Plural Comitative Constructions in Polish

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Comitative Construction

Comitative constructions are expressions that

- involve a PP headed by the preposition *with* and
- denote a relation between two (sets of) individuals / objects such that either
  - the one accompanies the other in an action / event / situation denoted by the predicate or
  - they are members of a set of equal participants involved in an action / event / situation denoted by the predicate.
Typology of Polish Comitative Constructions

(1) Jan z Marią wyjechał.  
Jan.SG with Maria.INSTR.SG left.SG  
‘Jan left with Maria.’

(2) Jan wyjechał z Marią.  
Jan.SG left..INSTR.SG with Maria.INSTR.SG  
‘Jan left with Maria.’

(3) Jan z Marią wyjechali.  
Jan.SG with Maria.INSTR.SG left.PL  
‘Jan and Maria left.’

(4) My z Marią wyjechaliśmy.  
we with Maria.INSTR.SG left.PL  
T1: ‘We left with Maria.’  
T2: ‘Maria and I left.’  
T3: ‘Maria and the rest of us left.’

(5) pro Z Marią wyjechaliśmy.  
pro with Maria.INSTR.SG left.PL  
T1: ‘We left with Maria.’  
T2: ‘Maria and I left.’  
T3: ‘Maria and the rest of us left.’
Plural Comitative Constructions

(6) Jan z Marią wyjechali.
Jan.SG with Maria.INSTR.SG left.PL
‘Jan and Maria left.’
Overview

- Crucial properties of PCCs
- Previous analyses of PCCs
  - Coordination-based approaches
  - Complementation-based approaches
  - Adjunction-based approaches
- Our proposal
- Summary and Outlook
(7) a. Jan z Marią wyjechali.
\begin{align*}
\text{Jan.SG with Maria.SG left.PL} \\
\text{‘Jan and Maria left.’}
\end{align*}

b. Piotr zobaczył Jana z Marią, którzy właśnie przyszli.
\begin{align*}
\text{Piotr saw Jan.SG with Maria.SG who.PL just arrived} \\
\text{‘Piotr saw Jan and Maria, who just arrived.’}
\end{align*}

c. Jan z Marią, zaproszeni przez Piotra, przyszli paktualnie.
\begin{align*}
\text{Jan.SG with Maria.SG invited.PL by Piotr arrived on time} \\
\text{‘Jan and Maria, invited by Piotr, arrived on time.’}
\end{align*}

\[\rightarrow\text{ The value of the number category of PCCs must be plural.}\]
### Gender System of Polish

<table>
<thead>
<tr>
<th>Gender</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>masculine-human / virile (m1)</td>
<td>chłopiec ‘boy’</td>
</tr>
<tr>
<td>masculine-animal (m2)</td>
<td>pies ‘dog’</td>
</tr>
<tr>
<td>masculine-inanimate (m3)</td>
<td>stół ‘table’</td>
</tr>
<tr>
<td>feminine (fem)</td>
<td>dziewczyna ‘girl’</td>
</tr>
<tr>
<td>neuter (neut)</td>
<td>okno ‘window’</td>
</tr>
</tbody>
</table>

(Saloni and Świdziński 1998), (Mańczak 1956)
The PDF contains a slide titled "Gender Resolution in PCCs I," which lists examples of plural comitative constructions in Polish. The examples are presented in a table-like format, with the following entries:

- Ojciec z synem
  father.M1 with son.M1
  'The father and the son'

- Ojciec z psem
  father.M1 with dog.M2
  'The father and the dog'

- Ojciec z laptopem
  father.M1 with laptop.M3
  'The father and the laptop'

- Ojciec z matką
  father.M1 with mother.FEM
  'The father and the mother'

- Ojciec z dzieckiem
  father.M1 with child.NEUT
  'The father and the child'

- Syn z ojcem
  son.M1 with father.M1
  'The son and the father'

- Pies z ojcem
  dog.M2 with father.M1
  'The dog and the father'

- Laptop z ojcem
  laptop.M3 with father.M1
  'The laptop and the father'

- Matka z ojcem
  mother.FEM with father.M1
  'The mother and the father'

- Dziecko z ojcem
  child.NEUT with father.M1
  'The child and the father'

The slide also includes a sentence in Polish: "leżeli na kanapie. lay.M1 on couch 'lay on the couch.'"
Gender Resolution in PCCs II

Notes z psem
note-book.m2 with dog.m2
'The note-book and the dog'

Notes z dogopsem
note-book.m2 with ballpen.m3
'The note-book and the ballpen'

Notes z gumką
note-book.m2 with eraser.FEM
'The note-book and the eraser'

Notes z radiem
note-book.m2 with radio.NEUT
'The note-book and the radio'

Pies z kotem
dog.m3 with cat.m3
'The dog and the cat'

Pies z miską
dog.m3 with dish.FEM
'The dog and the dish'

Pies z dzieckiem
dog.m3 with child.NEUT
'The dog and the child'

Matka z córką
mother.FEM with daughter.FEM
'The mother and the daughter'

Matka z dzieckiem
mother.FEM with child.NEUT
'The mother and the child'

Dziecko z jabłkiem
child.NEUT with apple.NEUT
'The child and the apple'

Pies z notesem
dog.m2 with note-book.m2
'The dog and the note-book'

Długopis z notesem
ballpen.m3 with note-book.m2
'The ballpen and the note-book'

Gumka z notesem
eraser.FEM with note-book.m2
'The eraser and the note-book'

Radio z notesem
radio.NEUT with note-book.m2
'The radio with the note-book'

Kot z psem
cat.m3 with dog.m3
'The cat and the dog'

Miska z psem
dish.FEM with dog.m3
'The dish and the dog'

Dziecko z psem
child.NEUT with dog.m3
'The child and the dog'

Córka z matką
daughter.FEM with mother.FEM
'The daughter and the mother'

Dziecko z matką
child.NEUT with mother.FEM
'The child and the mother'

Jabko z dzieckiem
apple.NEUT with child.NEUT
'The apple and the child'

leżały na kanapie.
lay.NON-M1 on couch
'lay on the couch.'
Gender Resolution in PCCs III

Further evidence for the involvement of each NP in a PCC in the gender resolution is provided by
- relative pronoun constructions and
- attributive modification.

Both NPs participate in gender resolution.
(10) a. Ja z tobą pracujemy.
   1ST with you.2ND work.1ST
   ‘You and I work.’

   b. Ja z nim pracujemy.
   1ST with he.3RD work.1ST
   ‘He and I work.’

   c. Ty z nim pracujecie.
   you.2ND with he.3RD work.2ND
   ‘He and You work.’

→ Both NPs participate in person resolution.
Coreference

\[(11)\]

\(a.\) \[[\text{Jan}_i z \text{ Maria}_j]_k\] odwiedzili swego *i/*j/k przyjaciela.
Jan with Maria visited POSS.RFL.PRN friend
‘Jan and Maria visited their friend.’

\(b.\) \[[\text{Jan}_i z \text{ Maria}_j]_k\] chcieli PRO *i/*j/k wyjechać.
Jan with Maria wanted PRO leave
‘Jan and Maria wanted to leave.’

\(c.\) PRO *i/*j/k odwiedziwszy przyjaciela, \[[\text{Jan}_i z \text{ Maria}_j]_k\] wyjechali.
PRO having visited friend Jan with Maria left
‘Having visited the friend, Jan and Maria left.’
Summary of Present Observations

- The number of the NP z NP cluster is plural.
- Both NPs participate in the gender resolution.
- Both NPS participate in the person resolution.
- The NP z NP cluster acts as a controller of possessive reflexive pronouns and PRO subjects.
Vassilieva and Larson (2001)

The analysis of (Vassilieva and Larson 2001) causes the following problems:

- It is not clear how the case assignment to $DP_2$ should work.

- Inversion of $DP_1$ and $DP_2$ cannot be ruled out and thus ungrammatical sentences such as that in (12) cannot be blocked:

\[(12)\]
\[
a. \text{Jan z Marią wyjechali.} \\
\quad \text{Jan with Maria left} \\
\quad \text{‘Jan and Maria left.’} \\

b. *Marią z Jan wyjechali. \\
\quad \text{Maria.INST with Jan left}
\]

- The analysis cannot account for grammatical structures such as that in (13), where besides the preposition $z$, a conjunction $i$ ‘and’ is present.

\[(13)\]
\[
\text{Ewa z Marią i Janekiem pojechali do Reno.} \\
\quad \text{Ewa with Maria and with Janek went to Reno} \\
\quad \text{‘Ewa, Maria and Janek went to Reno.’}
\]
This conjunctionless multi-headed analysis is problematic for the following reason:

It cannot explain the differences in the distribution of possessive pronouns in ordinary binary coordinate structures and in PCCs (cf. (McNally 1993)):

(14) a. Zarówno Jan jak i jego / *swoja żona wyjechali.  
    both Jan as and his / POSS.RFL.PRN wife left  
    ‘Both Jan and his wife left.’

b. Jan z(e) ?jego / ?swoją żoną wyjechali.  
    Jan with his / POSS.RFL.PRN wife left  
    ‘Jan left with his wife.’
Dyła and Feldman (to appear)
Grammatical Category I

(15) a. Jan i Maria przyszli.
    ‘Jan and Maria came.’
b. Jan przyszedł, ale już wyszedł.
    ‘Jan came but already left.’
c. Kupił duży i wygodny rower.
    ‘He bought a big and comfortable bike.’

(16) a. Kupił książki i po zeszycie.
    ‘He bought books and one exercise book of every kind.’
b. Doradził mu wyjazd i żeby nie wracał.
    ‘He advised him to leave and never come back.’
c. Wie o wypadku i że wszystko się dobrze skończyło.
    ‘He knows about the accident and that everything ended up well.’
d. Odpowiadał szybko i bez zastanowienia.
    ‘He was answering quickly and without thinking.’
e. Przyjedzie jesienią lub na wiosnę.
    ‘He’ll come in autumn or in spring.’

[(Kupśc et al. 2000)], [(Przepiórkowski et al. 2002)]
(17)  a. Jan i Maria przyszli.  
Jan and Maria came  
‘Jan and Maria came.’  
NP + NP

b. *Jan przyszedł z już wyszedł.  
Jan came with already left  
VP + VP

c. *Kupił duży z wygodny rower.  
bought.3RD.SG big z comfortable bike  
AP + AP

d. *Kupił książki z po zeszyt.  
bought3RD.SG books z PREP exercise book  
NP + PP
Case I

(18) a. Jan i Maria przyszli.
   Jan.NOM and Maria.NOM came
   ‘Jan and Maria came.’

b. Nie zaprosiliśmy Jana i Marii.
   not invited.1ST.PL Jan.GEN i Maria.GEN
   ‘We did not invite Jan and Maria.’

c. Janowi i Marii jest zimno.
   Jan.DAT and Maria.DAT is cold
   ‘Jan and Maria are cold.’

d. Nie przejmuj sie wcale Janem i Marią!
   not care.2ND, SING RM at all Jan.INSTR and Maria.INSTR
   ‘Don’t care about Jan and Maria!’

e. Rozmawiamy o Janie i Marii.
   tald.1ST.SG about Jan.LOC and Maria.LOC
   ‘We are talking about Jan and Maria.’

f. Zobaczyciśmy Jana i Marię.
   saw.1ST.SG Jan.ACC and Maria.ACC
   ‘We saw Jan and Mary.’
Case II

(19) a. Jan z Marią przyszli.
   Jan.NOM with Maria.INSTR came
   ‘Jan and Maria came.’

b. Nie zaprosiliśmy Jana z Marią.
   not invited.1ST.PL Jan.GEN with Maria.INSTR
   ‘We did not invite Jan and Maria.’

c. Janowi z Marią daliśmy książkę.
   Jan.DAT with Maria.INSTR gave.1ST.PL book
   ‘We gave Jan and Maria a book.’

d. Nie przejmuj sie wcale Janem z Marią!
   not care.2ND.SG RM at all Jan.INSTR with Maria.INSTR.
   ‘Don’t care about Jan and Maria!’

e. Rozmawiamy o Janie z Marią.
   tald.1ST.SG about Jan.LOC with Maria.INSTR
   ‘We are talking about Jan and Maria.’

f. Zobaczyciśmy Jana z Marią.
   saw.1ST.SG Jan.ACC with Maria.INSTR
   ‘We saw Jan and Mary.’
(20) COO

a. On i Maria poszli do kina.
   he and Maria went to cinema
   ‘He and Maria went to the cinema.’

b. *pro i Maria poszli do kina.
   pro and Maria went to cinema

(21) PCC

a. On z bratem poszli do kina.
   He with brother went to cinema
   ‘He and his brother went to the cinema.’

b. pro Z bratem poszli do kina.
   pro with brother went to cinema
   ‘He and his brother went to the cinema.’

\[
\begin{aligned}
\text{word} &::= \text{PHON} \langle s \rangle \\
\text{SYNS} &::= \text{LOC} \\
\text{CAT} &::= \text{HEAD} \langle \text{noun} \rangle \\
\text{VAL} &::= \text{SUBJ} \langle \text{NP}_{npro} \rangle \\
\text{COMPS} &::= \text{NP}_{npro} \langle \text{instr} \rangle \\
\text{CONT} &::= \text{INDEX} | \text{NUM} \langle \text{plur} \rangle
\end{aligned}
\]
Feldman (2002) II

Plural Comitative Constructions in Polish – p.23
McNally (1993) I

NP
   / \  \
  H   A

NP<e>

PP<e>
   / \  \
  H   C

P(z)  NP_{instr}<e>
McNally (1993) II

(22) *Każdy chłopak z każdą dziewczyną
each boy.SG with each girl.INSTR.SG
odtańczyli polkę na środku pokoju..
danced.PL polka in middle room

(23) \[\forall x (boy(x) \rightarrow \text{dance'}(x)) \land \forall y (girl(y) \rightarrow \text{dance'}(y))\]

(24) \[\forall x \forall y (boy(x) \land girl(y) \rightarrow \text{dance'}(x \oplus y))\]
Further problems:

- the modifiability of the z-PP by collectivizing adverbs, such as *razem* ‘together’, *wraz* ‘together’, *łącznie* ‘jointly’, *wespół* ‘jointly’, *wspólnie* ‘together / jointly’, *włącznie* ‘inclusive’, etc.,

- gender and person resolution.
Our Proposal: LE of z ‘with’
Our Proposal: Number Resolution

The Principle for Number Resolution

\[
\begin{align*}
\text{head-adjunct-structure} & \rightarrow \\
\text{ADJUNCT-DTR} \mid \text{SYNS} \mid \text{LOC} & \rightarrow \\
\text{CAT} \mid \text{HEAD} \mid \text{MORSYN} \mid \text{PFROM Z} & \\
\text{CONT} \mid \text{RESTR} & \\
\text{SYNS} \mid \text{LOC} \mid \text{CONT} \mid \text{INDEX} \mid \text{NUMBER plural}
\end{align*}
\]
Our Proposal: Gender Resolution

THE PRINCIPLE FOR GENDER RESOLUTION

∀ 1 ∀ 3

head-adjunct-structure

ADJUNCT-DTR

SYNS | LOC

CAT | HEAD | MORSYN | PFORM

CONT | RESTR

[NUCL CONJUNCTS 1] ...

CONX | BACKGROUND 3

∀ 1 ∀ 3

\[
\begin{align*}
&\exists 2 \left( \text{member}(2, \text{GENDER } m1, 1) \right) \\
&\lor
\left( \exists 2 \left( \text{member}(2, \text{GENDER } m1 \lor \text{non-m1}, 1) \right) \right)
\end{align*}
\]

\[
\begin{align*}
&\lor
\left( \exists 4 \left( \text{member}(4, \text{male}, 3) \right) \right)
\end{align*}
\]
Our Proposal: Person Resolution

THE PRINCIPLE FOR PERSON RESOLUTION

\[ \forall \, 1\]

\[ \text{head-adjunct-structure} \]

\[ \text{ADJUNCT-DTR} \left[ \begin{array}{c}
\text{SYNS} \\
\text{LOC}
\end{array} \right] \begin{array}{c}
\text{CAT} | \text{HEAD} | \text{MORSYN} | \text{PFORM}\end{array} 2 \]

\[ \text{CONT} | \text{RESTR} \left[ \begin{array}{c}
\text{NUCL CONJUNCTS} 1, \ldots \end{array} \right] \]

Plural Comitative Constructions in Polish – p.30
(1) **Semantic Compositionality Principle**
In any well-formed phrase structure, the mother’s \( \text{RESTR} \) value is the sum of the \( \text{RESTR} \) values of the daughters.

(25) **Semantic Inheritance Principle**
In any headed phrase except for the head-adjunct phrase in which the adjunct daughter is headed by the comitative preposition \( z \), the mother’s \( \text{INDEX} \) values are identical to those of the head daughter.
Our Proposal: The Structure of PCCs
Summary and Outlook

- Crucial properties of Polish PCCs have been discussed.
- Previous analyses of PCCs have been presented.
- An HPSG approach has been proposed that accounts for:
  - number, gender and person resolution,
  - coreference phenomena inside and outside of PCCs,
  - modifiability by collectivizing adverbs,
  - mixed agreement.
- In future work, other types of comitative constructions will be investigated with a view to get a uniform treatment of all Polish comitatives.
References


