

## PCC Effects in Berlin German – Insights from Arc Pair Grammar

**Introduction** The *Person Case Constraint* (PCC), which restricts the person features of two object clitics (Perlmutter 1971), is standardly analyzed as the result of an AGREE relation between a  $\varphi$ -probe on  $v^\circ$  and the two object clitics (Anagnostopoulou 2003; Béjar & Řezáč 2003). PCC effects in Berlin German pose a severe problem to such an approach. This problem does not arise once grammatical relations are recognized as primitives, as in Arc Pair Grammar (APG, Johnson & Postal 1980), and in particular several types of object relations (Postal 2010).

**Object clitics in Berlin German** Berlin German, in particular the variety spoken in the North

	1	2	3M	3N	3F	3REFL
ACC	<i>mr</i>	<i>dr</i>	<i>n</i>	<i>t</i>	<i>sə</i>	<i>sè</i>
DAT	<i>mr</i>	<i>dr</i>	<i>m</i>	<i>m</i>	<i>r</i>	<i>sè</i>

East, possesses object clitics. Their clitic status is corroborated by 4 observations: (1) they cannot bear stress; (2) they cannot be conjoined; (3) they cannot be the complement of a preposition; and (4) they are banned from the preverbal position in main clauses.

- (1) *Peter mag mr / \*MR / √MICH.*                      (2) *Peter mag \*mr und dr / √mich und dich.*  
 ‘Peter likes me.’    ‘Peter likes me and you.’
- (3) *Peter tanzt mit \*mr / √mir.*                      (4) *\*Mr / √mich mag Peter.*  
 ‘Peter dances with me.’                                      I.ACC           likes Peter           ‘Peter likes me.’

Berlin German shows PCC effects and, crucially, both strong and weak PCC effects. The strong PCC requires an accusative clitic to be 3PS when combined with a dative clitic. The weak PCC requires the accusative clitic to be 3PS unless the dative clitic is 1/2PS. The distribution of strong and weak PCC effects in Berlin German depends on the ditransitive verb. One set of verbs, which I call *group I verbs*, e.g. *zeing* ‘to show’ triggers strong PCC effects (cf. 5); the other set of verbs, which I call *group II verbs*, e.g. *vorzien* ‘to prefer’ triggers weak PCC effects (cf. 6).

- (5) a. \* *Die hat mr m jezeigt.*                      (6) a. \* *Die hat mr m vorzohng.*  
 she has I.ACC he.DAT showed                      she has I.ACC he.DAT preferred  
 ‘She showed me to him.’                                      ‘She preferred me to him.’
- b. √ *Die hat n mr jezeigt.*                      b. √ *Die hat n mr vorzohng.*  
 she has he.ACC I.DAT showed                      she has he.ACC I.DAT preferred  
 ‘She showed him to me.’                                      ‘She preferred him to me.’
- c. \* *Die hat mr dr jezeigt.*                      c. √ *Die hat mr dr vorzohng.*  
 she has I.ACC you.DAT showed                      she has I.ACC you.DAT preferred  
 ‘She showed me to you.’                                      ‘She preferred me to you.’

**Problems for AGREE** In AGREE approaches, the difference between strong and weak PCC effects resides in the  $v^\circ$ -head (Anagnostopoulou 2005; Nevins 2007; Deal 2020). To capture that Berlin German has verb-dependent strong and weak PCC effects, AGREE approaches must postulate two distinct  $v^\circ$ -heads, one triggering strong, and the other weak PCC effects. Every VP containing a ditransitive verb and its two objects must then be specified for the  $v^\circ$ -head it is merged with. The problem with this analysis is that this specification is arbitrary: no inherent grammatical property of the verb or the two objects predicts this specification. First, although *zeing* and *vorzien* assign different  $\theta$ -roles to their dative DPs (goal and beneficiary, respectively), *empfehlen* ‘to recommend’ and *ersparen* ‘to spare’ both assign the  $\theta$ -role beneficiary to their dative DPs, yet the first verb belongs to group I and the other to group II. Second, although *zeing* and *vorzien* have different base word orders (DAT > ACC and ACC > DAT, respectively), this pattern does not generalize either: *empfehlen* and *ersparen* both have DAT > ACC base word order, but belong to different groups. Third, the c-command relations are identical for both verb groups because both in group I (cf. 7) and in group II (cf. 8), only the accusative DP can bind the dative DP, showing that the objects’ hierarchical order is constant across verb group.

- (7) *Du hast n<sub>i</sub> / m<sub>k</sub> sè<sub>√i/\*k</sub> jezeigt.*                      (8) *Du hast n<sub>i</sub> / m<sub>k</sub> sè<sub>√i/\*k</sub> erspart.*  
 you have he.ACC he.DAT REFL shown                      you have he.ACC he.DAT REFL spared  
 ‘You showed him to himself.’                                      ‘You spared him from himself.’

To circumvent this problem, the effects observed in (5) and (6) could be taken to reflect not PCC effects but a phonological constraint requiring the first clitic in a clitic cluster to have less segments than the second clitic. The clitic cluster *mr m* in (5a) & (6a) violates this constraint, whereas the clitic cluster *n mr* in (5b) & (6b) obeys it. The mixed behavior of *mr dr* in (5c) &

(6c) would result from the identical number of segments of both clitics. Although attractive, the phonological constraint this analysis is based on doesn't hold in Berlin German. First, in a clitic cluster with a subject clitic and an object clitic, the subject clitic can have more segments than the object clitic (cf. 9 & 10). Second, even in clitic clusters with two object clitics, the first clitic can have more segments, namely in a cluster with a 3.F.ACC and a 3.M.DAT clitic (cf. 11).

- (9) *Jetzt helfen wir m.* (10) *Jetzt hilft sie m.* (11) *Ich habe sie m vorgestellt.*  
 now help we he.DAT now helps she he.DAT I have she.ACC he.DAT introduced  
 'Now we help him.' 'Now she helps him.' 'I introduced her to him.'

**An APG analysis** There is a single factor linked to the PCC effects with group I and group II verbs, namely passivization. The relevant factor is stated and illustrated in (12)-(14).

- (12) (i) If a dative DP induces a strong PCC effect, it can be passivized. (group I, cf. 13)  
 (ii) If a dative DP induces a weak PCC effect, it cannot be passivized. (group II, cf. 14)  
 (13)  $\sqrt{\text{Sie kriegt n}}$  *zeigt / empföhl.* (14) \* *Sie kriegt n vorzeshng / erspart.*  
 she gets he.ACC shown recommended she gets he.ACC preferred spared  
 'One shows/recommends him to her.' 'One prefers/spares him over/from her.'

The ability of a dative DP to be passivized is irreducible to some inherent property of it or the verb selecting it (pace Cook 2007): *empfehlen* and *ersparen* assign the same  $\theta$ -role to their dative DP, have DAT > ACC base word order, and have the dative DP lower than the accusative DP. Yet only *empfehlen* allows passivization. Adopting the Arc Pair Grammar framework allows a simple solution to this problem: the two verb groups assign different grammatical relations to their dative DP. Postal (2010) argues that a passivizable dative DP is an indirect object ('3-object'), whereas an unpassivizable dative DP is a semiobject ('5-object'). The accusative DPs of both verb groups are direct objects ('2-object'). The following patterns emerge.

- (15) (i) A clitic cluster with a 2-object and a 3-object shows strong PCC effects (group I)  
 (ii) A clitic cluster with a 2-object and a 5-object shows weak PCC effects (group II)

2- and 3-objects belong to the same subclass of objects, namely narrow objects (Postal 2010: 72). 2- and 5-objects, however, belong to distinct subclasses. I will refer to objects belonging to the same subclass as *class-agreeing* objects, and to objects belonging to distinct subclasses as *non-class-agreeing* objects. This is the first relevant ingredient for the analysis. The second is the notion *outrank*: A outranks B iff A is to the left of B on the hierarchy of grammatical relations '2 > 3 > 5'. Given these two notions, I suggest the following analysis for PCC effects.

- (16) In a cluster with two class-agreeing clitics, the outranking clitic is 3PS  
 (17) In a cluster with two non-class agreeing clitics, the outranking clitic is 3PS unless the outranked clitic is 1/2PS  
 Group I verbs are constrained by (16): the accusative-marked 2-object outranks the dative-marked 3-object, the 2-object and the 3-object class-agree, so the 2-object must be 3PS. Group II verbs are constrained by (17): the accusative-marked 2-object outranks the dative-marked 5-object, the 2-object and the 5-object do not class-agree, so the 2-object must be 3PS, unless the 5-object is 1/2PS. It is important to note that the crucial ingredient of this analysis is whether the two clitics class-agree; the analysis says nothing about narrow objects nor about passivization. This then predicts strong PCC effects with class-agreeing object clitics that are neither narrow objects nor allow passivization. This prediction is borne out. In causatives in German, the arguments of the embedded infinitive move to the causative verb, become its co-arguments, and acquire new grammatical relations. Crucially, they do not acquire the status of narrow objects, as neither of them can be passivized (Höhle 1978). Yet they show strong PCC effects.

- (18) *Sie lässt n mr ohrfeing.* (19) \* *Sie lässt mr n / dr ohrfeing.*  
 she lets he.ACC I.ACC cuff she lets I.ACC he.ACC you.ACC cuff  
 'She makes him cuff me.' 'She makes me cuff him/you.'

In the remainder of this presentation, I argue why the clitics in (18) & (19) belong to a separate class of objects distinct from narrow objects, and that cluster formation in complex prefields in German (Müller 2018) is also restricted by the grammatical relations of the clustered XPs.

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