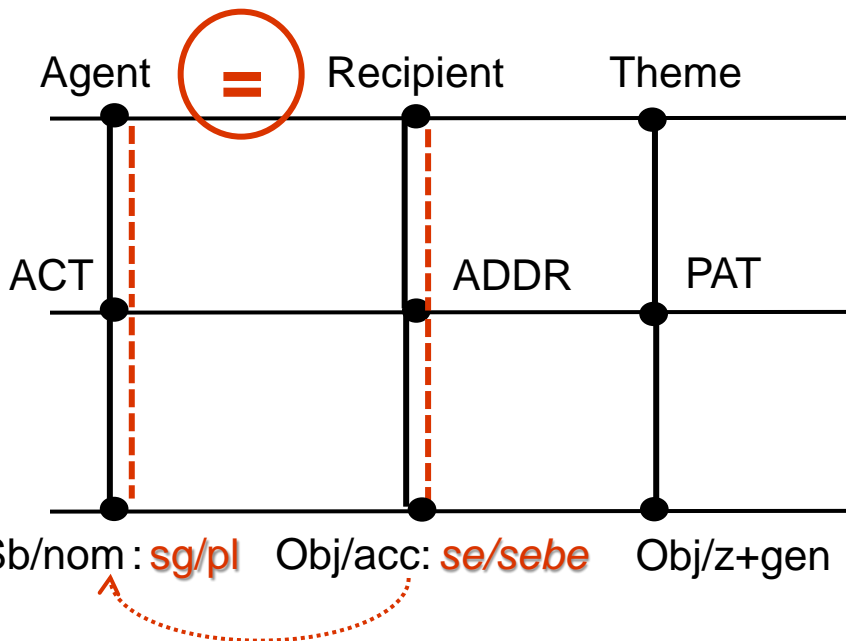


*Jiří a Petr se (vzájemně) obviňovali z porážky.*

*obviňovat* <sup>impf</sup>, *obvinit* <sup>pf</sup>  
**ACT(1) ADDR(4) PAT(z+2,že;obl)**

# Syntactic Reflexivity vs. Reciprocity

*obviňovat* *impf*, *obvinít* *pf*  
**ACT**(1) **ADDR**(4) PAT(z+2,že;obl)



*Hráči se obviňovali z porážky. (= o. každý sám sebe)*    *Hráči se (vzájemně) obviňovali z porážky.*

# Syntactic Reflexivity in Czech

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Rule for <b>syntactic reflexivity</b> (with actant in dative or accusative)	
	subject-oriented reciprocity
conditions: reflex: actants:	coref4, coref3 ACT(nom) & ADDR(dat acc)
actions: change form:	ADDR: dat → <b>si / sobě</b> acc → <b>se / sebe</b>
obligatoriness:	<b>ADDR</b>

Hráč **se** obviňoval z porážky. (= o. sám sebe)

Hráči **se** obviňovali z porážky. (= o. každý sám sebe)

**obviňovat** *impf*, **obvinit** *pf*  
**ACT**(1) **ADDR**(4) PAT(z+2,že;obl)

# Reciprocity in Czech

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- expressed by:
    - ~ lexical means           ⇒ **lexical reciprocal** verbs
    - ~ grammatical means   ⇒ **syntactic reciprocal** verbs
- (inspired by Panevová, 2007; Nedjalkov, 2007; Haspelmath, 2007)



# Lexical Reciprocal Verbs I

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- **lexical / inherent reciprocal verbs**

- ~ verbs bearing the semantic feature of symmetry in their lexical meaning; i.e., they denote mutual situations (Evans, 2008)
- ~ semantically restricted group

⇒ **express symmetry** even when participants are not (syntactically) reciprocalized

*Petr jednal s Pavlem o možnostech spolupráce.*

*Jan se bavil s Petrem o dovolené.*

*Izolovali malého pacienta od sourozenců.*

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*Petr jednal s Pavlem o možnostech spolupráce.*

→ *Petr a Pavel (spolu) jednali o možnostech spolupráce.*

*Jan se bavil s Petrem o dovolené.*

→ *Jan a Petr se bavili o dovolené.*

*Izolovali malého pacienta od sourozenců.*

→ *Izolovali (od sebe) malého pacienta a sourozence.*

- in addition, **syntactic operation of reciprocalization** may be applied

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*Petr jednal s Pavlem o možnostech spolupráce.*

subject-oriented

→ *Petr a Pavel (spolu) jednali o možnostech spolupráce.*

*Jan se bavil s Petrem o dovolené.*

subject-oriented

→ *Jan a Petr se bavili o dovolené.*

*Izolovali malého pacienta od sourozenců.*

object-oriented

→ *Izolovali (od sebe) malého pacienta a sourozence.*

- in addition, **syntactic operation of reciprocalization** may be applied

# Lexical Reciprocal Verbs II

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- sub-classification (inspired by Panevová, 2007)
  - (A) irreflexive inherent reciprocal verbs  
(e.g., *jednat, spolupracovat; izolovat, smíchat*)
  - (A') inherent reciprocal verbs with optional *se/si*  
(e.g., *korespondovat (si); plést (si)*)
  - (B) reflexive tantum reciprocal verbs  
(e.g., *bavit se, poprat se*)
  - (C) decausative verbs  
(e.g., *oddělit se, spojit se, smíchat se*)
  - (D) derived inherent reciprocal verbs  
(e.g., *líbat se, navštívit se, povídat si*)  
(Dimitriadis, 2004), (Siloni, 2001), Evans (2008): *discontinuous reciprocal verbs*

⇒ *se/si* ~ part of a verb lemma (B)-(D)  
 ~ derivational morphemes with different functions (C), (D)

# Lexical Reciprocal Verbs in VALLEX



Lexical reciprocal verbs in VALLEX		number	subject/object-oriented
201 LUs (~ 281 verb lemmas)	(A) irreflexive verbs	103	47 / 56
	(A') verbs with optional <i>se/si</i>	6	3 / 3
	(B) reflexive tantum verbs	33	32 / 1
	(C) decausative verbs	29	29 / 0
	(D) derived inherent reciprocal verbs	26	26 / 0
	total	197	137 / 60

# Reciprocalization Rule

Reciprocalization rule <b>for lexical reciprocal verbs</b>		
	subject-oriented reciprocity	object-oriented reciprocity
conditions: recipr: form:	<b>ACT-X</b> ACT(nom)	recipr: <b>PAT-X</b> or <b>X-PAT</b> form: PAT(acc)
actions: agreement:	number+gender+person, ACT	
change form:	ACT: nom → nom : plural X: s+instr → ∅ od+gen → <i>od sebe</i> dat → ∅ / <i>sí*</i> / <i>sobě</i> z+gen → <i>ze sebe</i> k+dat → <i>k sobě</i>	PAT: acc → acc : plural X: s+instr → ∅ od+gen → <i>od sebe</i> dat → ∅ / <i>sobě</i> z+gen → <i>ze sebe</i> k+dat → <i>k sobě</i>

\* not applicable for reflexive verbs (haplology)

# Lexical Reciprocal Verbs III

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- ⇒ constructions with reciprocal actants are characterized:
- ~ by plural subject / object;
  - ~ typically **not signaled by the reflexive pronoun** (s+instr → ∅)  
(if signaled, then long form in prepositional groups)
  - ~ by emphasizing lexical expressions:
    - spolu* (only for s+instr)
    - vzájemně, navzájem, mezi sebou, dohromady*

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!!! reflexives *se/si* (if they appear in the construction)  
are part of verb lemmas

- ⇒ **NO ambiguity**  
between reciprocal and reflexive constructions  
(reflexive constructions are limited for lexical reciprocal verbs  
due to obligatoriness of the reflexive pronoun there)



# Syntactic Reciprocal Verbs I

- **syntactic reciprocal verbs**

~ verbs denoting asymmetrical situations

BUT allowing their participants to be put into symmetry (Evans, 2008) (Panevová, 2007): lexically non-reciprocal verbs

~ symmetry is achieved by the **syntactic operation** of reciprocalization

~ semantically open group

*Petr políbil Marii (na tvář).*

→ *Petr a Marie **se** políbili (vzájemně).*

***Sebe** Petr a Marie políbili, ale děti ne.*

*Petr podezíral Marii z nevěry.*

→ *Petr a Marie **se** (navzájem) podezírali z nevěry.*

***Sebe** (navzájem) Petr a Marie podezírali, ale ...*

*Petr se dívá na Marii.*

→ *Petr a Marie se **na sebe** dívají (navzájem).*

*Musíte konfrontovat sen s realitou.*

→ *Musíte konfrontovat sen a realitu.*

subject-oriented

object-oriented

# Syntactic Reciprocal Verbs II

---

- (A) irreflexive verbs  
(e.g., *bojovat, obvinit, políbit, podezírat; konfrontovat*)
- (A') verbs with optional *se/si*  
(e.g., *pamatovat (si)*)
- (B) reflexive tantum verbs  
(e.g., *hledět si, chovat se, dívat se, postěžovat si*)
- (C) decausative verbs  
(e.g., *nakazit se, opřít se, stáhnout se*)
- (D) derived reflexive verbs  
(e.g., *obdivovat se*)

⇒ *se/si* ~ part of a verb lemma (B)-(D)  
 ~ derivational morpheme with different functions (C), (D)



# Syntactic Reciprocal Verbs III

---

- ⇒ reciprocal constructions of synt. reciprocal verbs are characterized:
- ~ by plural subject / object;
  - ~ typically by the **reflexive pronoun** in clitic or long form  
co-referring with subject / object
  - exception: **s+instr** → ∅
  - ~ by emphasizing lexical expressions:
    - spolu* (only for s+instr)
    - vzájemně, navzájem, mezi sebou, dohromady*

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- !!!** reflexives **se/si** (if they appear in the construction)
- ~ either part of a verb lemma
    - ⇒ **NO ambiguity** between reciprocal and reflexive constructions
  - ~ or reflexive pronoun
    - ⇒ **SOURCE of ambiguity** between reciprocal and reflexive constructions

# Disambiguating Means

- reciprocal construction:  
disambiguating adverbials:  
*spolu, vzájemně, navzájem, mezi sebou, dohromady*

lexical reciprocal verbs	<i>spolu</i>	<i>navzájem</i>	<i>vzájemně</i>	<i>dohromady</i>	<i>mezi sebou</i>
<i>bavit se</i>	<b>174 (2,88%)</b>	1 (0,02%)	0	1 (0,02%)	46 (0,76%)
<i>diskutovat</i>	<b>40 (2,08%)</b>	2 (0,10%)	0	0	4 (0,21%)
<i>hádat se</i>	<b>17 (1,06%)</b>	2 (0,12%)	2 (0,12%)	0	21 (0,31%)
<i>chodit</i>	<b>247 (1,06%)</b>	0	0	0	0
<i>jednat</i>	<b>20 (0,09%)</b>	0	0	0	3 (0,01%)
<i>porovnat</i>	1 (0,12%)	3 (0,37%)	<b>6 (0,73%)</b>	0	2 (0,24%)
<i>prát se</i>	<b>15 (1,63%)</b>	0	2 (0,22%)	0	11 (1,21%)
<i>promíchat se</i>	<b>1 (0,47%)</b>	0	<b>1 (0,47%)</b>	<b>1 (0,47%)</b>	0
<i>sejít se</i>	<b>30 (0,53%)</b>	0	0	8 (0,14%)	0
<i>spolupracovat</i>	<b>31 (0,77%)</b>	5 (0,12%)	10 (0,25%)	0	9 (0,22%)

SYN2015, % with respect to all occurrences of the verb,  
manually checked

# Disambiguating Means

- reciprocal construction:  
disambiguating adverbials:  
*spolu, vzájemně, navzájem, mezi sebou, dohromady*

syntactic reciprocal verbs	<i>spolu</i>	<i>navzájem</i>	<i>vzájemně</i>	<i>dohromady</i>	<i>mezi sebou</i>
<i>dívat se</i>	0	<b>18 (0,02%)</b>	11 (0,01%)	0	0
<i>litovat</i>	0	<b>7 (0,03%)</b>	1 (0,00%)	0	0
<i>naslouchat</i>	0	38 (0,35%)	<b>52 (0,47%)</b>	0	0
<i>obejmout</i>	7 (0,19%)	<b>12 (0,33%)</b>	11 (0,31%)	0	0
<i>odpustit</i>	0	<b>37 (0,22%)</b>	28 (0,16%)	0	3 (0,02%)
<i>podezírat</i>	0	<b>44 (0,38%)</b>	21 (0,18%)	0	7 (0,06%)
<i>stěžovat si</i>	0	26 (0,03%)	16 (0,02%)	2 (0,00%)	<b>32 (0,03%)</b>

SYNv6, % with respect to all occurrences of the verb in the plural form,  
manually checked

# Disambiguating Means

- reflexive construction:  
pronoun *sám*

syntactic reciprocal verbs	<i>sám</i> + refl. pronoun with pl verb	<i>sám</i> + refl. pronoun with sg or pl verb
<i>dívat se</i>	<b>106 (0,12%)</b>	221 (0,09%)
<i>litovat</i>	19 (0,08%)	111 (0,08%)
<i>naslouchat</i>	<b>13 (0,12%)</b>	<b>40 (0,14%)</b>
<i>obejmout</i>	2 (0,06%)	8 (0,04%)
<i>odpustit</i>	8 (0,05%)	20 (0,03%)
<i>podezírat</i>	2 (0,02%)	12 (0,05%)
<i>stěžovat si</i>	0	6 (0,00%)

SYNv6, % with respect to all occurrences of the verb and those in the plural form,  
manually checked



# Conclusion

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- conditions for ambiguity  
between reflexive and reciprocal constructions:
  - ~ lexical unit must allow both for reciprocity and reflexivity
  - ~ reciprocity and reflexivity affect the same pair of participants /  
valency complementations
  - ~ presence of the reflexive pronoun

# Conclusion

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between reflexive and reciprocal constructions:
  - ~ lexical unit must allow both for reciprocity and reflexivity
  - ~ reciprocity and reflexivity affect the same pair of participants / valency complementations
  - ~ presence of the reflexive pronoun

- ⇒ hypothesis – ambiguous reading is caused by:
- ~ semantic features:
    - symmetry usually blocks reflexive reading (for lexical reciprocal verbs)
      - ⇒ ambiguity only for syntactic reciprocal verbs
  - ~ formal features:
    - absence of reflexive pronoun blocks reflexive reading
      - ⇒ NO ambiguity for the form **s+instr** → ∅  
(for both lexical and syntactic reciprocal verbs)