



On Reciprocity

Jarmila Panevová, Marie Mikulová

1. Introduction

The description of the reciprocity phenomenon is more tricky than it is supposed in grammatical handbooks: It must cover both the issues of lexicon and of syntax and of their interplay as well.

The lexical counterpart of the English expression *each other* is not the central (core) means for denoting reciprocity in some Slavonic languages, esp. in Czech. The troublemaking Czech reflexive *se/si* plays a substantial part of responsibility for reciprocal relations. With some lexical items there is no surface expression of reciprocity, as we will demonstrate later.¹

The distinction between reciprocity as a part of lexical meaning of particular lexical items (see Section 2) and reciprocity as a syntactic relation between some participants of the syntactic construction seems to be universal. However, a lexical item that is characterized by the feature of inherent lexical reciprocity could be used in asymmetric (syntactically non-reciprocal) constructions (see the asymmetry between *John* and *Mary* in (1) and the symmetry of their respective roles in a syntactically reciprocal construction (2)):

1. *Jan se setkal s Marií v divadle.* [John met Mary in the theatre.]
[John-Nom se-Refl meet-3sg Prep-with Mary-Instr...]
2. *Jan a Marie se setkali v divadle.* [John and Mary met each other in the theatre.]
[John-Nom and Mary-Nom se-Refl meet-3pl...]

From the other side, many items lacking the lexical feature of reciprocity can be used in syntactically reciprocal constructions (see (3)):

3. *Jan a Marie se fotografují (navzájem).*²[John and Mary photograph each other.] [John

¹See also the comparison of German *einander* and Czech *jeden – druhý* given by Štícha (2003). The former is evaluated by him as more usual and more neutral than the latter.

²The other readings of (3) (without an adverb *navzájem*) are left aside here. They are connected with the ambiguity of *se*-constructions in Czech (see e.g. Panevová, 2001).

and Mary se-Refl photograph-3pl (each other)]

A sample of the classification of Czech verbs as to the lexical feature of reciprocity is given in Section 2. The syntactic reciprocity (using an operation of reciprocalization with its respective consequences for valency) as well as the problems connected with this approach will be described in Section 3. In Section 4 some results of searching for reciprocity phenomena in the electronic corpora of Czech will be presented.

2. Reciprocal and non-reciprocal verbs in Czech

Czech verbs can be classified from this point of view into three classes. In the meaning of the Czech verbs from the classes A and B (see below) the feature of reciprocity is implied, though they can be used in unreciprocal constructions (see (4) and (5) below) as well. The verbs from the classes A and B differ from each other: the reciprocity of verbs from the class A is inherent; if they belong to the class of “reflexiva tantum”, they have no unreciprocal counterpart, while the verbs from the class B are “derived” reciprocals, they have unreciprocal counterparts. The verbs from the class C are not lexically reciprocal.

A. Inherent reciprocal verbs:

Reflexive verbs: *hádat se* [to quarrel], *prát se* [to fight], *utkat se* [to clash with], *přít se* [to quarrel], *setkat se* [to meet], *scházet se* [to meet], *loučit se* [to say good-bye], *domlouvat se* [to agree], *podobat se* [to resemble].

Irreflexive verbs: *zápasit* [to struggle], *soutěžit* [to compete], *diskutovat* [to discuss], *polemizovat* [to argue], *obchodovat* [to trade], *sousedit* [to neighbor], *splývat* [to blend].

B. Derived reciprocal verbs:

líbat se [to kiss], *objímat se* [to embrace], *potkat se* [to meet], *pozdravit se* [to greet], *seznámit se* [to make an acquaintance], *vítat se* [to greet], *navštěvovat se* [to visit], *spojovat se* [to connect], *lišit se* [to differ].

C. Lexically non-reciprocal verbs:

líbat [to kiss], *objímat* [to embrace], *fotografovat* [to photograph], *napodobovat* [to imitate], *popisovat* [to describe], *obviňovat* [to blame], *oceňovat* [to appreciate], *osočovat* [to smear], *pomlouvat* [to gossip], *udávat* [to denunciate], *vidět* [to see].

In the asymmetric (non-reciprocal) usage of the verbs from A and B the implication that at least two participants involved are included in the same action is highly probable, but it is not certain (see (4) and (5), where the lexical reciprocity is canceled):

4. *Starší syn se rád hádá s mladším.* [The older son **gladly** argues with the younger one.]
5. *Jan se chce s Marií líbat pokaždé, když ji vidí, ale ona se vzpírá.* [John **wants** to kiss Mary every time when he meets her but she refuses.]

Many verbs belong to the class C, consisting of the lexically non-reciprocal items, which could be syntactically reciprocalized (see Section 3). This class is wide and it seems to be open. It should be noticed that many of them have a reflexive derivation belonging to the class B (e.g. *líbat se* [to kiss], *objímat se* [to embrace]). This step, called by us a derivation, is understood by Chrakovskij (1999) as a difference between dynamic (*líbat* [to kiss]) and static verbs (*líbat se* [to kiss each other]).

3. Syntactic reciprocity

We have described the syntactic operation of reciprocalization earlier [Panevová \(1999\)](#); [Panevová \(in press\)](#) in a more detailed way. Here, we only shortly repeat that the reciprocalization is a syntactic operation on the valency frames of verbs (and other lexical items) in which two valency slots are the bearers of the feature allowing their symmetrical usage, as is illustrated by sentence (11). This feature is technically marked in the valency frame by the superscript R (see (6), (7)).

6. *prát se* [to fight] - ACT^R (Nom), PAT^R (s + Instr) (class A)

7. *vzpomínat* [to remember] - ACT^R (Nom), PAT^R (na + Accus) (class B)

Verbs belonging to the classes A, B and C can be used in syntactically reciprocal construction in which one valency slot of the verb is deleted. The deletion is reflected in the syntactic structure either as a plural noun in subject³ (single elements of the plural noun participate in the same way in the action, see (8)) or as a coordinated construction of subjects (where the elements participating on the action is separated, see (9))⁴. In [Chrakovskij \(1999\)](#), the term “sopřazhenije rolej” (combining of the roles) is used for the noun in plural or for the members of coordination.

8. *Sourozenci se perou.* [The siblings se-Refl fight.]

9. *Jan a Robert se perou.* [John and Bob se-Refl fight.]

Other conditions for the using of this operation are also described elsewhere [Panevová \(1999\)](#): the homogeneity of the combined participants as to their lexical meaning and as to their position in the topic/focus articulation are required (see (10a), and unacceptability of (10b)) as well as the validity of paraphrases (11a) and/or (11b) for (11) are necessary:

10. (a) *Jan se setkal s námitkami.* [John se-Refl met the objections.]

(b) **Jan a námitky se setkali.* [John and objections met.]

11. *Jan a Marie se líbají.* [John and Mary se-Refl kiss-3pl] ← (11a), (11b)

(a) *Jan líbá Marii a (zároveň) Marie líbá Jana.* [John kisses Mary and (simultaneously) Mary kisses John.]

(b) *Jan se líbá s Marií a (zároveň) se Marie líbá s Janem.* [John se-Refl kisses Mary and (simultaneously) se-Refl Mary kisses John.]

We encounter here a theoretical problem: (11) is described as ambiguous because it has two sources (11a) and (11b). If we take into account the other means for expressing reciprocity in Czech (the expression *jeden – druhý* [each – other]), we actually receive two different paraphrases: (12a) and (12b) for (11a) and (11b), respectively:

12. (a) *Jan a Marie líbají jeden druhého.* [John and Mary kiss-3pl each-Nom other-Accus]

(b) *Jan a Marie se líbají jeden s druhým.* [John and Mary se-Refl kiss-3pl each-Nom s-Prep other-Instr sg]

³Examples in which the reciprocalization does not include the subject position are discussed in [Panevová \(1999\)](#).

⁴The collective (uncountable as well as countable) nouns (e.g. *šlechta* [aristocracy], *dělnictvo* [labour], *mužstvo* [team], *rodina* [family], *vláda* [government]) have to be understood as a semantical plural.

In (12a) the lexical element *each – other* is obligatory (its absence would cause ungrammaticality of this construction), while in (12b) it is optional. In (12a), it stands instead of a reflexive pronoun as a true reflexive in Accusative. In (12b), the elements *each – other* are used with the derived reciprocal verb *líbat se* [to kiss se-Refl] as optional and the syntactic construction (with the Objective moved in the coordinated Actor/Subject) is both grammatical and reciprocal.

The conclusion of this observation may be formulated as follows: There are two different lexical items in Czech lexicon: *líbat* [to kiss] and *líbat se* [to kiss se-Refl] belonging to the classes C and B, respectively; in their valency frames their both Actors and Objectives (Patients) bear a superscript R. The use of the superscript gives at least one common ambiguous output and some paraphrases different for (11a) and (11b).

4. Formal expressions of reciprocity in Czech

Analyzing the formal expressions of the syntactic reciprocity in which the first participant (Actor) and some other participant are involved,⁵ we have received a scale of means which are partially grammatical, partially lexical, some of them standing on the boundary between lexicon and grammar.

4.1. With the inherent reciprocal verbs (class A) and derived inherent reciprocal verbs (class B) the change of syntactic structure (i.e. a multiplied subject and a missing valency member) is a sufficient marker of reciprocity in principle and no overt expression for it is needed. However, the material from corpora⁶ shows, that the situation is more complicated and differs from one verb to another. With some verbs such zero expression is either ambiguous (see (13), (14)), or strange (up to unacceptability), see (15), (16):

13. *Američtí poradci jednájí o Ulsteru.* (PDT) [American advisors negotiate Ulster.]
14. *Všechna mužstva bojují o místo, které zajišťuje start v evropských pohárech.* (SYN2005).
[All teams fight for the position guaranteed the start in the European cups.]
15. *?Matka a dcera se podobají.* [Mother and daughter resemble each other.]
16. *?Země EU obchodují.* [The countries of EU trade.]

However, many sentences with zero expression of reciprocity with the verbs from A and B classes sound well enough and their reciprocal interpretation is obvious, see e.g. (17), (18):

17. *Pověření poslanci budou o základních principech důchodového pojištění zřejmě ještě dlouho diskutovat a mohou padnout závažná rozhodnutí.* (PDT) [Charged deputies will discuss basic principles of tax insurance and important decisions may be achieved.]
18. *V těchto místech komické i chmurné stránky počítačové historie splývají.* (PDT) [In these places funny and sad points of the computational history blend.]

⁵Other issues, such as multiplied reciprocity with which several pairs of participants enter the syntactically reciprocal relation (such as *Pavel a Jan spolu mluvili o sobě navzájem.* [Paul and John talked with each other about each other.]), the reciprocity between a participant and a free adverbial as well as the reciprocity between noun completions are studied elsewhere [Panevová \(1999\)](#); [Panevová \(in press\)](#); [Mikulová et al. \(2005\)](#).

⁶We have used the Czech National Corpus (CNC) in its variant SYN2005 (morphologically tagged corpus) and the syntactically annotated corpus the Prague Dependency Treebank (PDT) in its version 2.0.

The interpretation of the empty valency position probably depends on the semantics of the given verb and on the wider context of the sentence. The verbs *soutěžít* [to compete], *soupeřit* [to compete], for instance, presuppose the existence of the other competitor by their lexical meaning. Therefore, such sentences as (19), (20) are undoubtedly reciprocal:

19. *Firmy by měly soutěžít kvalitou poskytovaného servisu nebo cenami.* (SYN2005) [The companies would compete as to the quality of the delivered services or as to the prices.]
20. *...týmy České republiky, Finska, Ruska a Švédska soupeří o neoficiální titul mistra Evropy.* (PDT) [...the teams of Czech Republic, Finland, Russia and Sweden compete for unofficial title of European champions.]

On the contrary, verbs such as *bojovat* [to fight], *zápasit* [to struggle] may have beside the interpretation of “a fight of rivals” also an interpretation “to fight to reach something” (see also Lopatková et al., 2006). Therefore, the empty valency position also opens other interpretations than the reciprocal one (see (14) above and (21), (22); the reciprocal interpretation is, of course, excluded in some cases (see (23), (24)):

21. *Tehdy zde bojovali Mohykánovi bratři a příbuzní.* (SYN2005) [At that time Mohykan's brothers and relatives fought there.]
22. *...národy bojují o území a přírodní zdroje, jednotlivci bojují...* (SYN2005) [...nations fight for territories and natural sources, individuals fight for...]
23. *Pohled na malá prasátka, jak zápasí, aby se postavila na vlastní nohy.* (SYN2005) [A view on little pigs how they struggle to stand on their own legs.]
24. *Ale Renovi jezdci zápasili o holý život.* (SYN2005) [However, Reno's riders struggled for their poor life.]

A similar behavior as of the verb *bojovat* [to fight] is proper to the verbs with an Addressee (expressed in Czech by the prepositional phrase *s* with Instrumental) such as *diskutovat* [to discuss], *polemizovat* [to argue], *mluvit* [to talk], *hovořit* [to talk], *souhlasit* [to agree], but also by such inherent reciprocals as e.g. *prát se* [to fight], *loučit se* [to part], see (25), (26):

25. *Můj mladší i starší syn se ve škole rádi perou.* [My younger son and older one love to fight at school.]
26. *Otec a matka se už loučí, odjíždějí na léto na chatu.* [Our father and mother say good bye, they are leaving for the country cottage for the summer.]

4.2. With the verbs analyzed here, certain optional lexical expressions can be used. In Czech the adverbs *spolu* [together], *navzájem/ vzájemně* [each other], the prepositional construction *mezi sebou* [among/between each other] and the expression with a special agreement *jeden – druhý* [each other] belong to these optional means. Due to the grammatical features of the latter item⁷, we classify it as an alternative (semi)grammatical means for the reciprocity in Czech. The items enumerated here are interchangeable in majority of contexts, however, sometimes some of them sound peculiarly; see (27), (28), (29):

⁷In examples (12a) and (12b) above, the mixed character of the agreement of this complex item is illustrated: Its first part *jeden* agrees with the nominative of subject, its latter part *druhý* is required by the missing participant as to its case.

27. *Jak jsem později zjistil, soutěžili mezi sebou, kdo přijde s lepším příběhem.* (SYN2005) [As I have recognized later, they competed with each other, who would bring the better story.]
 (a) ...soutěžili spolu...
 (b) ...soutěžili vzájemně...
 (c) ...soutěžili navzájem...
 (d) ...soutěžili jeden s druhým...
28. *Po následující dva roky Mírea a Vlad spolu bojovali o valašský trůn.* (SYN2005) [During the next two years, Mírea and Vlad were fighting over the Moravian throne.]
 (a) ...mezi sebou bojovali ...
 (b) ...vzájemně bojovali ...
 (c) ...navzájem bojovali ...
 (d) ...jeden s druhým bojovali ...
29. *Účastníci kongresu se navzájem rozloučili a odjeli do svých domovů.* [The participants of the congress said their farewells to each other and left for their homes.]
 (a) ...se spolu rozloučili...
 (b) ...se vzájemně rozloučili...
 (c) ...se mezi sebou rozloučili...
 (d) ...se jeden s druhým rozloučili...

4.3. We have analyzed some samples of the occurrences of the verbs studied in this paper in CNC. The frequency of the selected verbs in the corpus SYN2005 is indicated in Table 1. Since these figures reflect all senses and all forms of selected verbs, they are of no great interest; they have partially influenced our selection of the samples studied in detail. Illustrative results of these studies will be described in Sections 4.3.1 - 4.3.6. We have excluded from the detailed analysis the verbs with many senses, such as *mluvit* [to talk] having 10 senses according to Lopatková et al. (2006) and the verbs with low frequency, such as *polemizovat* [to argue].

Table 1. Number of the occurrences of the selected verbs in the corpus SYN2005

<i>mluvit</i> [to talk]	46 213
<i>souhlasit</i> [to agree]	12 040
<i>bojovat</i> [to fight]	8 889
<i>diskutovat</i> [to discuss]	3 074
<i>splyvat</i> [to blend]	1 153
<i>soutěžit</i> [to compete]	1 138
<i>zápasit</i> [to wrestle/struggle]	1 136
<i>soupeřit</i> [to compete]	654
<i>polemizovat</i> [to argue]	323

4.3.1. Among three senses of the verb *souhlasit* [to agree] (see Lopatková et al., 2006) we are interested in the sense 1 “somebody agrees with somebody”. In the sample of the first 120 occurrences from SYN2005, there are only 2 occurrences of the sense 1 with a possible reciprocity reading, see (30):

30. *Nevěděli jsme, jak ho budeme chytat, ale všichni jsme souhlasili.* (SYN2005) [We did not know, how to catch him, however, we all agreed.]

4.3.2. In the sample of 400 occurrences of the verb *bojovat* [to fight], only 51 examples allow a reciprocal reading, in 3 among them, the adverb *spolu* [together] is present, in 4 the expression *mezi sebou* [among/between each other] is used. In 20 sentences, the general Actor appears and the interpretation “everybody involved fights with everybody”⁸ is very probable (see (31)). In the rest of examples, reciprocity is highly probable too, see (32):

31. *Bojovalo se současně ve třech světadílech.* (SYN2005) [It was fought on three continents simultaneously.]
 32. *Když se naskytla práce pro jednoho, bojovali o ni všichni nezaměstnaní.* (SYN2005) [When a job for one person appeared, all unemployed fought over it.]

4.3.3. The verb *zápasit* [to struggle/wrestle] in one of its senses, which are interesting from the point of view studied here, is close to the verb *bojovat* [to fight]. Among 150 occurrences of this verb in SYN2005, 50 examples are clearly reciprocal, in 18 sentences, the adverb *spolu* [together] is present (see (33)), in 2 of them, the expression *mezi sebou* [among/between each other] is used (see (34)):

33. *Rvali jsme se a zápasili spolu za měsíčního svitu.* (SYN2005) [We fought and struggle together in the moonlight.]
 34. *Je říje, jeleni mezi sebou zápasí.* (SYN2005) [It is rutting season, the stags struggle with each other.]

4.3.4. Among 150 occurrences of the verb *diskutovat* [to discuss] from the SYN2005, the reciprocal relation between Actor(s) and Addressee(s) is present in 99 sentences; however, in 54 of them, it is the case of their generalization (see (35)); the lexical means are present rarely: 2x *spolu* [together] (see (36)) and 1x *mezi sebou* [among/between each other]. However, in some occurrences, esp. from scientific texts this verb loses its meaning “to have a discussion with an opponent” and it has the meaning of simple presentation (see (37)):

35. *Diskutovalo se stále o stejných problémech.* (SYN2005) [The same problems were discussed all the time.]
 36. *Diskutovali spolu o schopnostech...* (SYN2005) [They discussed together the abilities of...]
 37. *Některé normativní důsledky budeme diskutovat v jedné z následujících kapitol.* (SYN2005) [We shall discuss some normative consequences in one of the following chapters.]

⁸The considerations about the features of general actor, allowing its reciprocal usage, are included in Panevová (2006).

4.3.5. In the sample of 150 occurrences of the verb *soutěžit* [to compete], there are 43 examples enforcing the syntactic reciprocity (the rest of them display the asymmetrical usage, see (38)), among these 43 in 6 sentences the expression *mezi sebou* [among/between each other] is present, in 5 *spolu* [together] and in 1 *navzájem* [each other] occurs, see (39):

38. *To je vyšetřovací zařízení, s nímž irácká tajná služba mohla soutěžit leda ve snu.* (SYN2005) [This is the investigative equipment with which Iranian secret services could compete let above the dream.]
39. *Samci navzájem soutěží o místo na společenském žebříčku.* (SYN2005) [The males compete with each other to reach for a top social position.]

4.3.6. The verb *soupeřit* [to compete] differs from *soutěžit* [to compete] by a stylistic feature, the former is bookish, while the latter is neutral. Among 150 occurrences, 54 sentences display syntactic reciprocity, in 7 of them, the adverb *spolu* [together] is present, in 7, the expression *mezi sebou* [among/between each other] is included, see (40):

40. *Proto tyto ženy soupeřily mezi sebou v umění zalíbit se mužům.* (SYN2005) [Therefore these women competed with each other in their skills to be loved by men.]

4.3.7. We wanted to demonstrate by the illustrative material, described in Sections 4.3.1 to 4.3.6, that the power of combined the lexical and syntactical reciprocity is so strong that the speakers rarely feel the necessity to use an explicit (optional) lexical means for the reciprocity.

4.4. The expressing of the reciprocity with the verbs from the open class C, where some of their participants fulfil the conditions for reciprocalization, is a bit more complicated. The means of expression depend on the original morphemic form of a participant required by the valency frame that is moved to the subject position.

4.4.1. If the participant (Patiens or Addressee) expressed by the accusative is involved in the reciprocity relation, there are two possibilities for the syntactic reciprocalization:

(i) (True) reflexive pronoun *se* is used. The examination of the corpus material did not fully prove that in favor of avoiding ambiguity, the lexical means (*navzájem/spolu/mezi sebou*) are used regularly at least with verbs having a counterpart in a derived reciprocal (B type). Sentences (41), (42) are ambiguous as to the source of the reciprocity in accordance with our assumptions from Section 3; however, their reciprocal meaning is obvious:

41. *Ti dva se tam líbali.* [The couple kissed each other there.]
42. *Seděli vedle sebe, objímali se kolem ramen.* (SYN2005) [They were sitting next to each other and embraced each other around the shoulders.]

For the verbs without a derived reciprocal counterpart, the reciprocal meaning is transparent only in presence of a lexical means for reciprocity (see (43)) while in (44) the reciprocity is not granted:

43. *Dokonce se vzájemně fotografujeme.* (SYN2005) [Eventually, we photograph each other.]
44. *...vedou tudy koleje. Protože vlak nejede, fotografujeme se alespoň u nich.* (SYN2005)

[...there are rails here. Since the train is not coming, we at least photograph ourselves/each other by them.]

Within the sample of 250 occurrences of the verb *fotografovat* [to photograph] from SYN2005, a lexical means for reciprocity was used only twice (see (43) above).

Analyzing all occurrences of the verb *okukovat* [to take a look at] (163 in the SYN2005), we have found only one example of reciprocity, see (45):

45. *Kočky vyčkávají, navzájem se okukují.* (SYN2005) [The cats are waiting, they are taking a look at each other.]

(ii) The other expression of reciprocity is manifested by *jeden – druhý* [each other], see (46), (47):⁹

46. *Ve škole napodobují jeden druhého.* (SYN2005) [They imitate each other at school.]
 47. *...pokoušejí se obelstít jeden druhého.* (SYN2005) [...they try to trick/outwit each other.]

4.4.2. The reflexive verbs (so-called “reflexiva tantum”) with a participant (Patiens) expressed by genitive or dative, such as *vyhýbat se* [to avoid], *dotknout se* [to touch], *všimát si* [to notice], *zamlouvat se* [to like], *líbit se* [to like], use obligatorily the expression *jeden - druhý* [each other], see (48), (49), (50); its stylistically less natural alternative is also acceptable (see e.g. (48a)):

48. *Sousedé se léta vyhýbali jeden druhému.* [The neighbors avoided each other for whole years.]
 (a) *Sousedé se léta sobě navzájem vyhýbali.*
 (b) ? *Sousedé se vyhýbali.* [The neighbors avoided.]
 49. *Přistupují tiše a radostně k sobě, aniž by se dotkli jeden druhého.* (SYN2005) [They are approaching silently and happily without touching each other.]
 (a) ?...*aniž by se dotkli.* [...without touching themselves/each other/something.]
 50. *Jan a Marie se líbí jeden druhému.* [John and Mary like each other.]
 (a) **Jan a Marie se líbí.* [*John and Mary like.]

4.4.3. The verbs with an Addressee expressed by dative, such as *blahopřát* [to congratulate], *pomáhat* [to help], *naslouchat* [to listen] have again two alternatives for expressing the syntactic reciprocity:¹⁰

(i) Dative form of reflexive pronoun *si* (see (51), (52)), optionally combined with one of the expressions *navzájem/vzájemně/spolu/mezi sebou*:

51. *Potvrzují, že obě ženy se navštěvovaly a blahopřály si k narozeninám.* (SYN2005) [They

⁹The expression *sebe/sobě navzájem* [Refl-long form each other] seems to be an alternative for *jeden – druhý* [each other]. They are interchangeable in all of the 53 occurrences from SYN2005. However, this expression often sounds unnaturally: Sentence (a) *Je podivuhodné, jak se mladí chlapci sobě navzájem podobají* (SYN2005) is stylistically worse than (a') *Je podivuhodné, jak se mladí chlapci jeden druhému podobají*. [It is surprising, how the young boys resemble each other.]

¹⁰However, the issue of *si*-derived reciprocals as an analogy to the class B remains still as an open question. It is necessary to explain why e.g. *tykat (si)* [to be on the first name terms], *vykat (si)* [to be on formal terms] need not any expression more and (a) is undoubtedly reciprocal: (a) *Profesoři a studenti si zpravidla vykají*.

confirm that the two women were visiting and congratulating each other on their birthdays.]

52. *Společně neseme následky krutého dětství a pomáháme si.* (SYN2005) [We bear together the consequences of cruel childhood and we help each other.]

(ii) The expression *jeden - druhý* [each other] in an appropriate form,¹¹ see (53):

53. *Naslouchali jeden druhému a zapomněli za těchto okolností na čas a prostor.* (SYN2005) [They listened to each other and they forgot the time and the space under those conditions.]

4.4.4. Verbs with the participant expressed by a prepositional case (such as *dívat se na + Accus* [to look at], *narazit na + Accus* [to bump], *křičet na + Accus* [to cry/shout], *volat na + Accus* [to shout], *ptát se na + Accus* [to ask], *předstírat před + Instr* [to pretend], *stydět se před + Instr* [to be ashamed], *smýšlet o + Loc* [to think about], *vědět o + Loc* [to know about]) have again two alternatives, analogically to Section 4.4.3:

(i) reflexive pronoun *se* in an appropriate prepositional case, optionally accompanied by the expressions *navzájem/vzájemně/spolu/mezi sebou*, see (54), (55), (56). Here we encounter the problem considered in Section 4.3 again: Though with these verbs the valency position moved into the subject is filled by the prepositional case of the pronoun *se* and it is not empty as in Section 4.3, the famous ambiguity of the reflexive *se* sometimes suggests the other than reciprocal interpretation. While in (54) a non-reciprocal interpretation would be ridiculous, ex. (55), (56) could be understood also as true-reflexives. The problem is connected with a boundary between a group and sentence coordination. The insertion of the adverb *navzájem* [each other] removes this ambiguity, see (56a):

54. *Jan a Marie na sebe narazili v kuřárně.* [John and Mary bumped at each other in the smoking room.]

55. *Hoši a dívky se před sebou stydí.* [Boys and girls are ashamed in front of each other/themselves.]

56. *Profesor A a profesor B o sobě vědí, že jsou fyzičci.* [Professor A and professor B know about each other/themselves that they are physicians.]

(a) *Profesor A a profesor B o sobě navzájem vědí, že jsou fyzičci.* [Professor A and professor B know about each other that they are physicians.]

(ii) Alternatively, the expression *jeden - druhý* [each other] can be used, see (57), (58), (59):

57. *Podívali se jeden na druhého, pokrčili rameny...* (SYN2005) [They looked at each other, shrugged their shoulders...]

58. *Službu chápali oba stejně a jeden to o druhém věděli.* (SYN2005) [They both interpreted the service in the same way and they knew it about each other.]

¹¹We have mentioned the peculiarity of the agreement of the parts of this expression in Note 7. There is one more peculiarity: the rule of the gender prominence (see e.g. Havránek and Jedlička, 1960) is kept here: (a) *Jan a Marie/Marie a Jan blahopřejí jeden druhému* [John and Mary/Mary and John congratulate each-Nom sg masc other-Dat sg masc], whereas (b) *Marie a Eva blahopřejí jedna druhé* [Mary and Eva congratulate each-Nom sg fem other- Dat sg fem].

59. *Ti dva mladí pitomci podezírali jeden druhého.* (SYN2005) [These two foolish guys suspected each other.]

4.5. There is one more means that could be taken into consideration as a possible expression of syntactic reciprocity; though it is possible only with some verbs, it crosses the boundary between A, B from one side and C from the other side. Dimitriadis and Milčev (2006) speak about “discontinuous reciprocals” with similar Serbian constructions (however, this term, according to our opinion, does not fit) and they point out the closeness of these constructions to the accompaniment modification. This type of construction is connected with another syntactic problem, namely the use of the *with*-constructions as an alternative expression for the coordination of sentence members. The other participant of reciprocity in these constructions is not coordinated, but it is expressed by the form typical for accompaniment (or subordinated coordination) *s* + *instrumental* [with + instrumental case], although the plural form of the predicate indicates a kind of mutuality (reciprocity). This type occurs in the corpus SYN2005 very rarely: We have found it 1x with *dotýkat se* [to touch], see (60), 4x with *navštěvovat se* [to visit each other], see (61), 4x with *objímat se* [to embrace], see (62), though there are also examples only suspected to be reciprocal (see (63)). With (64), both interpretations are acceptable because in the context there is no indication how many participants in the subject of the dependant clause are involved: it is not clear if it is only the speaker of the main clause together with *Skřivan* (then we have to do with the reciprocal reading); if somebody else is involved in the subject, we face the non-reciprocal (asymmetric) reading.

60. *Když se Stalin s Trumanem takřka dotýkali špičkami nosu, vecpal se mezi ně britský premiér.* (SYN2005) [When Stalin and Truman were nearly touching by the tips of their noses, the British prime minister squeezed between them.]
61. *S Honzou jsme se navštěvovali, jak jen to bylo možné.* (SYN2005) [lit. With Johnie we have visited each other whenever it was possible.]
62. *Objímali se s dívkou kolem pasu, (kdykoli s ní šel do parku).* (SYN2005) [lit. They embraced each other with a girl, whenever he went with her to the park]
63. *Pes vyskakoval na oba chlapce, kteří se objímali s Annou.* (SYN2005) [A dog sprung on the both boys, who embraced Anna.]
64. *Vzpomínám často, jak jsme se loučili se Skřivanem.* (SYN2005) [I often remember, how we said good bye to Skřivan.]

According to our opinion, this construction is possible with some verbs from the class C as well, e.g. *podezírat/podezřívát* [to suspect], *ujišťovat* [to assure], though we have not found any example of that type in the corpus SYN2005. However, the introspective examples (65) and (66) seem to be fully acceptable:

65. *Bratr se sestrou se podezírají, kdo z nich dopil láhev whisky.* [lit. Brother with his sister suspect each other who of them finished the bottle of whisky.]
66. *Otec se s matkou ujišťují, že se mají pořád rádi.* [lit. Father with mother assure each other that they still love each other.]

5. Conclusion

We think that the topic of Czech reciprocals has not yet been exhausted. We have proposed several issues open for further studies, e. g. the distribution of the optional lexical means, their position in word order, behavior of *si*-reflexives etc.

Recalling our ontological considerations on vagueness in syntactic reciprocal relations (see [Panevová, in press](#), Section 4, as well as [Chrakovskij, 1999](#)¹²), our insight into the corpus material confirms for the whole domain of reciprocity that there are many vague and ambiguous constructions, interpretation of which strongly depends on inferences provided by the speech participants with the knowledge of the broader context or situation. Our hypothesis that the use of the optional lexical means in a syntactically reciprocal construction could be redundant for the verbs from the classes A and B, while it is required (or at least preferred) for the verbs from the class C, was not fully confirmed by the corpora material. Therefore, we let speak several figures exploited from the SYN2005: In Tables 2 and 3 the figures in the column I indicate the number of the occurrences of the lemma having *se/si* on the left or on the right (not more than by 4 positions). The occurrence where syntactic reciprocity was applied is shown in the column II; the column III indicates how many occurrences from II are combined with the lexical item for reciprocity (including *jeden – druhý* [each other]).

Table 2. Selected verbs from the classes A, B

	I	II	III
<i>dotýkat se</i>	280 ¹³	68	19
<i>objímat se</i>	317	282	8
<i>loučit se</i>	207	113	2
<i>navštěvovat se</i>	167	87	23

Acknowledgement

The research was supported by the Ministry of Education, Youth and Sport (within the project MSM0021620838 and LC 536) and by Grant Agency of the Czech Republic (within the project 405/06/0589).

Bibliography

- [Chrakovskij1999] Chrakovskij, V. S. 1999. Diateza i referentnost. In: Teorija jazykoznanija. Rusistika. Arabistika. Sankt Peterburg, 67-101.

¹²He speaks here [Chrakovskij \(1999\)](#) about holistic/general meaning (celostnoje znachenije), where the particular role of the participants involved is not indicated.

¹³As to this verb, we have provided a selection of 280 occurrences from the whole number of occurrences exceeding 1 500 occurrences.

Table 3. Selected verbs from the class C

	I	II	III
<i>obdivovat</i>	172	4	4
<i>hodnotit</i>	141	4	4
<i>popisovat</i>	135	1	1
<i>obviňovat</i>	122	67	49
<i>přesvědčovat</i>	101	10	8
<i>chválit</i>	92	7	6
<i>ujišťovat</i>	84	19	12
<i>urážet</i>	76	14	6
<i>oceňovat</i>	67	1	1
<i>udávat</i>	51	5	5
<i>pomlouvat</i>	50	19	12
<i>podezírat/podezřívát</i>	46	5	4
<i>odměňovat</i>	28	0	0
<i>obdarovat</i>	15	13	11
<i>osočovat</i>	9	6	5
<i>blahopřát</i>	9	4	0

- [Dimitriadis and Milčev2006] Dimitriadis, A. and T. Milčev. 2006. Symmetric and non-symmetric reciprocals in Serbo-Croatian. Handout for FASL 6.5. Nova Gorica.
- [Havránek and Jedlička1960] Havránek, B. and A. Jedlička. 1960. Česká mluvnice [Grammar of Czech]. SPN, Praha.
- [Lopatková et al.2006] Lopatková et al., 2006. Valency Lexicon of Czech Verbs: VALEX 2.0. Technical Report TR-2006-34. Ústav formální a aplikované lingvistiky Matematicko-fyzikální fakulty UK, Praha.
- [Mikulová et al.2005] Mikulová et al., 2005. Annotation on the tectogrammatical level in the Prague Dependency Treebank. Technical Report 2006-30. Ústav formální a aplikované lingvistiky Matematicko-fyzikální fakulty UK, Praha.
- [Panevová1999] Panevová, J. 1999. Česká reciproční zájmena a slovesná valence [Czech reciprocal pronouns and valency of verbs]. Slovo a slovesnost, 60, 269-275.
- [Panevová2001] Panevová, J. 2001. Problémy reflexivního zájmena v češtině [Issues of reflexive pronoun in Czech]. In: Sborník přednášek z 44. běhu Letní školy slovanských studií. Univerzita Karlova, Filozofická fakulta, Praha, 81-88.
- [Panevová2006] Panevová, J. 2006. Dvě poznámky k tzv. vágnosti [Two remarks on so-called vagueness]. In: Od fonemu do textu. Prace dedykowane Prof. Romanowi. Laskowskiemu (eds. I. Bobrowski, K. Kowalik).Instytut Języka Polskiego PAN, Wyd. LEXIS, Kraków, 301-304.
- [Panevováin press] Panevová, J. in press. Znovu o reciprocitě [Reciprocity revisited]. Slovo a slovesnost, 68.

[Štícha2003] Štícha, F. 2003. Česko-německá srovnávací gramatika [Czech-German comparative grammar]. ARGO, Praha.