# Silencing the PCC

Stefan Keine Jon Ander Mendia

UCLA UPV/EHU

Basque displays what is known as the Strong Person Case Constraint (PCC): an absolutive DP may generally not be 1st or 2nd person if it is c-commanded by a dative DP. We make the novel observation that this restriction is obviated under verbal ellipsis, even if this ellipsis does not affect the DPs whose cooccurrence is normally ruled out. We then explore the consequences of this generalization for accounts of the PCC. First, it indicates that the PCC arises from properties of the verb agreement, not of the DP arguments. Second, a comprehensive account of the Basque PCC must be sensitive to both narrow-syntactic and PF properties (in particular whether or not the verb agreement is pronounced). We then develop an account of the Basque PCC based on Coon & Keine's (2021) feature-gluttony proposal. On this account, the Basque PCC results from an irresolvable conflict that arises in the morphological realization of a probe that has agreed with two DPs. We show that such an account offers a principled explanation of both the syntactic factors and the PF factors that condition the Basque PCC, in particular its interaction with verbal ellipsis.

#### 1. Introduction

The Person Case Constraint (PCC) is a crosslinguistically common restriction on possible person combinations, typically observed between direct and indirect objects in ditransitive constructions (Perlmutter 1971, Bonet 1991, 1994, Anagnostopoulou 2003, 2005, Béjar & Rezac 2003, Nevins 2007, Adger & Harbour 2007, Ormazabal & Romero 2007, Baker 2008, 2011, Pancheva & Zubizarreta 2018, Preminger 2019, Stegovec 2020, Foley & Toosarvandani 2022, Deal 2023, among many others; see Anagnostopoulou 2017 for an overview). Basque exhibits what is known as the "strong" version of the PCC, which prohibits a 1st and 2nd person direct-object absolutive DP in the presence of a dative DP (with some refinements to be discussed below); see Laka (1993a), Albizu (1997), Ormazabal & Romero (1998, 2001, 2007), Ormazabal (2000), Arregi & Nevins (2008, 2012), Rezac (2008b, 2010, 2011), Preminger (2011b, 2019), Odria (2017, 2019), and Coon & Keine (2021). The classical configuration in which such restrictions have been observed are ditransitive constructions, illustrated in (1).

## (1) Strong PCC in Basque

a. Zu-k *harakina-ri* **liburu-a** saldu d-i-o-zu. you-erg butcher-dat book-abs sold 3abs-aux-3dat-2erg 'You have sold the book to the butcher.'

 $(\sqrt{3}DAT > 3ABS)$ 

Unless noted otherwise, the Basque judgments are Jon Ander Mendia's, with crucial contrasts confirmed with three other native speakers.

- b. Zu-k *ni-ri* **liburu-a** saldu d-i-da-zu.
  you-erg I-dat book-abs sold 3abs-aux-ldat-2erg
  'You have sold the book to me.' (√ldat > 3abs)
- c. \*Zu-k harakina-ri **ni** saldu n-ai-o-zu.
  you-erg butcher-dat I.abs sold labs-aux-3dat-2erg
  Intended: 'You have sold me to the butcher.' (\*3dat > labs)
- d. \*Ni-k harakina-ri zu saldu z-aiti-o-t.

  I-ERG butcher-DAT you.ABS sold 2ABS-AUX-3DAT-1ERG

  Intended: 'I have sold you to the butcher.' (\*3DAT > 2ABS)
- e. \*Haiek *ni-ri* **zu** saldu z-ai-da-te.
  they.erg I-DAT you.ABS sold 2ABS-AUX-1DAT-3ERG *Intended:* 'They have sold you to me.' (\*1DAT > 2ABS)

Much recent work has documented that the precise combinations that are ruled out differ across languages and speakers, resulting in different types of the PCC (e.g., Bonet 1991, 1994, Anagnostopoulou 2005, Nevins 2007, Doliana 2013, Pancheva & Zubizarreta 2018, Yokoyama 2019, Stegovec 2020, Coon & Keine 2021, Foley & Toosarvandani 2022, Deal 2023; see Anagnostopoulou 2017 for an overview). Because we focus on Basque in this paper, which has the Strong PCC, we will put this crosslinguistic variation aside for the most part.

In addition to the basic Basque PCC facts in (1), the literature has uncovered a curious case of PCC obviation. In Basque nonfinite clauses, the PCC systematically disappears (see Laka 1993a, 1996, Bonet 1994, Albizu 1997, Ormazabal 2000, Preminger 2011b, 2019, Arregi & Nevins 2012, Coon & Keine 2021). That is, combinations of direct and indirect objects that are normally ruled out by the PCC are surprisingly allowed if they occur in a nonfinite clause. An illustrative example is provided in (2), based on Laka (1993a:27). Here, the combination of *harakina-ri* 'butcher-DAT' and *ni* 'LABS' that violates the PCC in simple finite clauses (see (1c)) is grammatical in a nonfinite clause.

(2) PCC disappears in nonfinite clauses

Gaizki irudi-tzen z-ai-t [zu-k harakina-ri ni sal-tze-a].

wrong look-IMPF 3ABS-AUX-1DAT you-ERG butcher-DAT I.ABS sell-IMPF-ART.ABS

'It seems wrong to me for you to sell me to the butcher.' (√3DAT > lABS)

This effect is general and can also be observed in other nonfinite clauses. What these nonfinite clauses have in common is that they lack verb agreement. In other words, neither *harakina-ri* 'butcher-dat' nor ni 'I.ABS' controls agreement on a verb in (2), in contrast to (1c), and this seems to be what underlies the PCC obviation. Assuming that the nonfinite clause in (2) lacks a  $\phi$ -probe, recent work on the PCC that incorporates the fact in (2) has therefore concluded that the PCC only arises in clauses that contain a  $\phi$ -probe (Preminger 2011b, 2019, Coon & Keine 2021, see also Anagnostopoulou 2003).

In this paper, we argue that the effect in (2) is in fact just one manifestation of a broader, novel generalization, stated in (3). We demonstrate that Basque PCC effects also disappear whenever the

verb and the agreeing auxiliary are elided, and we conclude that the PCC is abrogated in the absence of overt verb agreement. This generalization includes nonfinite clauses, which never contain overt  $\phi$ -agreement, but it also holds for ellipsis structures in which the agreeing verb is not pronounced. On standard assumptions about ellipsis, such clauses syntactically contain a  $\phi$ -probe that is not overtly realized. As we will see, in such configurations PCC effects systematically disappear as well.

## (3) Basque PCC effects disappear in clauses that do not contain an overtly realized verbal $\phi$ -probe.

What (3) shows is that the Basque PCC is not only affected by the syntactic presence or absence of a  $\phi$ -probe but also by whether a  $\phi$ -probe is overtly realized or not. We then explore the analytical ramifications of (3) and in particular what it teaches us about the source of PCC effects. On the one hand, we argue that (3) provides strong evidence against purely syntactic approaches to the PCC, such as approaches relying solely on person licensing or the Case Filter. On the other hand, earlier work on the Basque PCC has shown that an entirely morphological account is insufficient as well, in that the PCC is sensitive to syntactic distinctions that are neutralized in the surface morphology. We instead propose an analysis based on Coon & Keine's (2021) feature-gluttony approach to the PCC, which we show derives both the syntactic conditions underlying the PCC and, in conjunction with independently-motivated assumptions about ellipsis, the role of the overt realization of the  $\phi$ -probe (3). On this account, the PCC arises in configurations in which a single verbal φ-probe agrees with two DPs (4). In such configurations, the probe receives two distinct  $\phi$ -values, which results in an irresolvable conflict in the morphological realization of this  $\phi$ -probe. Importantly, this irresolvable conflict does not arise under verbal ellipsis because the multivalued probe is not morphologically realized. Irresolvable conflicts that result from multivaluation are not novel but have been observed in a range of other domains as well. We show that this approach enables a comprehensive account of the Basque PCC and the configurations in which it is obviated.

```
(4) Feature gluttony
[ ... X^{0} ... DP ... DP ... ] \Rightarrow multivalued probe
\Rightarrow irresolvable conflict if probe is morphologically realized
```

This paper is structured as follows: Section 2 demonstrates the Basque PCC in five configurations and then demonstrates that across these configurations, PCC effects disappear in various ellipsis configurations in which the verb goes unpronounced. This motivates the generalization in (3). Section 3 then discusses the implications of this generalization for accounts of the PCC, motivating in particular the need for an account of the PCC that encompasses both syntactic and PF factors. Section 4 then develops a feature-gluttony analysis of the Basque PCC and the environments in which it is obviated. Section 5 then shows how this account derives both the syntactic and the PF factors that condition the PCC in Basque. Section 6 concludes.

# 2. Overt agreement and the PCC in Basque

Basque exhibits PCC effects in a number of configurations in which a dative DP asymmetrically c-commands an absolutive DP, namely:

- (i) ditransitive constructions,
- (ii) psych-predicates,
- (iii) possessor-dative constructions,
- (iv) applicative-dative constructions, and
- (v) causatives.

In all of these configurations, the absolutive DP is standardly prohibited from being 1st or 2nd person, regardless of the person of the dative DP.<sup>2</sup> This restriction is independent of the surface word order. In this section, we illustrate these constructions and then show that across all of them, the PCC disappears whenever the verb and agreeing auxiliary undergo ellipsis. We illustrate this effect of ellipsis using:

- (i) gapping,
- (ii) stripping,
- (iii) fragment answers,
- (iv) split questions, and
- (v) comparative deletion.

This systematicity in PCC obviation under verbal ellipsis calls for an explanation, which motivates our account in section 4.

#### 2.1. PCC configurations

As stated in section 1, the standard generalization about the Strong PCC in Basque is that in the presence of a dative DP, a structurally lower absolutive DP cannot be 1st or 2nd person. This restriction is not affected by the surface order of the two DPs (that is, the PCC arises regardless of whether the dative DP linearly precedes the absolutive DP or the other way around); in other words, what matters is the base configuration. We already demonstrated the PCC in ditransitive constructions in (1); a relevant example is repeated in (5).

In this regard, the allocutive agreement behaves like ethical datives in Romance (Perlmutter 1971, Bonet 1991, Anagnostopoulou 2003). Rezac (2011) treats the allocutive markers as TP-external. They are hence outside the domain of the  $\phi$ -probe that underlies the PCC and thus do not participate in the PCC system. We adopt this view here.

<sup>&</sup>lt;sup>2</sup> Basque also has optional allocutive agreement, which refers to the addressee and is morphologically marked using the dative agreement markers. However, this agreement does not give rise to the PCC (Albizu 1997, Ormazabal & Romero 2007, Rezac 2011):

<sup>(</sup>i) Peru-k ni kalean ikusi na-i-k-Ø.
Peter-erg I.abs in.the.street see labs-aux-2m.dat-3erg

'Peter has seen me in the street (male addressee).' [Albizu 1997:7, ex. (10b)]

- (5) *PCC in ditransitive constructions* 
  - \*Zu-k harakina-ri ni saldu n-ai-o-zu. you-erg butcher-dat I.abs sold labs-aux-3dat-2erg Intended: 'You have sold me to the butcher.'

(\*3DAT > 1ABS)

A second configuration that displays the PCC in Basque is psych-verb constructions (Albizu 1997, Rezac 2008b, Arregi & Nevins 2012). Psych-verbs take a dative argument and an absolutive argument, and, as Rezac (2008b) shows, the dative DP asymmetrically c-commands the absolutive DP. As illustrated in (6), the absolutive DP cannot be 1st or 2nd person.

- (6) PCC with psych-verbs
  - a. *Ni-ri* **Mikel** gusta-tzen z-ai-t.

    I-DAT Mikel.ABS like-IMPF 3ABS-AUX-1DAT
    'I like Mikel.'

 $(\sqrt{1}DAT > 3ABS)$ 

b. \*Mikel-i ni gusta-tzen n-atzai-o.

Mikel-DAT I.ABS like-IMPF lABS-AUX-3DAT

Intended: 'Mikel likes me.'

(\*3DAT > 1ABS)

c. \*Ni-ri zu gusta-tzen z-atzaizki-t.

I-DAT you.ABS like-IMPF 2ABS-AUX-lDAT

Intended: 'I like you.'

(\*1DAT > 2ABS)

Third, PCC effects also arise with possessor-dative constructions (Rezac 2010), in which the dative DP is interpreted as the possessor of a PP constituent. An example is provided in (7a). As (7b), taken from Rezac (2010:775), illustrates, the absolutive DP may not be 1st or 2nd person.

- (7) PCC in possessor-dative constructions
  - a. *Miren-i* **haur-ak** beso-etara bota d-izki-o-te.

    Miren-DAT children-ABS arms-into thrown 3ABS-AUX-3DAT-3ERG

    'They threw the children into Miren's arms.' (\sqrt{3DAT} > 3ABS)
  - b. \*Miren-i zu beso-etara bota z-aituz-te.

    Miren-DAT you.ABS arms-into thrown 2ABS-AUX-3ERG

    Intended: 'They threw you into Miren's arms.' (\*3DAT > 2ABS)

Fourth, the PCC also arises in applicative-dative constructions, in which the dative is interpreted as "affected". Here too the absolutive DP may not be 1st or 2nd person, as shown in (8), from Rezac (2010:774–775).

- (8) PCC in applicative-dative constructions
  - a. Lami-ek *Miren-i* **Pello eta Mona** jan-go d-izki-o-te. lamias-erg Miren-dat Pello and Mona. Abs eat-fut 3Abs-Aux-3dat-3erg 'The lamias will eat Pello and Mona on Miren.' (\sqrt{3}dat > 3Abs)

b. \*Lami-ek *Miren-i* **zu** jan-go z-aituz-te.
lamias-erg Miren-dat you.abs eat-fut 2abs-aux-3erg *Intended:* 'The lamias will eat you on Miren.' (\*3dat > 2abs)

Fifth, the PCC arises with causatives of transitive verbs (Rezac 2010:775–776). Here, the causer receives dative case, which triggers the PCC if the theme is 1st or 2nd person.

- (9) *PCC in causative constructions* 
  - a. Haiek *ni-ri* **ikasle-a** isil-arazi-ko d-i-da-te.
    they.erg I-dat student-abs silence-CAUS-FUT 3ABS-AUX-lDAT-3ERG
    'They will make me silence the student.' (√1DAT > 3ABS)
  - b. \*Haiek *ni-ri* **zu** isil-arazi-ko z-ai-da-te.
    they.erg I-dat you.abs silence-caus-fut 2abs-aux-ldat-3erg *Intended*: 'They will make me silence you.' (\*1dat > 2abs)

The next sections make the novel observation that across a variety of constructions in which the lexical verb and the agreeing auxiliary are elided, the PCC restriction systematically disappears in all five PCC contexts. In the interest of space, we will demonstrate this generalization for all five PCC contexts for gapping, and then limit the data presentation to ditransitives, psych-verbs, and possessor datives for the other ellipsis contexts.

## 2.2. Gapping

- (10) demonstrates that the PCC in ditransitive configurations disappears under gapping, a process that elides the lexical verb and the agreeing auxiliary but leaves the nominal arguments unaffected. With gapping, an otherwise illicit 1st or 2nd person absolutive DP (see (5)) becomes grammatical. Here and throughout, we indicate elided material with " $\Delta$ ".
- (10) PCC obviation under gapping: Ditransitives

'Jon sold Mikel to the mayor, and you me to the butcher.'  $(\sqrt[4]{3}DAT > 1ABS)$ 

b. Jon-ek alkatea-ri Mikel saldu d-i-o, eta haiek *zu-ri* **ni**  $\Delta$ . Jon-erg mayor-dat Mikel.abs sold 3abs-aux-3dat and they.erg you-dat I.abs 'Jon sold Mikel to the mayor, and they me to you.' ( $^{\checkmark}$ 2dat > 1abs)

Gapping likewise lifts the person restriction with psych-predicates (see (6)), as shown in (11).

(11) PCC obviation under gapping: Psych-predicates
 Zu-ri Pello gusta-tzen z-ai-zu, eta ni-ri zu Δ.
 you-dat Pello.abs like-impf 3abs-aux-2dat and I-dat you.abs
 'You like Pello, and I you.'

The person restriction in possessor-dative constructions (see (7)) is also lifted under gapping (12).

- (12) *PCC obviation under gapping: Possessor-dative constructions* 
  - a. Mona-ri Pello beso-etara bota d-i-o-te, eta *Miren-i* Mona-dat Pello.abs arms-into thrown 3abs-aux-3dat-3erg and Miren-dat  $\mathbf{ni/zu}$   $\Delta$ . I.Abs/you.abs

'They threw Pello into Mona's arms, and me/you into Miren's.' ( $\sqrt{3}$ DAT > 1/2ABS)

b. Mona-ri Pello beso-etara bota d-i-o-te, eta { ni-ri zu Mona-dat Pello.abs arms-into thrown 3abs-aux-3dat-3erg and I-dat you.abs  $\Delta$  / zu-ri ni  $\Delta$  }. you-dat I.abs

'They threw Pello into Mona's arms, and you/me into mine/yours.'

 $(\sqrt{1}DAT > 2ABS / \sqrt{2}DAT > 1ABS)$ 

Gapping also obviates the PCC effect in applicative-dative constructions (see (8)), as demonstrated in (13).

(13) PCC obviation under gapping: Applicative-dative constructions
Lami-ek Miren-i Pello jan-go d-i-o-te, eta otso-ek Mona-ri
lamias-erg Miren-dat Pello eat-fut 3ABS-AUX-3DAT-3Erg and wolfs-erg Mona-dat
zu/ni Δ.
you.ABS/I.ABS
'The lamias will eat Pello on Miren, and the wolfs you/me on Mona.' (√3DAT > 1/2ABS)

Finally, gapping obviates the PCC with causatives (see (9)), as shown in (14).

In summary, gapping systematically rescues structures that would otherwise be ungrammatical due to the PCC.

#### 2.3. Stripping

PCC violations are also obviated by stripping, a process that elides all elements in a clause except for one. This is demonstrated for ditransitive constructions in (15), for psych-predicates in (16), and for possessor-dative constructions in (17).

- (15) PCC obviation under stripping: Ditransitives

  Jon-ek harakina-ri Mikel saldu d-i-o, eta **ni/zu**  $\Delta$  ere bai.

  Jon-erg butcher-dat Mikel.abs sold 3abs-aux-3dat and I.abs/you.abs too yes

  'Jon sold Mikel to the butcher, and me/you too.'

  ( $\sqrt{3}$  dat > 1/2abs)
- (16) PCC obviation under stripping: Psych-predicates
   Ni-ri Mikel gusta-tzen z-ai-t, eta zu Δ ere bai.
   I-DAT Mikel.ABS like-IMPF 3ABS-AUX-lDAT and you.ABS too yes
   'I like Mikel, and you too.' (√1DAT > 2ABS)
- (17) PCC obviation under stripping: Possessor-dative constructions
  Mona-ri Pello beso-etara bota d-i-o-te, eta ni/zu Δ ere
  Mona-DAT Pello.ABS arms-into thrown 3ABS-AUX-3DAT-3ERG and I.ABS/you.ABS also
  bai.
  yes
  'They threw Pello into Mona's arms, and me/you too.' (√3DAT > 1/2ABS)

## 2.4. Fragment answers

PCC effects are also obviated in fragment answers (see Merchant 2004 and Weir 2014 for arguments that fragment answers contain full syntactic structure plus ellipsis of everything except for the fragment answer). This can be seen most clearly in fragment answers to multiple wh-questions. As with gapping and stripping, otherwise ungrammatical combinations of DPs are then permitted. This effect is illustrated in (18)–(20). In these examples, the subexamples in (a) contain the question and the subexamples in (b) contain the corresponding fragment answers.

- (18) PCC obviation in fragment answers: Ditransitives
  - a. Nor saldu d-i-o Koldo-k nor-i? who.abs sold 3abs-aux-3dat Koldo-erg who-dat 'Who did Koldo sell to whom?' —
  - b. (i) Alkatea-ri Jon  $\Delta$  eta *harakina-ri* **ni/zu**  $\Delta$ .

    mayor-dat Jon.abs and butcher-dat I.abs/you.abs

    'Jon to the mayor and me/you to the butcher.' ( $\checkmark$ 3DAT > 1/2ABS)

- (ii) Alkatea-ri Jon  $\Delta$  eta { *ni-ri* **zu**  $\Delta$  / *zu-ri* **ni**  $\Delta$  }. mayor-DAT Jon.ABS and I-DAT you.ABS you-DAT I.ABS 'Jon to the mayor and {you to me / me to you}.' ( $^{\prime}$ 1DAT > 2ABS /  $^{\prime}$ 2DAT > 1ABS)
- (19) *PCC obviation in fragment answers: Psych-predicates* 
  - a. Nor gusta-tzen z-ai-o nor-i? who.abs like-impf 3abs-aux-3dat who-dat 'Who likes whom?' —
  - b. Mona-ri Pello  $\Delta$  eta { ni-ri  $\mathbf{zu}$   $\Delta$  / zu-ri  $\mathbf{ni}$   $\Delta$  }. Mona-dat Pello.abs and I-dat you.abs you-dat I.abs 'Mona (likes) Pello and {I (like) you / you (like) me}.' ( $^{\checkmark}$ 1dat > 2abs /  $^{\checkmark}$ 2dat > 1abs)
- (20) PCC obviation in fragment answers: Possessor-dative constructions
  - a. Nor bota d-i-o-te nor-i beso-etara? who.abs thrown 3abs-aux-3dat-3erg who-dat arms-into Who did they throw into whose arms? —
  - b. (i) Mona-ri Pello Δ eta Mikel-i ni/zu Δ.
     Mona-DAT Pello.ABS and Mikel-DAT I.ABS/you.ABS
     'Pello into Mona's and me/you into Mikel's.' (√3DAT > 1/2ABS)
    - (ii) Mona-ri Pello  $\Delta$  eta { ni-ri zu  $\Delta$  / zu-ri ni  $\Delta$ }.

      Mona-DAT Pello.ABS and I-DAT you.ABS you-DAT I.ABS

      'Pello into Mona's and {you into mine / me into yours}.'

      ( $\sqrt{1}DAT > 2ABS / \sqrt{2}DAT > 1ABS$ )

#### 2.5. Split questions

Another configuration in which PCC restrictions are obviated is split questions (see Arregi 2010 for arguments that split questions involve clausal structure plus ellipsis). As illustrated in (21)–(23), it is possible for the tag to contain combinations of arguments that would be ungrammatical due to the PCC in the absence of ellipsis. The scenario for these sentences is one where two actors in a play are discussing the plot of that play. The speaker remembers a specific plot point happening but does not remember who does what. For example, in (21), the speaker remembers that one of them is sold to the other but does not remember whether it is the speaker that is sold to the addressee or vice versa.

(21) PCC obviation in split questions: Ditransitives

Nor-i saldu-ko d-i-o-te nor, [zu-ri ni  $\Delta$ ] ala [ni-ri who.dat sell-fut 3abs-aux-3dat-3erg who.abs you-dat I.abs or I-dat zu  $\Delta$ ]?

'Who will they sell to whom, me to you or you to me?'  $(\sqrt{2}DAT > 1ABS / \sqrt{1}DAT > 2ABS)$ 

(22) PCC obviation in split questions: Psych-predicates

Nor-i gusta-tzen z-ai-o nor, [zu-ri ni  $\Delta$ ] ala [ni-ri who-dat like-impf 3abs-aux-3dat who.abs you-dat I.abs or I-dat zu  $\Delta$ ]?

'Who likes whom, you me or I you?'

 $(\sqrt{2}DAT > 1ABS / \sqrt{1}DAT > 2ABS)$ 

(23) PCC obviation in split questions: Possessor-dative constructions

Nor-i bota-ko d-i-o-te nor beso-etara, [zu-ri ni  $\Delta$ ] ala who-dat throw-fut 3abs-aux-3dat-3erg who.abs arms-into you-dat I.abs or [ni-ri zu  $\Delta$ ]?

I-DAT you.ABS

'Who will they throw into whose arms, me into yours or you into mine?'

 $(\sqrt{2}DAT > 1ABS / \sqrt{1}DAT > 2ABS)$ 

## 2.6. Comparative deletion

Lastly, the PCC is also obviated by comparative deletion (see, e.g., Kennedy 2002, and Lechner 2004, 2018 for discussion of comparative deletion in general). (24) illustrates this for ditransitive constructions. (24a) provides the baseline configuration; (24b) illustrates the PCC. (24d) then shows that comparative deletion obviates the PCC violation. (24c) demonstrates that this effect arises only in the clause that is elided, not in the antecedent clause, in which no ellipsis takes place.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> (24c,d) pose some parsing difficulty due to the center embedding. This difficulty impacts both examples equally and is hence independent of the PCC. It can be alleviated by extraposing the *than*-phrase, as shown in (i):

<sup>(</sup>i) Politikari eskuindar-ei Koldo maiz-ago aurkez-ten d-i-e-te **ni/zu** politikari politician rightwing-dat Koldo often-er introduce-IMPF 3ABS-AUX-3DAT-3ERG I.ABS/you.ABS politician ezkertiar-ei baino.

leftwing-dat than

<sup>&#</sup>x27;They introduce Koldo to rightwing politicians more often than me/you to leftwing politicians.'

- (24) *PCC obviation under comparative deletion: Ditransitive* 
  - a. Baseline: no PCC

*Politikari eskuindar-ei* **Koldo** maiz aurkez-ten d-i-e-te.
politician rightwing-dat Koldo.ABS often introduce-IMPF 3ABS-AUX-3DAT-3ERG
'They often introduce Koldo to rightwing politicians.' (√3DAT > 3ABS)

- b. Baseline: PCC
  - \**Politikari ezkertiar-ei* **ni** maiz aurkez-ten n-ai-e-te.
    politician leftwing-DAT I.ABS often introduce-IMPF lABS-AUX-3DAT-3ERG *Intended*: 'They often introduce me to leftwing politicians.' (\*3DAT > lABS)
- c. Baseline: PCC configuration not targeted by ellipsis
  - \*Politikari ezkertiar-ei ni [politikari eskuindar-ei Koldo Δ] baino politician leftwing-dat I.abs politician rightwing-dat Koldo.abs than maiz-ago aurkez-ten n-ai-e-te. often-er introduce-IMPF labs-aux-3dat-3erg

    Intended: 'They introduce me to leftwing politicians more often than Koldo to rightwing politicians.' (\*3dat > labs)
- d. *PCC obviation in comparative deletion*

Politikari eskuindar-ei Koldo [politikari ezkertiar-ei ni/zu  $\Delta$ ] politician rightwing-dat Koldo.Abs politician leftwing-dat I.Abs/you.Abs baino maiz-ago aurkez-ten d-i-e-te. than often-er introduce-IMPF 3Abs-Aux-3dat-3erg 'They introduce Koldo to rightwing politicians more often than me/you to leftwing politicians.' ( $\checkmark$ 3dat > 1/2abs)

- (25) illustrates this effect of comparative deletion with psych-predicates.
- PCC obviation with comparative deletion: Psych-predicates
   Mikel-i Mona [ni-ri zu Δ] baino gehi-ago gusta-tzen z-ai-o.
   Mikel-DAT Mona.ABS I-DAT you.ABS than more-er like-IMPF 3ABS-AUX-3DAT
   'Mikel likes Mona more than I (like) you.'

Possessor-dative constructions are illustrated in (26).

- (26) *PCC obviation with comparative deletion: Possessor-dative constructions* 
  - a. Baseline: PCC
    - \*Guraso-ei ni beso-etatik maiz ken-tzen n-ai-e-te.
      family-DAT I.ABS arms-from often take.away-IMPF lABS-AUX-3DAT-3ERG

      Intended: 'They often take me away from my parents' arms.' (\*3DAT > lABS)

## b. Obviation in comparative deletion

Guraso hori-ei haur-ak beso-etatik [ *ama-ri* **ni/zu** Δ ] baino parents those-DAT children-ABS arms-from mother-DAT I.ABS/you.ABS than maiz-ago ken-tzen d-izki-e-te. often-er take.away-IMPF 3ABS-AUX-3DAT-3ERG

'They take children away from those parents' arms more often than me/you from my/your mom's.'

( $\sqrt{3}$  DAT > 1/2ABS)

#### 2.7. PCC and overt $\phi$ -agreement

The data in the preceding sections provides converging evidence that the Basque PCC is systematically sensitive to ellipsis. What the various ellipsis configurations in this section have in common is that they elide the lexical verb and the agreeing auxiliary, and we showed that this ellipsis obviates the PCC. This finding has important implications for our understanding of PCC effects. The standard approach to ellipsis involves (PF) deletion or non-pronunciation of syntactic structure present in the ellipsis site (see, e.g., Ross 1969, Sag 1976, Merchant 1999, 2001, 2004, 2013, Fox 2000, Kennedy & Merchant 2000, Fox & Lasnik 2003, Van Craenenbroeck 2010, Bošković 2014, Wurmbrand 2017, Mendes 2020, Mendes & Nevins 2023, among many others; see, e.g., Van Craenenbroeck & Merchant 2013 and Merchant 2019 for an overview). That is, the elliptical clauses involve regular clausal syntax with partial deletion or non-pronunciation at PF. This is the case for Basque as well. First, Basque exhibits case-connectivity effects (see Ross 1969, Merchant 1999, 2001, 2004, Ott 2014, and Lechner 2018, among others, for discussion of case connectivity in various ellipsis constructions). The remnant DPs must bear the same cases they would in the absence of ellipsis. For example, gapping in (10) leaves behind an ergative DP, a dative DP, and an absolutive DP. Following the literature just cited, we conclude that the ellipsis site must therefore contain the syntactic structure necessary for licensing these cases, and because these cases must be identical to the non-elided counterpart of the sentence, this structure must be the regular clause structure. Case connectivity holds for all ellipsis structures considered here. Assuming that case is assigned under φ-Agree (e.g., Chomsky 2000, 2001), case connectivity also directly entails the presence of regular clausal  $\phi$ -probes in elided structure. Second, Basque obeys Merchant's (2001) P-stranding generalization: Basque does not permit P-stranding under movement, and sluicing does not permit P-stranding either. Both case connectivity and the P-stranding generalization are standard arguments for the presence of regular syntactic structure in ellipsis sites, motivating this view for Basque as well.

If ellipsis sites contain ordinary clause structure, we can infer that they must syntactically contain the regular verbal  $\phi$ -probe(s) as well, the only difference being that these probes are not overtly realized at PF.<sup>4</sup> The fact that in this case the PCC restrictions systematically disappear provides clear

<sup>&</sup>lt;sup>4</sup> In principle, as a reviewer suggests, it is conceivable that the syntactic status of φ-probes differs between elided and non-elided structure, with φ-probes missing in elided structures. However, such an approach strikes us as unprincipled. First, we are not aware of evidence, in Basque or elsewhere, that would support such a partial syntactic representation in the ellipsis site. Second, we are also not aware of this view having been independently proposed in the literature on ellipsis. Third, it is not clear to us how this account could be modeled in the first place: the syntax would have to

indication that the Basque PCC is tied to the overt morphological realization of this  $\phi$ -probe. This generalization is stated in (27), which covers all of the ellipsis data in sections 2.2–2.6.<sup>5</sup>

be able to build clause structures without  $\phi$ -probes in them, but only if such structures later undergo ellipsis at PF, a significant look-ahead problem. Fourth, as noted in the text, if case assignment involves  $\phi$ -Agree, as is standardly assumed, case connectivity directly entails the presence of ordinary  $\phi$ -probes in the elided clause structure. Fifth, the view that ellipsis sites lack  $\phi$ -probes would still pose significant problems for a standard nominal-licensing account (to be discussed in section 3.1): if ellipsis sites lack  $\phi$ -probes, all object DPs that originate in an ellipsis site would remain unlicensed and thus violate the PLC. This would predict that verbal ellipsis leads to ungrammaticality in the presence of any object DP, the opposite of what we find. For these various reasons, this approach does not seem like a viable alternative to the conclusion drawn in the main text.

(i) Ni-k harakina-ri zu saldu {\*z-aiti-o-t / z-aitu-t }. ditransitive I-ERG butcher-DAT you.ABS sold 2ABS-AUX-3DAT-lERG 2ABS-AUX-lERG 'I have sold you to the butcher.'

Not all speakers have this rescue strategy (Rezac 2010:774, 2011:184), but for speakers who accept (i) with the auxiliary form that drops dative agreement interpreting PCC obviation under ellipsis becomes somewhat more difficult. This is because it is then conceivable that the structure that underlies the ellipsis involves this form of the auxiliary. Since this form is grammatical even if no ellipsis applies, it is no longer clear whether ellipsis interacts with the PCC.

Fortunately, it is easy to show that this is not a general concern. PCC repair via dropping of the dative agreement is available only in ditransitive constructions, but not with psych-predicates, possessor datives, applicative datives, or causatives (Rezac 2008b:81, 2010:774–776, 2011:185), as shown in (ii)–(v), respectively. For these constructions, there is no form of the agreeing auxiliary that would make them grammatical.

- (ii) \*Itxaso-ri **ni** gusta-tzen { n-atzai-o / n-aiz / d-u-t }. psych-predicate
  Itxaso-dat I.abs like-impf labs-aux-3dat labs-aux 3abs-aux-lerg
  Intended: 'Itxaso likes me.'
- (iii) \*Miren-i ni beso-etara bota { n-ai-o-te / n-au-te }. possessor dative Miren-DAT I.ABS arms-into thrown labs-aux-3DAT-3ERG labs-aux-3ERG Intended: 'They threw me into Miren's arms.'
- (iv) \*Lami-ek Miren-i **zu** jan-go { z-aiti-o-te / z-aituz-te }. applicative dative lamias-erg Miren-dat you.abs eat-fut 2abs-aux-3dat-3erg 2abs-aux-3erg Intended: 'The lamias will eat you on Miren.'
- (v) \*Haiek ni-ri **zu** isil-arazi-ko { z-ai-da-te / z-aituz-te }. causative they.erg I-dat you.abs silence-caus-fut 2abs-aux-ldat-3erg 2abs-aux-3erg Intended: 'They will make me silence you.'

The fact that PCC obviation under ellipsis holds for psych-verbs, possessor datives, applicative datives, and causatives as well despite there not being a grammatical non-elided counterpart thus provides clear evidence for (27) even for speakers who have the contrast in (i).

Second, in some varieties of Basque, psych-predicates permit repair of a PCC violation through so-called *absolutive displacement* (Rezac 2008b, 2010, 2011:224–229). Here, the absolutive DP appears in ergative case and controls ergative agreement, and the absolutive agreement slot bears 3rd person default agreement. An example is given in (vi), taken from Rezac (2008b:81). A 2nd person absolutive DP is ungrammatical regardless of the form of the auxiliary, but if the DP appears in ergative case, the sentence is grammatical.

(vi) Itxaso-ri { zu-k / \*zu } gusta-tzen d-i-o-zu. Itxaso-dat you-erg you.abs like-impf 3abs-aux-3dat-2erg 'Itxaso likes you.'

Crucially for us, absolutive displacement in (vi) manifests in the form of the DP (zu-k instead of zu). This means that it is possible to tell whether absolutive displacement has taken place in a given structure even if the auxiliary is elided. In all of our ellipsis examples, the form of the object DP is absolutive, not ergative. The fact that these structures are

<sup>&</sup>lt;sup>5</sup> Two notes on PCC repairs. First, for some speakers, including the second author, it is possible to repair ditransitive PCC violations by dropping the dative agreement (Rezac 2010:774, 2011:184). Thus, (i) is ungrammatical with the regular agreement form *z-ait*(*i*)-*o-t*, but grammatical if the absolutive and the ergative DP are agreed with (*z-aitu-t*):

(27) Basque PCC effects disappear in clauses that do not contain an overtly realized verbal φ-probe.

While (27) covers all ellipsis cases discussed above, its scope is not confined to these ellipsis cases. As mentioned in section 1, PCC effects are also obviated in Basque in nonfinite clauses that lack agreement altogether. This effect too can be observed across all five PCC configurations investigated here. Laka (1993a:27) and Albizu (1997:5) observe this effect for ditransitives; Arregi & Nevins (2012: 68–69) demonstrate it for ditransitives and psych-predicates. For ditransitives, the generalization is illustrated in (28), from Coon & Keine (2021:662). (28a) provides the baseline PCC configuration. (28b,c) show that the same combination of arguments does not lead to ungrammaticality if it occurs inside a nonfinite clause. For psych-predicates, the generalization is illustrated in (29), adapted from Arregi & Nevins (2012:65, 69). The same is true for possessor datives, applicative datives, and causatives, as shown in (30)–(32).

- (28) PCC effects disappear in nonfinite clauses: Ditransitives
  - a. \*Zu-k harakina-ri ni saldu n-ai-o-zu.
    you-erg butcher-dat I.abs sold labs-aux-3dat-2erg
    Intended: 'You have sold me to the butcher.'

(\*3DAT > 1ABS)

- b. Gaizki irudi-tzen z-ai-t [zu-k *harakina-ri* **ni** sal-tze-a]. wrong look-IMPF 3ABS-AUX-lDAT you-ERG butcher-DAT I.ABS sell-IMPF-ART.ABS 'It seems wrong to me for you to sell me to the butcher.' (\sqrt{3DAT} > 1ABS)
- c. Zu-k [harakina-ri ni sal-tze-n] probatu d-u-zu.
  you-erg butcher-dat I.abs sell-impf-loc attempted 3abs-aux-2erg
  'You have attempted to sell me to the butcher.' (\sqrt{3}dat > labs)
- (29) PCC effects disappear in nonfinite clauses: Psych-predicates
  - a. \**Ni-ri* **zu** ondo jaus-ten z-atzai-t.

    I-DAT you.ABS well fall-IMPF 2ABS-AUX-lDAT *Intended*: 'I like you.'

(\*1DAT > 2ABS)

- b. [Ni-ri zu ondo jaus-te-a] nahi d-u-t. I-DAT you.ABS well fall-IMPF-ART.ABS want 3ABS-AUX-1ERG 'I want to like you.'  $(\sqrt[4]{1}DAT > 2ABS)$
- (30) PCC effects disappear in nonfinite clauses: Possessor-dative constructions (cf. (7b))
  Gaizki irudi-tzen z-ai-t [Miren-i zu beso-etara bota-tze-a].
  wrong look-IMPF 3ABS-AUX-lDAT Miren-DAT you.ABS arms-into throw-IMPF-ART.ABS
  'It seems wrong to me to throw you into Miren's arms.' (\sqrt{3DAT} > 2ABS)

grammatical therefore cannot be attributed to absolutive displacement but must be the result of ellipsis, in line with (27). Moreover, absolutive displacement is limited to psych-verbs and not available in the other PCC configurations (Rezac 2008b:80).

- (31) PCC effects disappear in nonfinite clauses: Applicative-dative constructions (cf. (8b))

  [ Lami-ek Miren-i zu ja-te-a ] nahi d-u-t.

  lamias-ERG Miren-DAT you.ABS eat-IMPF-ART.ABS want 3ABS-AUX-1ERG

  'I want the lamias to eat you on Miren.' (√3DAT > 2ABS)
- (32) PCC effects disappear in nonfinite clauses: Causatives (cf. (9b))

  Gaizki irudi-tzen z-ai-t [haiek ni-ri zu isil-araz-te-a].

  wrong look-IMPF 3ABS-AUX-lDAT they.ERG I-DAT you.ABS silence-CAUS-IMPF-ART.ABS

  'It seems wrong to me for them to make me silence you.' (\(^1\)DAT > 2ABS)

Assuming that the absence of verb agreement in these nonfinite clauses indicates the syntactic absence of a  $\phi$ -probe, Preminger (2011b, 2019) and Coon & Keine (2021) conclude that the PCC disappears if a clause does not syntactically contain a  $\phi$ -probe. In light of the ellipsis facts, it stands to reason that this effect is just a special case of the generalization in (27). Clauses that do not contain a  $\phi$ -probe at all clearly also do not contain an overtly realized  $\phi$ -probe. The disappearance of the PCC in (28)–(32) then falls under (27). Conversely, the ellipsis facts presented here strongly suggest that the overarching generalization is not about the syntactic presence or absence of a  $\phi$ -probe, but instead about the presence or absence of an *overtly realized*  $\phi$ -probe.

All of the ellipsis cases in sections 2.2–2.6 involve ellipsis of both the lexical verb and the agreeing auxiliary. The formulation of the empirical generalization (27) only makes reference to the realization of the  $\phi$ -probe. This predicts that ellipsis of the auxiliary alone is sufficient to obviate the PCC. This expectation is in line with the nonfinite clauses in (28)–(32), in which the lexical verb is retained but the PCC is nonetheless obviated. For ellipsis, the prediction is more difficult to test because ellipsis of just the auxiliary is more restricted. But it is possible in gapping configurations to elide only the auxiliary and retain the lexical verb. In this case, the PCC likewise disappears in the conjunct in which the gapping applies. This is shown for ditransitive predicates in (33) and for possessor datives in (34).

- (33) Gapping of auxiliary obviates the PCC: Ditransitives

  Jon-ek harakina-ri Mikel oparitu d-i-o, eta alkatea-ri **ni** saldu  $\Delta$ .

  Jon-erg butcher-dat Mikel.abs gifted 3abs-aux-3dat and mayor-dat I.abs sold

  'Jon gifted Mikel to the butcher and sold me to the mayor.'

  ( $\checkmark$ 3dat > labs)

A second relevant configuration is Right-Node Raising, not illustrated here: Right-Node Raising allows omission of just the auxiliary in the first conjunct, which likewise obviates the PCC in this

conjunct. Like (33) and (34), this corroborates the generalization in (27): the PCC is obviated whenever the verbal agreement is not overtly realized.

In sum, the generalization in (27) captures the systematic obviation of PCC effects in a wide range of configurations, both under verbal ellipsis and in nonagreeing nonfinite clauses. In light of its pervasiveness, (27) should find an explanation in the basic principles that underlie the PCC (a conclusion also supported by familiar poverty-of-the-stimulus considerations). The next section considers what analytical constraints (27) imposes on accounts of the PCC in Basque.

# 3. Implications for accounts of the PCC

The PCC has generated an empirically and analytically rich literature. This section discusses the implications of the evidence in the previous sections for accounts of the (Basque) PCC. We argue that the ellipsis facts provide an argument against nominal-licensing accounts of the PCC and in general against purely syntactic approaches. At the same time, there is evidence in Basque that a purely morphological analysis of the PCC is also insufficient. The goal of this section is not a comprehensive discussion of existing accounts of the PCC, but to evaluate the significance of the generalization in (27) in the context of these accounts. This will then form the basis of our own proposal in section 4.

#### 3.1. Nominal-licensing accounts and failed Agree

Abstracting away from specifics of implementation, the most common approach to the PCC in the recent literature is to attribute the person restriction to *failed Agree* between a probe and a DP due to intervention by another DP. The source of the restriction is often attributed to failed *nominal licensing*. The general analytical intuition pursued by these approaches is that 1st and 2nd person DPs require (special) nominal licensing through Agree with a functional head. The PCC then arises in configurations in which two DPs need to agree with, or be licensed by, a single functional head, but this functional head is unable to do so (see, e.g., Anagnostopoulou 2003, 2005, Béjar & Rezac 2003, Adger & Harbour 2007, Nevins 2007, Baker 2008, 2011, Richards 2008, Preminger 2011b, 2019, Walkow 2012, 2013, Kalin 2019, Stegovec 2020, Deal 2023).

For the sake of concreteness, we illustrate this general approach with Béjar & Rezac's (2003) analysis in terms of the *Person Licensing Condition* (PLC) in (35). This condition states that 1st and 2nd person DPs are subject to special licensing requirements, which are met by Agree with a functional head.

(35) Person Licensing Condition (Béjar & Rezac 2003:53)

An interpretable 1st/2nd person feature must be licensed by entering into an Agree relation with a functional category.

In PCC configurations, a direct object DP is separated from its licensing head (by assumption v) by the indirect object. The indirect object blocks  $\phi$ -Agree across it (more specifically Agree for person), preventing the relevant probe on v from agreeing with the direct object, as shown in (36). If the direct

object is 1st or 2nd person, it therefore remains unlicensed, in violation of the PLC (35). Because 3rd person DPs are not subject to the PLC, the direct object may be 3rd person without incurring a licensing problem.

(36) 
$$[_{HP} H^0 \dots [\dots DP \dots [\dots DP_{[1/2]} \dots]]] \rightarrow violates (35)$$

In this way, the account derives the restriction that the direct object may not be 1st or 2nd person in the presence of an indirect object, which is correct for Basque.

The general approach of attributing the PCC to the failure of a nominal to  $\varphi$ -agree with a functional head has been maintained in much recent work, but this body of work offers different explanations for why certain nominals must agree in this way.<sup>6</sup> For example, Anagnostopoulou (2003, 2005) reduces this requirement to the Case Filter; Adger & Harbour (2007) attribute it to an interaction between Case licensing and selection; and Stegovec (2020) suggests that  $\varphi$ -Agree is necessary in order for an argument clitic to receive interpretable  $\varphi$ -features. In spite of these differences, these accounts share the core idea that the PCC arises from the failure of a nominal to  $\varphi$ -agree with a functional head. For ease of reference, we will refer to such analyses as "(nominal) licensing accounts" or "failed-Agree accounts" because on these accounts, the object (either a full DP or an argumental clitic) must  $\varphi$ -agree with a functional head in order to license its occurrence. The PCC results, on these accounts, from the inability to establish such  $\varphi$ -Agree.

As we now show, the analytical challenge that arises from the ellipsis cases is largely the same for accounts within this family, and in what follows, we will therefore abstract away from the differences between them. Let us consider the generalization in (27), according to which PCC effects disappear in the absence of an overtly realized  $\phi$ -probe, in the context of licensing/failed-Agree accounts of the PCC. Because such accounts attribute the PCC to the presence of an unlicensed DP that arises from the failure to establish a  $\phi$ -Agree relation with this DP, it is not at all clear on such accounts why eliding the  $\phi$ -probe should obviate the PCC. For concreteness, let us consider the gapping case (11), adapted here in (37). For the sake of clarity, the elided material *gusta-tzen z-atzaizki-t* is struck-out. If this ellipsis does not take place, the example is ungrammatical (see (6c)), and there is no grammatical overt form of the ellipsis site in (37). This means that the PCC obviation must be directly the result of the verbal ellipsis.

While this difference affects which of the two DPs is the one that fails to agree, it does not affect the basic idea that the PCC results from the failure to agree with both DPs. The problem posed by the Basque ellipsis facts is therefore the same for these analyses as it is for analyses in which it is the lower DP that cannot be agreed with.

<sup>&</sup>lt;sup>6</sup> Another dimension along which accounts within this family differ is the structural relationship between the licensing φ-probe and the to-be-agreed-with nominal. Most often, the probe is located above both DPs, as in (36), but other accounts sandwich the functional head between the two DPs (e.g., Adger & Harbour 2007, Walkow 2013, Yokoyama 2019, Deal 2023), as in (i).

(37) Zu-ri Pello gusta-tzen z-ai-zu, eta *ni-ri* **zu** gusta-tzen you-dat Pello.abs like-impf 3abs-aux-2dat and I-dat you.abs like-impf z-atzaizki-t
2abs-aux-1dat
'You like Pello and I you.' (√1dat > 2abs)

Two principal problems arise for a nominal-licensing/failed-Agree account of the PCC. First, because the licensing requirement (such as the PLC (35)) is syntactic in nature in the sense that it requires a syntactic operation to take place (i.e.,  $\phi$ -Agree and/or case assignment), it is unexpected that non-pronunciation of syntactic structure should interact with it and abrogate the PCC. Second, the DP arguments whose cooccurrence is normally prohibited by the PCC (i.e., *ni-ri* 'I-DAT' and *zu* 'you.ABS' in (37)) are *not* affected by gapping—they are outside of the ellipsis site. An account that attributes the PCC to the presence of an unlicensed *nominal* therefore leaves unexplained why the PCC is obviated if the *verb and auxiliary* are elided.

One might wonder whether this rescuing effect of ellipsis can be attributed to the frequently-assumed (though controversial) ability of some ellipsis processes to repair island violations (e.g., Ross 1969, Chomsky 1972, Merchant 1999, 2001, 2008, Kennedy & Merchant 2000, Fox & Lasnik 2003, Bošković 2011). In what follows, we provide two arguments that ungrammaticality repair under ellipsis does not offer a principled explanation for (37) on a nominal-licensing-based account. First, (37) involves gapping, and gapping (like stripping) does not have the ability to repair island violations in Basque in the first place, just like it does not in English (see Merchant 2019 and the references cited there). This is demonstrated for gapping in (38) and for stripping in (39).

#### (38) No island repair under gapping

\*Batzu-ek greko-a azter-tzen duen ikertzaile-a alokatu nahi some-ERG Greek-ABS investigate-IMPF have.COMP research-ABS hired want d-u-te, eta beste batzu-ek  $\Delta$  albaniar-a.

3ABS-AUX-3ERG and other some-ERG Albanian-ABS

Intended: 'Some wanted to hire the researcher who studies Greek, and others the one who studies Albanian.'

## (39) No island repair under stripping

\*Kotxe-a lapurtu zuen gizon-a harrapatu d-u-te, baina ez  $\Delta$  car-ABS stolen have.pst.comp man-ABS caught 3ABS-AUX-3ERG but not bizikleta.

bicycle.ABS

*Intended:* 'They have caught the man who stole the car, but not the one who stole the bike.'

Gapping and stripping thus do not in general have the ability to repair ungrammatical structures in Basque. The PCC obviation under gapping and stripping therefore cannot simply be attributed to such an ability. It would therefore be entirely ad hoc to stipulate that gapping and stripping nonetheless repair nominal-licensing failures.

Second, in the cases of island repair under ellipsis discussed in the literature, the source of the ungrammaticality is located *inside* the ellipsis site. In fact, Fox & Lasnik (2003) and Merchant (2008) explicitly argue that rescue-by-ellipsis only applies to material within the ellipsis site, not to material outside of it. Importantly, on a licensing account of the PCC, the source of the PCC is a DP that has failed to agree and therefore remains unlicensed. Crucially, however, this DP is *not* elided in (37) and hence outside of the ellipsis site in all the examples in sections 2.2–2.6. Therefore, even if cases such as (38) and (39) were rescued by eliding the structure that gives rise to the ungrammaticality, a licensing account of the PCC would nonetheless fail to derive the rescuing effect of ellipsis in (37) because ellipsis would apply to the "wrong" element to have a rescuing effect: the DP whose licensing failure is taken to be the source of the ungrammaticality is not elided.

We conclude that the observation that the PCC is modulated by the overt realization of a  $\phi$ -probe poses a serious challenge to accounts that attribute the PCC to failed Agree and concomitant failure to license a DP, and repair by ellipsis is unlikely to overcome this challenge in a principled manner. This conclusion is independent of what exactly underlies the licensing requirement and which of the two DPs is the one that remains unlicensed (see fn. 6). Because PCC obviation through verbal ellipsis holds for all PCC configurations discussed in section 2, the same challenge arises for such accounts across this range of constructions.

The ellipsis cases also pose a challenge to licensing accounts that extend to PCC obviation in non-finite clauses (see (28)–(32)). The most explicit version of such an account is developed by Preminger (2011b, 2019), who assumes that that these nonfinite clauses syntactically lack a  $\phi$ -probe and proposes a revised version of the PLC that includes a caveat for such clauses. The caveat is that only DPs that occur in the same clause as a  $\phi$ -probe are subject to the licensing requirement. DPs in clauses without a  $\phi$ -probe may remain unlicensed. This revised PLC is stated in (40).

(40) Person Licensing Condition (Preminger 2011b:931)
 A 1st/2nd-person pronoun in the same clause as a person φ-probe must be agreed with by that φ-probe.

Because according to the PLC in (40), 1st and 2nd person DPs need to be licensed through  $\phi$ -Agree only in clauses that contain a  $\phi$ -probe, it derives the fact that nonfinite clauses in Basque do not show PCC effects.<sup>7</sup>

Coon & Keine (2021) point out that this account is ad hoc in that it does not offer an explanation for why DPs should require licensing through  $\phi$ -Agree only if the clause in which they occur also contains a  $\phi$ -probe. In addition to this objection, the revised PLC (40) also does not straightforwardly extend

<sup>&</sup>lt;sup>7</sup> A related proposal is made by Anagnostopoulou (2003, 2005), whose analysis of the PCC attributes it to failure of Case licensing of the lower DP. In a nutshell, she proposes that 1st and 2nd person DPs bear a special person feature that needs to be checked through Agree. This checking requirement is itself grounded in the Case Filter. To account for the absence of person restrictions with strong pronouns instead of clitics in Greek and with non-agreeing verbs in Icelandic dative-nominative constructions, Anagnostopoulou (2003, 2005) suggests that DPs that are not agreed with may be licensed through default Case assignment. A proper evaluation of this account requires a better understanding of the conditions under which default Case assignment is available—in particular an account of why lower DPs in PCC configurations cannot be rescued through default Case assignment. Moreover, this analysis does not straightforwardly extend to the Basque ellipsis cases since the syntactic mechanisms that this account attributes the PCC to (Agree, feature checking, and the Case Filter) should not be affected by verbal ellipsis.

to the ellipsis cases presented in the preceding section and hence the generalization in (27). As just noted, while the surface form of elliptical sentences like (37) lacks overt  $\varphi$ -agreement, on the standard assumption (motivated for Basque in section 2.7) that ellipsis involves the non-pronunciation or PF deletion of otherwise regular syntactic structure, these sentences nonetheless contain a regular  $\varphi$ -probe syntactically. As such, the DPs in these clauses should be subject to the syntactic licensing requirement even if the  $\varphi$ -probe remains unpronounced at PF. (40) would therefore predict that the PCC is unaffected by ellipsis of the  $\varphi$ -probe, contrary to fact. It is possible, of course, to add a second caveat to (40) according to which only  $\varphi$ -probes that are overtly realized at PF count, but this would simply amount to a restatement of the empirical generalization. In our own analysis, we will attempt to develop a more explanatory account.

We take the generalization that the PCC arises only in the presence of an overtly realized verbal  $\phi$ -probe to provide strong indication that the PCC arises from the  $\phi$ -probe and its overt realization. Because licensing accounts of the PCC locate the source of the PCC in *syntactic* licensing needs of a DP, they do not offer a ready explanation of the role of the PF realization of the verbal agreement. Instead, (27) invites an approach to the PCC grounded in the  $\phi$ -probe and its realization. Before we pursue such an account, we document another constraint on the analysis space in the next section.

#### 3.2. Morphological approaches

The effect of ellipsis on the PCC could be taken as direct support for a morphological or PF characterization of the (Basque) PCC (see Perlmutter 1971, Bonet 1991, 1994, Laka 1993a, 1996, Arregi & Nevins 2008, 2012). For example, Bonet (1994:36) states a morphological constraint to the effect of (41) for Basque. The constraint is morphological in nature in that it operates on the agreement markers, not the argument DPs themselves.

(41) If there is dative agreement, the absolutive agreement must be 3rd person. [Bonet 1994]

Because the constraint in (41) applies to the agreement morphology rather than the arguments themselves, it elegantly derives that the Basque PCC disappears in nonfinite clauses (see section 2.7): because these clauses lack agreement altogether, they are in compliance with (41) even if the absolutive DP is 1st or 2nd person. Furthermore, this account potentially derives the ellipsis facts in section 2 if ellipsis sites do not contain agreement markers relevant for (41).

While a morphological account of the Basque PCC is thus potentially better-equipped to handle the interactions with ellipsis, Albizu (1997) and Rezac (2008b) point out a significant challenge to a purely morphological approach to the PCC (also see Preminger 2019). Albizu (1997) and Rezac (2008b) make the important observation that the Basque PCC is sensitive to the *syntactic* configuration of the absolutive DP and the dative DP, a distinction that is neutralized in the agreement

<sup>&</sup>lt;sup>8</sup> Another possibility, suggested to us by Omer Preminger (p.c.), might be to assume that if the φ-probe is elided, it no longer counts as a being a clausemate of the DP—that is, the DP then no longer counts as occurring in the same clause as the φ-probe. However, it is not clear why ellipsis should affect the clausemate relation in this way, and we do not know of existing definitions of the clausemate relation that would have this effect. Furthermore, we are not aware of any independent indication from other syntactic dependencies that clausematehood is destroyed by ellipsis in this way.

morphology: in particular, the PCC arises only if the dative DP is structurally higher than the absolutive DP. In particular, they show that there are verbs in Basque that take only an absolutive and a dative argument and that these verbs fall into two classes, illustrated in (42), from Rezac (2008b:63). The first class involves unaccusative psych-verbs like *gustatu* 'like'. We already saw in (6) that this class exhibits the PCC—the absolutive DP may not be 1st or 2nd person. The second class is exemplified by the verb *etorri* 'come'. Verbs in this second class do not restrict the person of the absolutive DP. Rezac (2008b) demonstrates through a number of syntactic tests that the two verb classes differ in the hierarchical relationship between the base positions of the absolutive DP and the dative DP. With psych-verbs like *gustatu* 'like', the dative DP c-commands the absolutive DP; with motion verbs like *etorri* 'come', the absolutive DP c-commands the dative DP. This distinction is not reflected in the surface word order between the two DPs, which is free.

(42) a. PCC with DAT > ABS verbs

\*Ni Itxaso-ri gusta-tzen n-atzai-o.

I.ABS Itxaso-DAT like-IMPF lABS-AUX-3DAT

Intended: 'Itxaso likes me.'

b. No PCC with ABS > DAT verbs

Ni Itxaso-ri etor-tzen n-atzai-o.

I.ABS Itxaso-DAT come-IMPF lABS-AUX-3DAT

'I am coming to Itxaso.'

(\*1ABS > 3DAT)

Crucially, the difference in the syntactic relationship between the absolutive DP and the dative DP is neutralized in the morphology—that is, the form of the agreeing auxiliary is identical between the two verb classes. As a consequence, the would-be form of the auxiliary in (42a)—were it grammatical—is identical to the attested form in (42b). Thus, we conclude with Albizu (1997) and Rezac (2008b) that whatever underlies the ungrammaticality of (42a) cannot be solely morphological in nature because the morphological form of the auxiliary is demonstrably permissible (42b) (in violation of (41)). A purely morphological surface filter thus fails to make the right cut.<sup>10</sup> Albizu (1997), Rezac

<sup>&</sup>lt;sup>9</sup> While this characterization is true for Standard Basque, which is our domain of investigation here, it is worth mentioning that there are some nonstandard varieties that restrict or rule out 1st or 2nd person absolutive DPs even with motion verbs (Rezac 2009, Arregi & Nevins 2012). For these varieties, it is conceivable that motion verbs too involve a DAT>ABS syntax, like psych-verbs. Alternatively, for these varieties, a purely morphological filter of the kind proposed by Arregi & Nevins (2008, 2012) might be the appropriate analysis. Both analyses would in principle be compatible with our own account for Standard Basque here, but they do not extend to Standard Basque for the reasons given in the main text. In the discussion that follows, the term "Basque" should be understood as "Standard Basque", with other varieties put aside.

A more nuanced account is proposed by Arregi & Nevins (2008:57–58, 2012:64–69), who treat the Basque agreement markers on the auxiliary as clitics, and they assume that absolutive and dative clitics appear on the same head ("H" for Arregi & Nevins 2008; "T" for Arregi & Nevins 2012). They then propose that this head can host only a single clitic. This has the effect that absolutive clitics and dative clitics are incompatible with each other. Following Laka (1993a), they furthermore argue that 3rd person absolutive DPs do not generate a clitic so that it is specifically Ist/2nd person absolutive clitics that are prohibited from cooccurring with a dative clitic, deriving the PCC. The account is morphological in nature in the sense that it imposes a restriction on the amount of material that the morphologically complex auxiliaries may comprise.

To account for the disparity between the two verb classes in (42) with respect to the PCC, Arregi & Nevins (2012) suggest that the dative DP in (42b) differs from the dative DP in (42a) in that the dative clitic in (42b) appears on a

(2008b), and following them Preminger (2019) conclude that an account of the PCC that extends to the contrast in (42) must crucially involve a syntactic component and specifically be sensitive to the syntactic relationship between the two DPs. This is expressed in the generalization in (43).

(43) Basque PCC effects arise only if the dative DP c-commands the absolutive DP (a relationship that is neutralized in the agreement morphology).

## 3.3. Interim summary

Let us take stock. On the one hand, we saw evidence from ellipsis and nonfinite clauses that the PCC in Basque is sensitive to the overt realization of a  $\phi$ -probe. At the same time, the contrast in (42) shows that a non-stipulative account ought to be sensitive to the syntactic arrangement of the dative DP and the absolutive DP. These two conclusions are repeated in (44).

- a. Basque PCC effects disappear in clauses that do not contain an overtly realized verbal φ-probe.
  - b. Basque PCC effects arise only if the dative DP c-commands the absolutive DP (a relationship that is neutralized in the agreement morphology).

These generalizations strongly suggest that a comprehensive account of the Basque PCC must be sensitive to *both* the syntactic configuration of the DPs *and* the PF realization of the verbal  $\phi$ -agreement. (44) imposes significant constraints on the analysis space. Nominal-licensing accounts are sensitive to the syntactic relationship between the DPs but because nominal licensing is crucially syntactic in nature, the role of the PF realization of the  $\phi$ -probe in (44a) remains unexplained. On the other hand, morphological accounts of the Basque PCC are potentially better equipped to derive the role of overt  $\phi$ -agreement, but they do not lend themselves to a principled account of the role that the syntactic arrangement of the two DPs plays, hence (44b). Both types of approaches therefore miss important, if complementary, generalizations.

As a result, a comprehensive account of the Basque PCC should be cross-modular in the sense that it is conditioned by both narrow-syntactic factors (in particular the syntactic relationship between the two DPs) and PF factors (in particular whether the verbal  $\phi$ -probe is pronounced or not). Moreover,

separate functional head, different from the functional head that hosts the absolutive clitics. The two clitics therefore do not compete for the same host and may thus cooccur. This analysis derives the contrast in (42), but we will not adopt it here for two reasons. First, the assumption that the dative clitic is hosted on a different head in (42a) than in (42b) is not independently motivated—the surface forms of the auxiliaries in the two classes are always identical. Second, it is simply a stipulation that the dative clitic in (42a) is hosted by the same head as the absolutive clitic but the dative clitic in (42b) is not. The inverse of this situation would be equally conceivable, yielding the PCC in (42b) but not in (42a). This account therefore leaves unexplained the empirical connection between the syntactic relationship between the two DPs on the one hand and the presence or absence of PCC effects on the other—it misses the generalization in (43) that all cases of the PCC in Basque arise in configurations in which a dative DP c-commands an absolutive DP. Moreover, the syntactic condition on the PCC described in (43) is not specific to Basque either but a general property of PCC effects crosslinguistically, which generally arise whenever a dative DP intervenes between a probe and a structurally lower accusative/absolutive DP. In light of this generality and pervasiveness, (43) ought to follow from the principles of the account. But this calls for an account that is sensitive to the syntactic relationship between the two DPs.

the sensitivity of the PCC to the pronunciation of the  $\phi$ -probe encourages an account that attributes the PCC to verbal agreement rather than to nominal licensing. The challenge is to develop an account that has these properties. We undertake this task in the next section, where we develop an analysis based on Coon & Keine's (2021) feature-gluttony approach to hierarchy effects that, we argue, allows us to understand these generalizations.

## 4. A feature-gluttony account

Coon & Keine (2021) develop an approach to the PCC and other hierarchy effects that attributes these effects to configurations in which a single probe agrees with multiple goals—configurations they call feature gluttony or simply gluttony (also see Coon et al. 2021, Hoover 2021, Keine et al. 2022, and Bhatia & Bhatt 2023 for applications of this approach to other domains). Such double Agree takes place when, after an articulated probe has agreed with one DP, there is a second DP that bears features that are sought after by the probe but that are not present on the higher DP. A probe that has agreed with two DPs is called *gluttonous*. As will become important, feature gluttony is not itself ungrammatical, but it results in an irresolvable conflict in the morphological realization of the head that contains the gluttonous probe, resulting in ineffability and hence ungrammaticality. Crucially, ellipsis bleeds the morphological realization of elided structure (a view motivated on independent grounds), and so no morphological conflict arises if the gluttonous probe is elided. In other words, verbal ellipsis obviates the otherwise fatal effects of a gluttonous probe, which we show enables a principled explanation of the generalizations in (44). The core ingredients of our account are previewed in (45). Our analysis differs from Coon & Keine's (2021) general account of the PCC in some respects; most importantly, we treat the Basque PCC as arising from a φ-agreement probe rather than from cliticization (see section 6 for some general comments), and we integrate the effects of ellipsis on gluttonous probes. (45a) and (45b) are presented in sections 4.1 and 4.2, respectively; (45c) is discussed in section 4.4; and (45d) in section 5.2.

#### (45) Principles of the account

- a. Segment-based φ-Agree
   (e.g., Béjar 2003, 2008, Béjar & Rezac 2009, Béjar & Kahnemuyipour 2017, Coon & Keine 2021),
- b. Late insertion of vocabulary items (e.g., Halle & Marantz 1993, 1994, et seq.)
- c. Ineffability in vocabulary insertion arising from multivaluation (Schütze 2003, Citko 2005, Van Riemsdijk 2006, Kratzer 2009, Asarina 2011, 2013, Bjorkman 2016, Citko & Gračanin-Yuksek 2021, Coon & Keine 2021, Privizentseva 2021, 2023, Bhatia & Bhatt 2023),

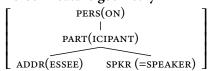
 d. Ellipsis bleeds vocabulary insertion (Merchant 1999, 2001, 2015, Kennedy & Merchant 2000, Abels 2019, Mendes 2020, Privizentseva 2021, 2023, Mendes & Nevins 2023)

The feature-gluttony approach differs from the approaches discussed in section 3 in several respects. Unlike purely morphological approaches, the account crucially relies on syntactic Agree and the structural relationship between  $\phi$ -probes and DPs. Unlike nominal-licensing approaches, (i) it does not involve a requirement for DPs to be licensed through  $\phi$ -Agree (that is, there is no person-licensing requirement such as the PLC); (ii) PCC configurations are characterized not by failed Agree, but by double Agree (in other words, the PCC results from "too much" Agree); (iii) the account locates the source of the PCC not in an unlicensed DP, but in a gluttonous  $\phi$ -probe; and (iv) the account crucially involves a lethal morphological conflict and is hence not purely syntactic in nature.

#### 4.1. Segment-based $\phi$ -Agree and feature gluttony

Following much recent work, we assume that φ-features are internally complex and organized in feature geometries (see Harley & Ritter 2002, Béjar 2003, Béjar & Rezac 2009, Preminger 2014, among many others). The relevant feature geometry for person is given in (46). Following the terminology in Béjar & Rezac (2009) and Coon & Keine (2021), we will refer to the individual subfeatures in (46) as *segments*. Different person values differ in the number of segments they bear. 3rd person DPs bear only the [PERS] segment; 2nd person bears [PERS [PART [ADDR]]]; 1st person bears [PERS [PART [SPRK]]].

### (46) **Person-feature geometry**



Building on work by Béjar (2003, 2008), Béjar & Rezac (2009), Béjar & Kahnemuyipour (2017), and others, Coon & Keine (2021) assume that φ-probes may be internally complex as well and contain uninterpretable counterparts of the segments in (46). The amount of internal articulation is subject to parametrization across languages, yielding different types of PCC patterns; see Coon & Keine (2021:677) and fn. 26.

Following Béjar (2003), Béjar & Rezac (2009), and others, we assume *segment-based Agree*, as defined in (47), from Coon & Keine (2021:665). The individual segments of the probe search independently, each agreeing with the closest matching counterpart on a DP. When a probing segment agrees with a DP, it *interacts* (in Deal's 2015 terms) with the entire person-feature geometry of the DP, and *all* person segments of the DP are copied over to the probe. As such, probing and copying are operations with different granularities: probing applies at the level of the individual segment,

whereas copying is "coarse" and applies at the level of the feature geometry as a whole (see also Béjar 2003:39, Béjar & Rezac 2009:45–46, Preminger 2011a:36–37, 2014:47–48, and Kalin 2019:18–19).<sup>11</sup>

#### (47) Agree

A probe segment [uF] agrees with the closest accessible DP in its c-command domain that bears [F]. If Agree is established, the hierarchy of segments containing [F] is copied over to the probe, valuing and thus removing [uF].

To illustrate with schematic examples, consider a complex probe containing the segments  $[u\alpha]$  and  $[u\beta]$ . (48) shows Agree in a configuration in which the first goal DP contains matching segments  $[\alpha]$  and  $[\beta]$  for each segment (in addition to another segment  $[\gamma]$ ). Each probe segment searches independently and agrees with the closest matching counterpart on the closest DP. As a result of this Agree, for each agreeing segment, the entire feature matrix of the goal DP ( $[\alpha [\beta [\gamma]]]$ ) is copied over onto the probe. Given the set-theoretical axiom that  $\{A, A, ...\} = \{A, ...\}$ , this representation is equivalent to there being a single  $[\alpha [\beta [\gamma]]]$  value on the probe (49).<sup>12</sup> Because both  $[u\alpha]$  and  $[u\beta]$  find a goal on the closest DP, it is irrelevant for this Agree step whether there are other, more distant goals in the structure, as indicated in (48).

(48) 
$$X^{0}$$
 ...  $DP$  ...  $(DP)$ 

$$\begin{bmatrix} u\alpha & \bullet \\ u\beta & \bullet \end{bmatrix} - \cdots - \begin{bmatrix} \bullet \alpha \\ i \\ \beta \\ i \end{bmatrix}$$

$$\begin{bmatrix} \vdots \end{bmatrix}$$

(49) Single-valued probe after Agree in (48)

$$\begin{bmatrix} \phi = \left\{ \begin{bmatrix} \alpha \\ | \beta \\ | \gamma \end{bmatrix}, \begin{bmatrix} \alpha \\ | \beta \\ | \gamma \end{bmatrix} \right\} = \begin{bmatrix} \phi = \left\{ \begin{bmatrix} \alpha \\ | \beta \\ | \gamma \end{bmatrix} \right\} \end{bmatrix}$$

As will become clear, a crucial property of the gluttony account is that the PCC is *not* attributed to failed nominal licensing, failed case assignment, or failed  $\phi$ -Agree (like the PLC (35)/(40)). Thus, if there is a lower DP in (48), this DP does not agree with the  $\phi$ -probe, but this failure to Agree is harmless.

Because each segment searches and agrees independently with its closest counterpart on a DP, it is possible for different segments of a probe to agree with different DPs. This is the case if (i) the probe contains at least two segments, (ii) the higher DP matches some but not all of these segments, and (iii) the lower DP matches some probe segment not matched by the higher DP. This is schematized in

This coarseness of copying is motivated independently of PCC effects. The reason is that probes can be underspecified relative the feature geometry on a DP. For example, the Basque probe in (59) below lacks [uaddr] and [uspkr], hence the distinction between 1st and 2nd person. But the agreement morphology that realizes this probe distinguishes between 1st and 2nd person in Basque, and consequently it is clear that these segments must be copied over from the DP even if the probe is not specified for them. The same reasoning applies to all probes whose segments do not completely mirror the segments on DPs, including flat [upers] probes, which do not result in hierarchy effects at all.

<sup>&</sup>lt;sup>12</sup> Though see fn. 19 for a possible alternative that is compatible with the rest of our account.

(50), where both  $[u\alpha]$  and  $[u\beta]$  agree with their closest counterparts, which are located on different DPs. Configurations in which different segments of a probe agrees with different DPs are called *gluttony*. As a result of these Agree dependencies, the full geometries of both DPs are copied over to the probe, in line with (47). Because of Agree with  $[u\alpha]$ , the higher DP's feature geometry ( $[\alpha]$ ) is copied over; and because of Agree with  $[u\beta]$ , the lower DP's complete feature geometry ( $[\alpha]$ ) is copied over. The  $\phi$ -probe therefore acquires a *pair of distinct values*, as shown in (51).

(51) Multivalued probe after Agree in (50)

$$\left[ \varphi = \left\{ \left[ \alpha \right], \left[ \begin{array}{c} \alpha \\ \beta \\ \gamma \end{array} \right] \right\} \right]$$

Coon & Keine (2021) argue that gluttonous probes such as (51) are not themselves ungrammatical, but the coexistence of two feature values can create an irresolvable conflict in the morphological realization of the gluttonous head, a point that will be crucial in our analysis of the Basque PCC in section 4.4.

Following Preminger (2009, 2011a, 2014, to appear), we assume that Agree must be attempted, but failure to find a goal does not lead to a crash. This holds at the level of the segment as well as at the level of the probe as a whole. Thus, if a probe segment fails to find a matching goal segment, no problem arises. For example, if the search space contains only a DP with an  $[\alpha]$  specification,  $[u\alpha]$  agrees with it (52).  $[u\beta]$  fails to find a goal, but this is unproblematic.

(52) 
$$X^{0}$$
 ... DP 
$$\begin{bmatrix} u\alpha & \bullet \\ u\beta \end{bmatrix}$$
 ---  $\begin{bmatrix} \bullet & \alpha \end{bmatrix}$ 

(53) Single-valued probe after Agree in (52) 
$$[\phi = \{ [\alpha] \} ]$$

If the structure lacks a goal DP altogether, neither segment finds a goal, and the probe remains unvalued, resulting in default agreement (Preminger 2009). Thus, default agreement is analyzed as the realization of an unvalued  $\phi$ -probe.

## 4.2. Late insertion of vocabulary items

A second component of our account is the principles that regulate the morphological realization of syntactic heads. We adopt a *realizational* view of morphology (in the terminology of Stump 2001),

according to which morphology realizes syntactic feature structures. More specifically, we assume a *late-insertion* model like Distributed Morphology (Halle & Marantz 1993, 1994, et seq.). In this model, narrow syntax operates on abstract feature structures that are not associated with phonological properties. These abstract feature structures are given overt exponence post-syntactically through a process commonly called *vocabulary insertion*. This process inserts *vocabulary items* (VIs) into abstract syntactic heads, thereby giving them a phonological realization. Our analysis below treats the Basque PCC as arising from the interaction of this process with gluttonous probes.

As is standard in Distributed Morphology, we assume that VIs may be underspecified with respect to the features of the head they realize.<sup>13</sup> Vocabulary insertion (the process that inserts VIs into syntactic heads) is regulated by the *Subset Principle*, stated in (54) (also known as the *Elsewhere Principle* or *Pāṇini's Principle*).<sup>14</sup> The Subset Principle mandates that only VIs whose morphosyntactic features are a subset of the features of the syntactic head are eligible for insertion. Given underspecification of VIs, it is possible that more than one VI satisfies this requirement. In this case, the most specific eligible VI is chosen, where specificity is determined based on the number of feature segments the VI is specified for.

## (54) Vocabulary insertion

Within a cycle of vocabulary insertion, a vocabulary item V is inserted into a syntactic head H iff (i) and (ii) hold:

- (i) Subset requirement:

  The morphosyntactic features of V are a subset of the morphosyntactic features of H and H's syntactic context;
- (ii) Specificity:
   Of all vocabulary items that meet the subset requirement (i), V bears the greatest number of feature segments.

To illustrate (54) using a schematic example, consider the head features (55a) and the three VIs in (55b). The string to the left of the bidirectional arrow in (55b) is the phonological information of the VI; the string to the right is the VI's morphosyntactic specification, which may be underspecified. The subset requirement (54.i) limits competition to  $/\alpha/$  and  $/\beta/$  (since  $/\gamma/$ 's specification {A, C} is not a subset of {A, B}). Among these, specificity (54.ii) requires that  $/\beta/$  be inserted since it contains more feature segments than  $/\alpha/$ .

Underspecification and competition are widely adopted in current theories of morphology (e.g., Williams 1981, Anderson 1992, Noyer 1992, 1997, Corbett & Fraser 1993, Halle & Marantz 1993, 1994, Wunderlich 1996, Halle 1997, Stump 2001, 2016, Harley & Noyer 2003, Baerman et al. 2005, Arregi & Nevins 2012) as a means of deriving syncretism in morphological paradigms (see also Jakobson 1962 and Bierwisch 1967). For example, verb agreement in the present tense in English is -s in the 3sg but -Ø everywhere else. Theories that employ underspecification can postulate a single VI /-Ø/ that is completely underspecified and thus satisfies (54) for all agreement values except 3sg, where it is blocked by /-s/, which bears [3, sg].

<sup>&</sup>lt;sup>14</sup> The formulation in (54) is based on Halle & Marantz (1993, 1994), Halle (1997), and Keine (2010). For related formulations, see Lumsden (1992), Noyer (1992, 1997), Halle (1994), Müller (2004a,b, 2005), among others.

- (55) Illustration
  - a. Head features:

 $\{A, B\}$ 

b. Vocabulary items:

$$/\alpha/\leftrightarrow \{\}$$
  
 $/\beta/\leftrightarrow \{A\}$   
 $/\gamma/\leftrightarrow \{A,C\}$ 

Thus, the morphosyntactic specification of a VI does not need to fully match the features on the head, it only needs to be a subset.

#### 4.3. Absolutive agreement in Basque

Against the background of these general assumptions, we now turn to specific properties of  $\phi$ -agreement in Basque. Basque auxiliaries exhibit a rich agreement system, including agreement with absolutive, dative, and ergative DPs. Ignoring other aspects of their morphology (for which see, e.g., Hualde 2003b and Arregi & Nevins 2012), the general agreement template is given in (56).

(56) Basque auxiliary-agreement template ABS- $\sqrt{AUX}$ -DAT-ERG

Recent work has argued that Basque agreement markers on auxiliaries are not uniform in that some involve genuine  $\phi$ -agreement while others are clitics. Preminger (2009) argues that the prefixal (absolutive) agreement slot realizes genuine  $\phi$ -agreement while the dative and ergative markers are instances of clitic doubling. The most direct evidence for this difference comes from configurations in which agreement fails. Preminger (2009) shows that genuine agreement and clitic doubling behave differently when they are unsuccessful: failed agreement results in default agreement, whereas failed clitic doubling results in the wholesale absence of the clitic. As shown in (57), clauses that lack an absolutive DP show 3rd person singular agreement on the auxiliary (*d*-). By contrast, (58) shows that clauses that lack a dative or ergative DP simply lack ergative and dative marker on the auxiliary altogether. See Preminger (2009) for much additional discussion and evidence.<sup>15</sup>

No absolutive argument → default agreement
 Ni-k dantzatu d-u-t.
 I-ERG danced 3ABS-AUX-lERG
 'I danced.'

<sup>&</sup>lt;sup>15</sup> All else equal, it is conceivable that the 3rd person absolutive agreement in (57) is agreement with a 3rd person implicit object, rather than default agreement (see Bobaljik 1993, Hale & Keyser 1993, Laka 1993b). We refer the reader to Preminger (2009, 2012) for arguments that this is not the case.

(58) No ergative/dative argument → absence of "agreement"
 Ni joan n-aiz.
 I.ABS go lABS-AUX
 'I went.'

Preminger (2009) concludes that absolutives control genuine agreement in Basque, while dative and ergative "agreement" is clitic doubling. We adopt this conclusion here. Following Rezac (2003, 2004, 2008b, 2011), Béjar & Rezac (2009), and Preminger (2009:655–663), we assume that agreement with the absolutive DP is triggered by a probe in the vP region; for the sake of concreteness, we place the probe on v itself, though the precise identity of the head does not matter for our concerns here. This φ-probe has the specification in (59). Our analysis is also compatible with specifying the probe for either [SPKR] or [ADDR] or both. What is crucial is that the probe contains both [PERS] and [PART], and as such is fully satisfied by 1st and 2nd person DPs, but not by 3rd person DPs, which do not match all of the probe's segments.

(59) Basque person probe on 
$$v$$

$$\begin{bmatrix} u_{\text{PERS}} \\ v_{\text{PART}} \end{bmatrix}$$

Agreement with v is realized in the prefix slot of the Basque auxiliary in (56). As just discussed, following Preminger (2009), we assume based on (58) that the suffixal "agreement" slots (controlled by ergative and dative DPs) are the result of clitic doubling and triggered by probes separate from (59). Because we locate the source of the PCC in the  $\phi$ -Agree by v, we will focus primarily on the Agree behavior of v. We offer a brief discussion of how clitic doubling of dative DPs fits into this system in section 4.5. In what follows, we will also largely put aside number agreement, which we take to be established by a separate probe that operates independently of the issues that are at stake here (see Coon & Keine 2021:669–691 for discussion of number probes in this line of analysis more generally).

Turning now to the morphological realization of agreement with v, the relevant paradigm for the agreement prefixes is provided in (60) (e.g., Hualde 2003b:206–209). As shown, the 3rd person prefixes display sensitivity to tense and mood: in the present tense, the 3rd person prefix is d-; in the past tense, it is z-; in the hypothetical, it is l-; and in 3rd person imperative ("May he/she/it ..."), it is b-.<sup>17</sup>

A similar but more nuanced conclusion is reached by Arregi & Nevins (2008, 2012). They propose that the absolutive marker is a clitic alongside the ergative and dative markers, but that the absolutive DP controls genuine φ-agreement with T, which is realized on the auxiliary root. In other words, they argue that the absolutive controls both a clitic and genuine agreement. This view is in principle compatible with our analysis here as well. What is crucial is that the absolutive controls genuine agreement (possibly in addition to clitic doubling) while the dative is clitic-doubled.

<sup>17</sup> Not included in (60) are the exceptional present-tense forms of auxiliaries that bear 3rd person absolutive agreement and in addition dative agreement, but not ergative agreement, so-called "bivalent intransitives" (see Hualde 2003b: 214). These forms all start with z-, which Hualde (2003b:214) hypothesizes might derive from historic palatalization of the regular underlying 3rd person prefix d- (e.g., \*d-i-a-gi-t > zait). Their proper synchronic treatment is not clear to us, and immaterial for our concerns here. One natural analysis in line with Hualde's (2003b) hypothesis is in the form of a readjustment rule. Following Arregi & Nevins (2012:144,146), we assume that auxiliaries that do not contain an ergative clitic but do contain a dative clitic bear the features [-have] and [+appl]. The readjustment rule in (i) then converts /d-/ to [z-] in this context.

## (60) Basque absolutive agreement prefixes

|                   | SINGULAR   | PLURAL     |
|-------------------|------------|------------|
| 1                 | n-         | g-         |
| 2                 | <i>z</i> - | <i>z</i> - |
| 2.familiar        | h-         | h-         |
| 3/default present | d-         | d-         |
| past              | <i>z</i> - | z-         |
| hypothetical      | l-         | l-         |
| imperative        | b-         | b-         |

Furthermore, the 3rd person forms also appear in the absence of an absolutive agreement controller (Preminger 2009, 2012), as we saw in (57). In line with the analysis of default agreement proposed in Preminger (2009, 2014, to appear), we treat such cases as the realization of an unvalued  $\phi$ -probe. The subset requirement on vocabulary insertion in (54.i) thus entails that the VIs that appear with 3rd person agreement must lack a person specification; that is, these VIs are elsewhere markers in that they are in principle compatible with any person feature on v including the absence of a person feature. Furthermore, to account for the tense/mood sensitivity of the VIs that appear in the 3rd person, we adopt Arregi & Nevins's (2012:287) analysis in terms of context specifications for the structurally adjacent T head. The resulting VIs are given in (61).

#### (61) *Vocabulary items for v*

a. 
$$/n-/ \leftrightarrow [PERS [PART [SPKR]]]_v$$
 / \_\_\_ [SG]
b.  $/g-/ \leftrightarrow [PERS [PART [SPKR]]]_v$  / \_\_\_ [PL]
c.  $/z-_1/ \leftrightarrow [PERS [PART [ADDR]]]_v$ 
d.  $/h-/ \leftrightarrow [[PERS [PART [ADDR]]], [FAMILIAR]]_v$ 
e.  $/d-/ \leftrightarrow []_v$  / \_\_\_ [PRESENT]\_T
f.  $/z-_2/ \leftrightarrow []_v$  / \_\_\_ [PAST]\_T
g.  $/l-/ \leftrightarrow []_v$  / \_\_\_ [HYPOTHETICAL]\_T
h.  $/b-/ \leftrightarrow []_v$  / \_\_\_ [IMPERATIVE]\_T

The VIs in (61e-h) do not carry a person-feature specification, only a contextual specification for a feature on T. Given this underspecification, they fulfill the subset requirement (54.i) for all person specifications on v, including the absence of a person feature. They are thus the elsewhere markers. Their distribution is restricted by (i) their contextual specifications, and (ii) competition with the VIs in (61a-d), which bear more segments than the VIs in (61e-h) and are hence more specific. As

<sup>(</sup>i)  $/d-/ \rightarrow [z-] / \underline{\hspace{1cm}} [-have, +appl]$ 

Alternatively, one could treat this z- as an additional agreement VI.

<sup>&</sup>lt;sup>18</sup> This underspecification analysis is in line with Trask's (1981:297) intuition that the 3rd person prefixes are markers of the absence of 1st or 2nd person, rather than markers of the presence of 3rd person (also see Laka 1993a and Arregi & Nevins 2012 though their analyses differ from ours in important respects).

we will see in greater detail shortly, if v bears a 1st or 2nd person feature, the appropriate VI among (61a–d) is inserted, in line with specificity (54.ii). This limits the appearance of the VIs in (61e–h) to configurations in which v bears a 3rd person feature or no person feature at all.

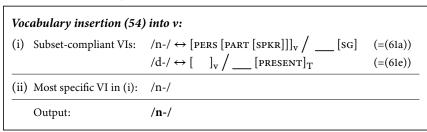
We now demonstrate how vocabulary insertion proceeds non-gluttonous configurations (that is, configurations in which v agrees with only one DP). First, (62) shows that in a monotransitive configuration with a 1st person object and a present-tense auxiliary, the prefixal agreement is *n*-. Agreement is established as in (63). Both the [PERS] and the [PART] segment of the probe on v find a matching counterpart on the object DP (63a). In line with (47), the object's full person-feature geometry is copied over to the probe, yielding (63b).<sup>19</sup> Vocabulary insertion then applies as shown. Of the VIs in (61), only /n-/ (61a) and /d-/ (61e) fulfill the subset requirement (54.i). Of these two, /n-/ is specified for four feature segments ([PERS], [PART], [SPKR], and [SG]) whereas /d-/ is specified for only one feature segment ([PRESENT]). Thus, /n-/ is more specific than /d-/ (as defined in (54.ii)), and it is therefore inserted.

- (62) Mona-k ni ikusi **n**-au.

  Mona-erg I.abs seen labs-aux.pres

  'Mona has seen me.'
- (63) a. Agree  $T_{[PRESENT]} \dots v \dots DP^{ABS}$   $\begin{bmatrix} u_{PERS} & & & & \\ | & & & \\ | & & & \\ u_{PART} & & & \\ | & & & \\ | & & & \\ SPKR \end{bmatrix}$ 
  - b. Single-valued probe on v after Agree (in context of [sG] feature)

$$T_{\texttt{[present]}} \dots \qquad v \qquad \dots \quad DP^{\texttt{abs}}$$
 
$$\begin{bmatrix} \varphi = \left\{ \begin{bmatrix} \texttt{pers} \\ | \\ \texttt{part} \\ | \\ \texttt{spkr} \end{bmatrix} \right\} \end{bmatrix}$$



<sup>&</sup>lt;sup>19</sup> In principle, because two of v's segments agree with the absolutive DP in (63) and the person value of the absolutive DP is therefore copied over twice. Recall, however, that given the set-theoretic axiom that {A, A, ...} = {A, ...}, such a representation would be identical to the one in (63b). In principle, one could also assume that collections of values are not sets but multisets (so that {A, A, ...} ≠ {A, ...}). If so, given the account developed in section 4.4, vocabulary insertion would apply twice but converge on the same VI in each cycle (/n-/ in the case at hand). This would be unproblematic. But since we do not see a benefit of this alternative, we will retain the assumption that collections of feature values are standard sets, as in (63b).

As a second example, consider a configuration with a single 3rd person object, such as (64), where the auxiliary again bears a [PRESENT] feature and the prefixal agreement is *d*-. As shown in (65a), the [PERS] segment of v's probe agrees with the object DP. [PART] fails to find a matching counterpart and so does not establish an Agree relation. The resulting configuration is shown in (65b), and vocabulary insertion applies as indicated. The only subset-compliant VI is /d-/, which is underspecified for the featural content of v and hence inserted.

- (64) Mona-k Mikel ikusi d-u. Mona-erg Mikel. abs seen 3 abs-aux. pres 'Mona has seen Mikel.'
- (65) a. Agree  $T_{[present]} \dots v \dots DP^{abs}$   $\begin{bmatrix} upers \bullet \\ | \\ upart \end{bmatrix} ---- \begin{bmatrix} \bullet & \bullet & \bullet \\ \bullet & \bullet & \bullet \\ \end{bmatrix}$ 
  - b. Single-valued probe on v after Agree (in context of [sg] feature)  $T_{\texttt{[PRESENT]}} \dots \qquad v \qquad \dots \quad DP^{\texttt{ABS}} \\ \left[ \varphi = \left\{ \left[ \begin{array}{cc} \texttt{PERS} \end{array} \right] \right\} \right]$

Third, consider a configuration that lacks an absolutive DP altogether, such as (66). As noted in section 4.3, in this case the prefixal agreement slot bears default agreement, which is identical to the 3rd person form (d- in (66)). In this case, neither [uPERS] nor [uPART] on v agrees, and the probe remains unvalued (represented as "{[ $\emptyset$ ]}" in (67)). Vocabulary insertion proceeds as shown in (67). Because the VI /d-/ is underspecified for person and features of v more generally, it fulfills the subset requirement. It is hence inserted into v.

(66) Ni-k dantzatu **d**-u-t.

I-ERG danced 3ABS-AUX.PRES-1ERG
'I danced.'

Default agreement is thus treated as the absence of a  $\phi$ -value due to failed  $\phi$ -Agree. The failure of one or both probe segments to find a matching goal in (65) and (67) does not crash the derivation (Preminger 2011a, 2014, to appear), but it leads to insertion of the elsewhere VI into the head containing the unvalued probe.

This analysis treats 3rd person agreement as syntactically, but not morphologically, distinct from failed agreement. Syntactically, 3rd person agreement is regular agreement (65) whereas failed agreement is the absence of an Agree relationship (and hence of valuation), as in (67). Morphologically, however, because there are no VIs that are specified for a 3rd person feature in (61), 3rd person agreement and failed agreement lead to insertion of the same, underspecified, VIs (also see fn. 18)—for both 3rd person agreement and failed agreement, the only subset-compliant VIs are the elsewhere VIs in (61e-h). It follows that 3rd person agreement and failed agreement are morphologically identical in Basque while still maintaining the idea that, syntactically, 3rd person agreement is genuine agreement, not lack thereof.

## 4.4. Gluttony, morphological ineffability, and the PCC

In this section, we turn to configurations in which v's search space contains two DPs. These are the configurations in which v's probe may in principle agree with two distinct DPs and hence acquire two person values. These are also the configurations in which PCC effects arise. Given the definition of Agree in (47), gluttony results if (i) a probe's search space contains more than one DP, (ii) the higher DP matches some but not all of the probe's segments, and (iii) the lower DP matches at least one segment not matched by the higher DP. We propose that PCC effects arise from gluttony in conjunction with the principles of morphological realization just discussed. For the sake of concreteness, we illustrate this analysis with ditransitive constructions but the relevant derivations hold equally for the other PCC configurations in section 2.1. As before, we will for now focus only on the behavior of the  $\phi$ -probe on v, which is realized in the prefixal agreement slot. The additional clitic doubling of dative DPs is taken up briefly in section 4.5.

We consider first PCC-violating configurations with a 3rd person dative DP and a 1st or 2nd person absolutive DP. An example is given in (68). Here, the 1st person absolutive object *ni* 'I.ABS' is impossible, regardless of the absolutive agreement prefix on the verb (i.e. both 1st person agreement *n*- and 3rd-person/default agreement *d*- are ungrammatical, as is any other agreement prefix).

(68) \*Zu-k harakina-ri **ni** saldu { **n**-ai-o-zu / **d**-ai-o-zu } you-erg butcher-dat I.abs sold labs-aux.pres-3dat-2erg 3abs-aux.pres-3dat-2erg Intended: 'You have sold me to the butcher.' (\*3dat > labs)

The syntactic configuration for (68) is shown in (69): [upers] agrees with the 3rd person DP (the closest DP that matches [pers]) but [upart] agrees with the lower, 1st person DP because only this DP contains a [part] segment. (69) thus instantiates gluttony. The full geometries of both DPs are copied over onto v, in line with (47), yielding a pair of distinct person values on v, shown in (70).

(69) 
$$T_{[PRESENT]} \dots V \dots DP^{DAT} \dots DP^{ABS}$$
  $\rightarrow feature gluttony$ 

$$\begin{bmatrix} u_{PRS} \bullet \\ | \\ u_{PART} \bullet \end{bmatrix} \dots \bullet_{[PRS]} \begin{bmatrix} p_{ERS} \\ | \\ \bullet p_{ART} \\ | \\ s_{PKR} \end{bmatrix}$$

(70) Multivalued probe on v in (69)

$$\left[ \varphi = \left\{ \left[ \text{ pers } \right], \left[ \begin{array}{c} \text{pers } \\ \text{part } \\ \text{spkr } \end{array} \right] \right\} \right]$$

Gluttony and multivalued probes such as (70) are not themselves ungrammatical, but they may result in an irresolvable morphological conflict—in a nutshell, vocabulary insertion must realize both values, but cannot do so, resulting in ineffability. Our proposal builds on a significant body of work that has argued that multivalued probes or heads may result in ineffability for morphological reasons. Effects of this kind have been documented in a variety of unrelated empirical domains, exemplified in (71). What these phenomena and/or analyses have in common is that a single syntactic element bears a feature with two distinct values, and ineffability results.

- (71) Morphological ineffability due to multivaluation
  - a. Right Node Raising and ATB constructions (Borsley 1983, Dyła 1984, Franks 1995, Citko 2005, Asarina 2011, 2013, Citko & Gračanin-Yuksek 2021),
  - b. free relatives (Lumsden 1992, Schütze 2003, Van Riemsdijk 2006),
  - c. Horn amalgams (Van Riemsdijk 2006),
  - d. Icelandic dative–nominative constructions (Schütze 2003, Ussery 2017, Atlamaz & Baker 2018, Coon & Keine 2021),
  - e. English *go-get* constructions (Bjorkman 2016),
  - f. person restrictions in copula clauses (Coon & Keine 2021, Bhatia & Bhatt 2023),
  - g. gender-mismatch effects in Russian (Privizentseva 2021, 2023),
  - h. person complementarity in K'ichean Agent Focus (Coon et al. 2021),
  - i. availability of fake indexicals in German (Kratzer 2009)

To give an example, Right Node Raising and ATB constructions are subject to a case-matching requirement, illustrated for Right Node Raising in Russian in (72). As (72a) shows, if the shared element receives the same case from both verbs (both verbs assign accusative case to their object in (72a)), the Right Node Raising is grammatical. By contrast, in (72b) the shared DP receives different cases from each verb, each of which demands a different form of the shared noun (*ostavil* 'kept' assigns accusative case, demanding the form *tarelk-u*; and *nadoela* 'be sick of' assigns nominative case, demanding the form *tarelk-a*). The structure in (72b) is ungrammatical, regardless of the morphological case form of the shared DP.

- (72) Multivaluation and ineffability in Russian Right Node Raising
  - a. On ne soxranil, a vybrosil, **pechen'-e** iz poezdki v Angliju. he not kept<sub>acc</sub> but discarded<sub>acc</sub> cookie-ACC from trip to England 'He did not keep, but rather threw out, cookies from a trip to England.'

[Asarina 2011:193, ex. (47)]

b. \*On ne ostavil, tak kak emu nadoela, **tarelk-{u/a}** s chërnoj kaëmkoj. he not kept<sub>acc</sub> as him sick.of<sub>nom</sub> place-{ACC/NOM} with black border 'He didn't keep, as he was sick of, the plate with a black border.'

[Asarina 2011:174, ex. (2)]

Asarina's (2011, 2013) account involves a multidominant structure in which the object is shared across the two conjuncts and receives case from both verbs. In (72b), the shared DP receives two distinct case values, which each demand a different morphological form. Asarina (2011, 2013) proposes that if a head contains two feature values, both values structures must be spelled out by the same VI (see also Schütze 2003, Citko 2005, Bjorkman 2016, and Citko & Gračanin-Yuksek 2021). If the two values demand different VIs, this requirement cannot be satisfied. Failure to satisfy the requirement is fatal and results in ineffability. Applied to (72b), [ACC] demands /-u/ and [NOM] demands /-a/. The two VIs are different, and the structure is therefore ungrammatical regardless of which VI is inserted.<sup>20</sup> This same line of analysis is also adopted, in varying forms, by the other references just cited.<sup>21</sup>

Bjorkman (2016) suggests that it is possible to derive Asarina's (2011, 2013) morphological requirement from general principles of the vocabulary-insertion process. First, adopting an idea suggested in Schütze (2003), if there are multiple feature values on one head, vocabulary insertion applies to each value separately. In other words, each value initiates a separate cycle of vocabulary insertion, each leading to selection of a VI, see (73a). Second, as is standardly assumed in Distributed Morphol-

<sup>&</sup>lt;sup>20</sup> Notably, the ineffability in (72b) disappears under syncretism. See fn. 23 for discussion.

<sup>&</sup>lt;sup>21</sup> Similar effects have also been observed for verb agreement. For example, Bjorkman (2016) discusses ineffability in the English *go get* construction, which is limited to contexts in which the form of the verb matches its infinitival form (i):

<sup>(</sup>i) a. I/you/we/they go get the paper every morning.

b. \*She goes gets / go gets / goes get the paper every morning. [Bjorkman 2016:55, ex. (2e), (3a)]

Bjorkman's (2016) account is that the verb in these constructions is multivalued as well in addition to the regular inflectional feature (e.g., present tense, 3rd singular in (ib), which requires the VI /-s/), the verb bears an inflectional feature [INFL:DIR], which calls for imperative inflection (i.e., the bare verb). In (ib), these two features call for different VIs, leading to an irresolvable conflict and hence ineffability, analogous to Asarina's (2011, 2013) account of (72).

ogy, only a single VI may be inserted into any given head (e.g., Halle & Marantz 1993, 1994, Arregi & Nevins 2012), see (73b).<sup>22</sup> Both conditions in (73) are inviolable.

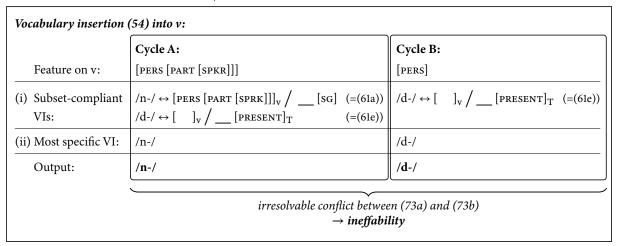
#### (73) Conditions on insertion

- a. Each feature value triggers a separate cycle of vocabulary insertion. For each cycle, the VI selected in this cycle must be inserted into the head.
- b. Only a single VI may be inserted per head.

Equipped with these insights, we now return to the PCC-violating 3>1 configuration in (68). We propose that the ungrammaticality of (68) is the result of the same logic as the ungrammaticality of (72): v in (70) has acquired two distinct person values, which result in morphological ineffability in the same way that the two case features in (72) do. (74) shows how vocabulary insertion applies to v in (69)/(70). In line with (73a), vocabulary insertion applies separately to each person value on v, hence in two cycles. Within each cycle, vocabulary insertion applies normally, as defined in (54). For the sake of concreteness, we call the cycles "Cycle A" and "Cycle B" in (74), but there is no temporal ordering between them—they could apply in either order or simultaneously. One cycle applies to the 1st person feature [PERS [PART [SPKR]]] (Cycle A). Vocabulary insertion in this cycle applies just as it does in (63b), selecting the VI /n-/ as the most specific VI that meets the subset requirement. The other insertion cycle applies to the 3rd person value [PERS] (Cycle B). It applies as it does in (65b), selecting /d-/. Given these two outputs, a conflict arises. On the one hand, (73a) requires that for each cycle, the VI selected in this cycle is inserted. Satisfying (73a) thus requires inserting both /n-/ (to comply with Cycle A) and /d-/ (to comply with Cycle B). On the other hand, (73b) mandates that only one VI may be inserted into any given head. Both requirements are unranked and inviolable. Regardless of which VI is inserted, one of the requirements is violated: inserting /n-/ violates the demands of Cycle B (violating (73a)); inserting /d-/ violates the demands of Cycle A (also violating (73a)); and inserting both /n-/ and /d-/ violates (73b). (74) thus leads to "lethal competition" (Mendes 2020, Mendes & Nevins 2023) between VIs, and an irresolvable conflict between (73a) and (73b).

<sup>&</sup>lt;sup>22</sup> (73a) can presumably itself be derived from vocabulary insertion being a strictly local process that does not have simultaneous access to information about two separate cycles of insertion. As a result, competition between two VIs may be resolved within a cycle of insertion, but not across two cycles because doing so would require comparing the output of the two insertion cycles. Vocabulary insertion, being confined to individual cycles, is too local a process to have access to this kind of information and is therefore unable to resolve the competition.

(74) Vocabulary insertion into gluttonous v in (70) (in context of [sG] absolutive agreement)



Because the constraints in (73a) and (73b) are both unranked and inviolable, there is no licit way of morphologically realizing the v head in (74) at all. A structure containing this v head is thus ineffable as a whole, and hence ungrammatical. This derives the ungrammaticality of (68). 3>2 configurations such as (1d) are ruled out analogously.

This account thus attributes the PCC to a fatal morphological conflict that arises from a gluttonous, and hence multivalued, probe. An important difference between this account and the morphological approaches discussed in section 3.2 is that in (74) the morphological conflict arises *within the prefixal agreement slot*, as schematized in (75). By contrast, the morphological accounts in section 3.2 invoke a conflict between the absolutive agreement prefix and the dative clitic. On the account we propose here, the dative clitic is altogether immaterial for the PCC: the morphological conflict arises between two absolutive-agreement VIs (/d-/ and /n-/ in the case at hand) that compete for a single agreement slot. This is desirable, as we show in section 5.1.

(75) Fatal insertion conflict within absolutive (i.e. prefixal) agreement slot in (74)

The analysis just developed attributes the ungrammaticality of the Basque PCC not to the syntactic configuration per se but rather to the overt (i.e., PF) realization of certain syntactic configurations (i.e. those configurations that result in gluttony). This account thus connects the Basque PCC to the much more general pattern of morphological ineffability that may arise from multivaluation, observed in

a multitude of domains (see (71)).<sup>23</sup> Furthermore, as we show in section 5.2, this will allow us to explain why ellipsis of the relevant structure obviates the PCC.

The account derives the ungrammaticality of the 3>1 configuration in (68) as well as analogous 3>2 configurations. By contrast, 3>3 configurations such as (76) are correctly ruled in. Here, v's probe agrees only with the dative DP since [upart] is not matched by the lower, 3rd person DP. The probe hence acquires only a single value, which, given [present] on T, is realized by inserting the VI /d-/ (analogously to (65)). The dative clitic is the result of a separate clitic-doubling process.<sup>24</sup>

(76) Zu-k harakina-ri liburu-a saldu d-i-o-zu.
you-erg butcher-dat book-abs sold 3abs-aux.pres-3dat-2erg
'You have sold the book to the butcher'. (\sqrt{3dat} > 3abs)

(77) 
$$T_{[PRESENT]} \dots v \dots DP^{DAT} \dots DP^{ABS}$$

$$\begin{bmatrix} u_{PERS} & & & \\ u_{PART} & & & \\ & u_{PART} & & \end{bmatrix} \quad [PERS]$$

There is a further well-established property of the class of constructions in (71), which our account in principle predicts to hold for Basque as well. Empirically, the morphological ineffability that ordinarily arises in the cases in (71) typically does not arise under syncretism—that is, if the two values on the probe call for the same morphological realization (Schütze 2003, Citko 2005, Kratzer 2009, Asarina 2011, 2013, Bjorkman 2016, Keine et al. 2019, Citko & Gračanin-Yuksek 2021, Coon & Keine 2021, Bhatia & Bhatt 2023). Importantly, however, Asarina (2011, 2013) shows based on Right Node Raising in Russian that mere homophony does not have a rescuing effect (also see Hartmann & Heycock 2022); only cases in which the two values call for *the same VI* avoid the ineffability (thus, accidental homophony between two VIs or homophony that results from phonological processes is not sufficient). This is in line with the constraints in (73): if the two cycles of vocabulary insertion converge on the same VI, and on then, (73a) and (73b) do not conflict: it is possible to satisfy both requirements while still only inserting a single VI.

In principle, we expect morphological syncretism of this kind to likewise have a rescuing effect in Basque. However, it is impossible to test this prediction given the inventory of VIs in (61). With the probe in (59), there is no configuration in which v is gluttonous and the two person values demand the same VI. There is an apparent instance of syncretism in the two homophonous VIs  $/z_{-1}/$  and  $/z_{-2}/$  in (61), repeated in (i). The VI  $/z_{-1}/$  realizes 2nd person agreement on v; the VI  $/z_{-2}/$  is an elsewhere realization of v in the context of past-tense T. These two contexts are obviously not a natural class, and so the two elements are clearly distinct VIs that just happen to be homophonous.

(i) a. 
$$/z_{-1}/\leftrightarrow [PERS [PART [ADDR]]]_v$$
 (=(61c))  
b.  $/z_{-2}/\leftrightarrow []_v$  / \_\_\_[PAST]\_T (=(61f))

Given Asarina's (2011, 2013) insights, our account predicts that this homophony should *not* obviate the PCC. This is indeed the case, as shown in (ii).

(ii) \*Ni-k harakina-ri zu saldu z-inti-o-da-n. I-ERG butcher-DAT you.ABS sold 2ABS-AUX-3DAT-lERG-PST Intended: 'I have sold you to the butcher.'

The derivation of (ii) is analogous in the relevant respects to (69)/(74). v acquires two values: [PERS] from the dative DP, and [PERS [PART [ADDR]]] from the absolutive DP. T bears a [PAST] specification. The two cycles of vocabulary insertion arrive at different VIs, with the fact that they are homophonous being irrelevant for the principles in (54) and (73).

The same reasoning applies to the z- form in bivalent intransitives (see fn. 17). Thus, to the extent that the relevant predictions can be tested in Basque, the facts are fully in line with what is known about other multivalued-probe configurations.

<sup>&</sup>lt;sup>24</sup> It is a perhaps surprising consequence of our analysis that the 3rd person prefix agreement in (76) (glossed descriptively as "3ABS") is actually agreement with the dative argument rather than the absolutive argument. As far as we can tell, this consequence is unproblematic. The dative agreement clitic on the auxiliary in (76) is produced by a different probe and hence independent of our account of the PCC, though we will return to it in the next section.

(78) 
$$\phi$$
-value on  $v$  in (77) 
$$\left[\phi = \left\{\left[\text{PERS}\right]\right\}\right]$$

Given that this account does not postulate a requirement for DPs to agree in order to be licensed, the lack of Agree between v and the lower, absolutive DP in (77) does not have detrimental effects.

The account thus derives that the PCC arises only if the lower DP is 1st or 2nd person because it is only in these configurations that gluttony arises.

## 4.5. Datives, KP structure, and the Strong PCC

To complete our account of the Strong PCC in Basque, we need to consider configurations in which the dative DP is 1st or 2nd person. As it stands, the analysis so far predicts that such configurations are grammatical, with v agreeing only with the dative DP. This would correspond to the Weak PCC, attested in, e.g., varieties of Catalan and Italian (Bonet 1991, 1994, Bianchi 2006). But Basque has the Strong PCC and such configurations are ungrammatical, as (79). As indicated, this structure is ungrammatical regardless of the agreement morphology in the prefixal slot (i.e., v).

(79) \*Haiek *ni-ri* **zu** saldu {**z/d/n**}-ai-da-te.
they.erg I-DAT you.ABS sold {2ABS/3ABS/1ABS}-AUX.PRES-1DAT-3ERG *Intended:* 'They have sold you to me.' (\*1DAT > 2ABS)

An account of (79) becomes available when we consider the structure of dative DPs (Coon & Keine 2021). Much previous work has observed that dative DPs frequently behave like 3rd person DPs for external syntactic processes, regardless of their actual, semantically-interpreted person feature (e.g., Chomsky 2000:128, Anagnostopoulou 2003:269–270, Richards 2008, Sigurðsson & Holmberg 2008, Bjorkman & Zeijlstra 2019, Coon & Keine 2021, and Hoover 2021). One common line of analysis is that such dative DPs are encased in larger nominal structure (e.g. a KP shell or a PP shell) that insulates the person feature of the DP from the outside, see, e.g., Rezac (2006, 2008b), Richards (2008), Odria (2017, 2019), Bjorkman & Zeijlstra (2019), Coon & Keine (2021), and Hoover (2021). We adopt this approach here and treat dative DPs as having the KP structure in (80).<sup>25</sup> The KP shell insulates the φ-features of the DP inside it from outside probes, and itself bears a 3rd person specification (Richards 2008, Bjorkman & Zeijlstra 2019, Coon & Keine 2021, Hoover 2021).<sup>26</sup> This insulation may be derived in several ways, for example by KP being a phase, or by K constituting a horizon

<sup>&</sup>lt;sup>25</sup> The treatment of dative DPs in (80) is not crucial to our account; alternatively, φ-Agree with a dative results in a 3rd person feature on the probe in some other way (Chomsky 2000, Anagnostopoulou 2003, Sigurðsson & Holmberg 2008).

Coon & Keine (2021:677n22) also envisage a second path to the Strong PCC. One involves insulation of the dative DP; the other involves a fully-articulated φ-probe that bears the full person geometry in (46): [upers [uaddr] [uspkr]]]. This latter probe will result in gluttony in 1>2 and 2>1 configurations as well, even if the dative DP is not insulated. As Coon & Keine (2021) point out, the two analyses of the Strong PCC make different predictions for configurations in which the dative is the lower of two DPs (i.e., ACC>DAT and ABS>DAT configurations). If the dative is insulated as in (80), such configurations should never result in gluttony regardless of the person values of the two DPs. Thus, such configuration should not display the PCC. This is the case for Basque (see section 5.1). On the other hand, if the dative DP is not insulated and the probe is fully articulated, then 1/2/3.ABS/ACC > 1/2.DAT configurations should result in gluttony, hence the PCC. The latter prediction corresponds to the "reverse PCC" in Slovenian (Stegovec 2020).

(Keine 2020) for v's person probe, which allows Agree with KP but not anything dominated by KP. It follows that for an outside probe, datives only bear a [PERS] feature, regardless of the semantically interpreted person feature of the DP inside them.

### (80) Structure of dative DPs



By contrast, absolutive DPs are not encased in a KP layer and thus their full person specification is visible to outside probes. The view that at least some dative DPs in Basque are structurally larger than absolutive DPs is not novel (see Rezac 2006, 2008a, 2011, Arregi & Nevins 2012, Rezac & Fernández 2012, Odria 2017, 2019, Berro & Fernández 2019), and it is consistent with the surface morphology of these case forms. As shown in (81), the dative form of a personal pronoun is formed by attaching the suffix *-ri* to the absolutive form in most cases (in the case of *zuek* 'you.pL', additional allomorphy applies).<sup>27</sup> The *-ri* is plausibly the realization of the dative K.

#### (81) Basque personal pronouns

|            | lsG   | 1pl   | 2sg   | 2 <sub>PL</sub> | 2.familiar |
|------------|-------|-------|-------|-----------------|------------|
| absolutive | ni    | gu    | zu    | zuek            | hi         |
| dative     | ni-ri | gu-ri | zu-ri | zue-i           | hi-ri      |

Furthermore, Rezac (2006, 2008a) argues that dative DPs in Basque may enter into *defective*  $\phi$ -Agree with v, which does not value the probe (also see Odria 2017, 2019). Our proposal that dative KPs bear only a dummy [PERS] specifications can be seen as a variant of Rezac's (2006, 2008a) insight. We return to further independent motivation for (80) immediately below.

Assuming the structure for dative DPs/KPs in (80), a 1DAT > 2ABs configuration like (79) amounts to a 3DAT > 2ABs configuration as far as the behavior of the  $\phi$ -probe on v is concerned. This is shown in (82a), and the resulting  $\phi$ -probe in (82b). Vocabulary insertion results in an irresolvable conflict in the way just discussed, and ungrammaticality results in (79).

(82) a. 
$$v$$
-Agree in (79)
$$T_{[PRESENT]} \dots V \dots KP^{DAT} \dots DP^{ABS} \longrightarrow feature gluttony$$

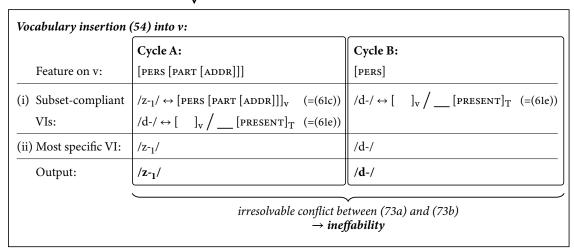
$$\begin{bmatrix} u_{PERS} & & & & \\ u_{PART} & & & \\ & u_{PART} & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ &$$

We assume, therefore, that both paths to the Strong PCC are attested, and we will adopt the insulation approach for Basque given the absence of reverse-PCC effects.

<sup>&</sup>lt;sup>27</sup> See, e.g., Hualde (2003a:179) and De Rijk (2008:111-114) for a fuller exposition of Basque personal pronouns and the forms of other cases.

b. *Vocabulary insertion into gluttonous v* 

$$T_{[PRESENT]} \dots \qquad v \qquad \dots \quad KP^{DAT} \quad \dots \quad DP^{ABS}$$
 
$$\begin{bmatrix} \phi = \left\{ \begin{bmatrix} pers \\ part \\ Addr \end{bmatrix} \right\} \end{bmatrix}$$



By contrast, our analysis permits grammatical 1/2DAT > 3ABS configurations, as in (83). Due to KP insulation of the dative DP, these effectively behave like 3DAT > 3ABS configurations as far as the  $\phi$ -probe on v is concerned. No gluttony results and the structure is grammatical.

(83) Zu-k *ni-ri* **liburu-a** saldu d-i-da-zu.
you-erg I-dat book-abs sold 3abs-aux.pres-1dat-2erg
'You have sold the book to me.' (√1dat > 3abs)

(84) 
$$v \dots KP^{\text{dat}} \dots DP^{\text{abs}}$$

$$\begin{bmatrix} u_{\text{PERS}} \bullet \\ | \\ u_{\text{PART}} \end{bmatrix} \leftarrow \begin{bmatrix} v_{\text{PERS}} \end{bmatrix}$$

(85) 
$$\phi$$
-value on  $v$  in (84) 
$$\left[\phi = \left\{\left[\text{PERS}\right]\right\}\right]$$

This account rests on the assumption that dative DPs in Basque are encased in a KP shell with a dummy person specification, and this view is supported by independent considerations. First, as already noted, the view that Agree with dative DPs invariably produces 3rd person agreement on the probe, as well as KP/PP insulation accounts of this effect, have been independently proposed, both for Basque (Rezac 2006, 2008a, 2011) and for other languages (Chomsky 2000:128, Anagnostopoulou 2003:269–270, Richards 2008, Sigurðsson & Holmberg 2008, Bjorkman & Zeijlstra 2019, Coon & Keine 2021, and Hoover 2021). As noted, Rezac (2006, 2008a) argues that dative DPs are encased in

a PP shell and visible to v's  $\phi$ -probe, but that they interact with the  $\phi$ -probe defectively, similar to what we propose here.

Second, as noted in Coon & Keine (2021), dative insulation makes a clear prediction about verbs whose dative argument is structurally lower than their absolutive argument (ABS>DAT verbs, discussed in section 3.2), such as *etorri* 'come'. Due to insulation by the KP, the dative argument necessarily bears only [PERS] from the outside, a segment also present on the absolutive DP. Dative insulation therefore predicts that there is no potential for gluttony in these constructions, hence that there is no person restriction on the dative DP. As (86) shows, this prediction is borne out.

(86) No person restriction on dative DP in ABS>DAT constructions

Itxaso ni-ri etor-tzen z-ai-t.

Itxaso.ABS I-DAT like-IMPF 3ABS-AUX.PRES-3DAT

'Itxaso comes to me.' (√3ABS > 1DAT)

(87) 
$$\begin{array}{cccc} & \text{v} & \dots & \text{DP}^{\text{ABS}} & \dots & \text{KP}^{\text{DAT}} \\ \begin{bmatrix} u_{\text{PERS}} & \bullet \\ & & \\ & u_{\text{PART}} \end{bmatrix} & & \begin{bmatrix} e_{\text{PERS}} & \vdots \\ & & & \end{bmatrix} \end{array}$$

Dative insulation as in (80) thus provides a unified account of two distinct generalizations: In DAT>ABS configurations, 1st and 2nd person absolutive DPs *always* result in gluttony, regardless of the person of the dative (hence, the Strong PCC). By contrast, in ABS>DAT configurations, gluttony *never* arises, regardless of the person of the dative.

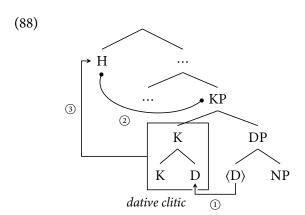
Third, because the KP shell in (80) does not bear a number specification, an outside number probe cannot access a dative DP's number feature. As a result, there is no potential for number gluttony in ditransitives. This is borne out—the Basque PCC rules out specific combination of person features, but not of number features (i.e., there is no "Number Case Constraint").

In summary, dative insulation offers a uniform account of several superficially unrelated empirical generalizations, which we take as independent support for it.

### 4.6. Dative clitic doubling

As noted above, we have so far focused on Agree by v, which is realized in the prefixal agreement slot in (56). To complete our account, we now briefly discuss how suffixal agreement with the dative DP is established, and why this agreement slot reflects the actual, semantically interpreted person features of the dative DP rather than the dummy 3rd person specification of the KP. As already noted, we assume following, e.g., Laka (1993a), Arregi & Nevins (2008, 2012), Rezac (2008a), Preminger (2009), Rezac et al. (2014), and Odria (2017, 2019) that the suffixal dative agreement is an instance of clitic doubling, demonstrated, for instance, by the fact that in the absence of a dative DP, this agreement slot disappears altogether rather than showing default agreement (see (58)). We also assume with Arregi & Nevins (2012), Preminger (2019), and others that clitic doubling is (long) movement of a nominal head that the clitic is the overt realization of. This clitic-doubling process is a separate process and hence does not affect our account of Agree by v. The relevant derivation is schematized

in (88). DP-internally, the D head undergoes movement to K (1).  $\phi$ -Agree between some functional head H (possibly v) and KP (2) then induces movement of the K head (including D) to H (3), where D and K are jointly pronounced as the clitic. Due to the inclusion of D, this clitic reflects the  $\phi$ -features of the D head, not the dummy [PERS] feature of K. Note that if K corresponds to the dative case suffix -ri on a DP, as we suggested above, then this analysis entails that the lower copy of K (and possibly D as well) is pronounced as well.



The "agreement" behavior of dative DPs thus crucially depends on whether the "agreement" involves  $\varphi$ -Agree or clitic doubling, which Preminger (2009) has shown the prefixal agreement slot and the suffixal agreement slot differ in. Because the prefix agreement slot, and hence v, involves  $\varphi$ -Agree rather than clitic doubling, it is sensitive only to the dummy [PERS] feature of the KP, resulting in gluttony whenever a lower absolutive DP is 1st or 2nd person. By contrast, because the suffixal dative-agreement slot involves clitic doubling rather than  $\varphi$ -Agree, it realizes the features of the K+D complex, and hence the actual person features of the dative DP.

#### 4.7. Section summary

The gluttony account attributes the PCC to a fatal conflict that arises in the morphological realization of a probe that has agreed with two DPs—a feature with two distinct values overwhelms the morphological-realization process, leading to ineffability. This analysis differs from the previous accounts discussed in section 3 in central ways. First, in contrast to nominal-licensing accounts (section 3.1), the account does not invoke a nominal-licensing requirement like the PLC (35). In other words, there is no requirement for DPs to agree with  $\phi$ -probes. Second, the PCC is not attributed to failed Agree, but to double Agree: a single probe agrees with more than one DP, yielding a gluttonous configuration and a multivalued probe. Third, gluttony is not itself ungrammatical, but the presence of multiple values on the probe gives rise to a fatal conflict in the morphological realization of the  $\phi$ -probe. Fourth, the locus of the PCC is not the DPs, but the  $\phi$ -probe.

While the gluttony account thus shares with the morphological accounts discussed in section 3.2 that the Basque PCC is the result of a morphological problem, this morphological problem is the downstream effect of double  $\phi$ -Agree. The account thus crucially involves a syntactic component,

a point to which return in section 5.1. Furthermore, the morphological conflict arises not between two distinct agreement slots, but rather within a single agreement slot: two VIs compete for insertion into the prefixal agreement slot, leading to ineffability (see (74) and (75)). Fatal insertion conflicts of this kind have been documented in a range of other empirical domains (see (71)), and as a result the gluttony account views the PCC as just one manifestation of a much more general pattern.

# 5. Syntax and morphology in the account of the PCC

We now show how the approach to the PCC in section 4 derives the empirical generalizations in sections 2 and 3. We concluded there that a comprehensive account of the PCC must be both syntactic and morphological in nature. It must be syntactic in being sensitive to the hierarchical syntactic arrangement of the DPs involved; it must be morphological in being sensitive to whether  $\phi$ -agreement is overtly realized or not. The next two sections demonstrate how the analysis developed in section 4 satisfies these two requirements.

### 5.1. The syntactic side of the PCC: Hierarchical arrangement of DPs

As reviewed in section 3, Albizu (1997) and Rezac (2008b) show that the PCC in Basque cannot be reduced to surface morphology but must make crucial reference to the syntactic relationship between the absolutive and the dative DP, as stated in (44b), repeated here as (89).

(89) Basque PCC effects arise only if the dative DP c-commands the absolutive DP (a relationship that is neutralized in the agreement morphology).

To reiterate, the argument for (89) is based on the observation that the PCC arises only in configurations in which the dative DP c-commands the absolutive DP—such as with psych-verbs (90a)—but not if the absolutive DP c-commands the dative DP—such as with motion verbs (90b). Because the surface morphology of the auxiliary neutralizes the distinction between the two verb classes, a successful account of (90) cannot be solely in terms of the surface morphology.

```
(90) a. DAT > ABS verbs [=(42)]

*Ni Itxaso-ri gusta-tzen n-atzai-o.

I.ABS Itxaso-DAT like-IMPF lABS-AUX-3DAT

Intended: 'Itxaso likes me.' (*3DAT > lABS)

b. ABS > DAT verbs

Ni Itxaso-ri etor-tzen n-atzai-o.

I.ABS Itxaso-DAT come-IMPF lABS-AUX-3DAT

'I am coming to Itxaso.' (√lABS > 3DAT)
```

This role of the syntactic arrangement of the DPs is predicted by the gluttony account. Whether or not a configuration results in gluttony is crucially conditioned by the structural relationship between

the two DPs. In DAT>ABS constructions like (90a), a 1st or 2nd person absolutive DP leads to gluttony, as shown in (91), and hence to ineffability, analogous to (74).

By contrast, no gluttony arises if the 1st or 2nd person absolutive DP is structurally higher than the dative DP because in this case both segments on v agree with the absolutive DP, as shown in (92). The probe therefore receives only a single value, and vocabulary insertion into it applies successfully (analogous to (63b)).

(92) 
$$v$$
-Agree in (90b)  
 $v$  ...  $DP^{ABS}$  ...  $KP^{DAT}$   $\rightarrow$  no feature gluttony
$$\begin{bmatrix} u_{PERS} & \bullet & --- & \bullet & \bullet \\ u_{PART} & \bullet & --- & \bullet & \bullet \\ u_{PART} & \bullet & --- & \bullet & \bullet \\ u_{PART} & \bullet & --- & \bullet & \bullet \\ u_{PART} & \bullet & --- & \bullet & \bullet \\ u_{PART} & \bullet & --- & \bullet & \bullet \\ u_{PART} & \bullet & --- & \bullet & \bullet \\ u_{PART} & \bullet & --- & \bullet & \bullet \\ u_{PART} & \bullet & --- & \bullet & \bullet \\ u_{PART} & \bullet & --- & \bullet & \bullet \\ u_{PART} & \bullet & --- & \bullet & \bullet \\ u_{PART} & \bullet & --- & \bullet & \bullet \\ u_{PART} & \bullet & --- & \bullet & \bullet \\ u_{PART} & \bullet & --- & \bullet & \bullet \\ u_{PART} & \bullet & --- & --- \\ u_{PART} & \bullet & --- \\ u_{PART} & --- & --- \\ u_{PART} & --- & --- \\ u_{PART} & --- \\ u_{PART} & --- & --- \\ u_{PART} & ---$$

Because word order is free in Basque, the surface order of the two DPs does not necessarily correspond to the base order. The PCC is determined solely by the base order of the two DPs. This follows straightforwardly if scrambling applies after probing by v, so that it does not have an effect on whether v is gluttonous or not.

As noted in section 4.4, the morphological conflict in (91) does *not* arise between the prefixal absolutive agreement and the dative clitic, but instead between two VIs competing for the prefix slot (see (74) and (75)). The dative clitic is immaterial. Unlike the morphological accounts discussed in section 3.2, the fact that the combination of n- and -o is grammatical in (90b) is thus predicted immediately.

In sum, because whether or not a configuration leads to gluttony is determined by the syntactic operation Agree, our account is crucially sensitive to purely syntactic factors like the structural relationship between two DPs relative to the probe on v.<sup>28</sup> In this respect, then, the gluttony account is crucially syntactic in nature and this provides a principled account of (89) and the contrast in (90).

#### 5.2. The morphological side of the PCC: Obviation under ellipsis

The clear role of purely syntactic factors in the PCC notwithstanding, the ellipsis evidence presented in section 2 provides evidence that the PCC cannot be conditioned solely by syntactic factors either. Instead, it must be sensitive to whether a syntactically present  $\phi$ -probe is overtly realized or not (93).

<sup>&</sup>lt;sup>28</sup> Also see the absence of PCC effects with allocutive datives (fn. 2), which are outside of v's search space and therefore to not give rise to gluttony.

(93) Basque PCC effects disappear in clauses that do not contain an overtly realized verbal φ-probe.

We now show that the gluttony account provides a principled explanation of (93) given independently motivated interactions between ellipsis and vocabulary insertion. Merchant (1999, 2001, 2015), Kennedy & Merchant (2000), Abels (2019), Mendes (2020), Mendes & Nevins (2023), and Privizent-seva (2021, 2023) all argue that ellipsis bleeds the morphological realization of nodes in the ellipsis site and that, as a result, morphological problems and conflicts disappear under ellipsis. Within the morphological framework adopted here, we formulate this claim as (94):

## (94) Vocabulary insertion does not apply to elided syntactic structure.

The crucial consequence of (94) is that problems in the morphological realization of a node do not arise under ellipsis because the process that results in these problems (i.e., vocabulary insertion) does not apply. Merchant (1999:219–273, 2001:163–200) develops an account along these lines for several island contexts that are obviated under sluicing (also see Kennedy & Merchant 2000). For example, to derive that sluicing structures may violate the ban against left-branch extraction in English, Merchant (1999, 2001) and Kennedy & Merchant (2000) propose that such extraction is not itself illicit but requires a DP-internal head that cannot be morphologically realized and thus ordinarily leads to morphological ineffability of the structure it appears in. Ellipsis bleeds the morphological realization of this head so that the morphological problem no longer arises, rescuing the structure.

Merchant (2015), Abels (2019), Mendes (2020), Mendes & Nevins (2023), and Privizentseva (2021, 2023) likewise argue for (94) based on morphological defectivity that is repaired under ellipsis. An illustrative example of the latter type is provided by Russian, which has a number of verbs that lack a 1st person singular non-past form (Abels 2019, Mendes 2020, Mendes & Nevins 2023). Examples are provided in (95).

(95) Non-past inflection of three Russian defective verbs

|                 | buzit' 'make a fuss' | <i>šelestet</i> ' 'rustle' | oščutiť 'to sense' |
|-----------------|----------------------|----------------------------|--------------------|
| 1s <sub>G</sub> | _                    | _                          | _                  |
| 2sg             | buziš'               | šelestiš'                  | oščutiš            |
| 3sg             | buzit                | šelestit                   | oščutit            |
| 1pl             | buzim                | šelestim                   | oščutim            |
| 2 <sub>PL</sub> | buzite               | šelestite                  | oščutite           |
| 3PL             | buzjat               | šelestjat                  | oščutjat           |

(Abels 2019:1249, Mendes & Nevins 2023:185)

Crucially, the ineffability of a 1st person singular form disappears when the verb is elided. This is exemplified in (96), where the 1st person singular verb form is elided and the structure is grammatical. Mendes (2020) shows that the effect arises with gapping, stripping, comparative deletion, and fragment answers.

(96) Morphological-gap obviation under ellipsis in Russian

```
    a. On { buzit / šelestit }, a ja net Δ.
    he makes.a.fuss rustles but I not 'He {makes a fuss/rustles} but I don't.'
```

[Mendes 2020:154, ex. (1), adapted from Abels 2019:1249, ex. (97)]

b. Na veršine étoj gory ty oščutiš radosť, a ja  $\Delta$  strakh. on top this mountain you sense happiness.ACC but I fear.ACC 'At the top of this mountain, you will sense happiness, and I fear.'

[Mendes & Nevins 2023:186, ex. (6a)]

Based on evidence of this kind and others, Merchant (2015), Abels (2019), Mendes (2020), Mendes & Nevins (2023), and Privizentseva (2021, 2023) all propose analyses that involve ellipsis bleeding morphological realization and thereby circumventing a morphological problem that would otherwise arise. To illustrate, in their analysis of the Russian defectivity repair under ellipsis, Mendes (2020) and Mendes & Nevins (2023) analyze the ineffability of the 1sG form of  $o\check{s}\check{c}utit$  'sense' as arising from the competing processes of  $t \to \check{s}\check{c}$  ( $/t/\to/g/$ ) mutation and  $t \to \check{c}$  ( $/t/\to/tf/$ ) mutation, each observable in other verbs. They implement these competing pressures by means of the VIs in (97). The VIs /ogug/ and /ogut/ each represent the VI for 1sG but with a different mutation process having applied. /ogut/ represents the elsewhere form, where neither mutation process has applied. Because (97a) and (97b) are equally specific, vocabulary insertion fails to resolve the competition between them. This results in lethal competition, and hence ineffability. <sup>29</sup>

(97) a. 
$$\sqrt{\text{oščut}} \leftrightarrow /\text{ocuc} / [_T [_v \__v] 1\text{SG.NPST}]$$
  
b.  $\sqrt{\text{oščut}} \leftrightarrow /\text{ocut} / [_T [_v \__v] 1\text{SG.NPST}]$   
c.  $\sqrt{\text{oščut}} \leftrightarrow /\text{ocut} /$  [Mendes & Nevins 2023:186, ex. (5)]

This line of analysis is hence that paradigm gaps can result from having too many viable VI choices—the same reasoning we used to derive the PCC in Basque. A different line of approach to paradigm gaps is pursued by Yang (2016), who proposes that paradigm gaps are the result of having too few viable choices (also see Mendes 2020, Mendes & Nevins 2023). He proposes that morphological processes are productive only if they have few enough exceptions (formalized as his *Tolerance Principle*). Paradigm gaps arise if all the a priori viable morphological processes have too many exceptions to qualify as productive, leaving the item without a morphological option of realizing its features. In the case of Russian 1sg gaps, Yang (2016:152–153) proposes that both the  $t \rightarrow \check{s}\check{c}$  and the  $t \rightarrow \check{c}$  process have too many exceptions to be productive, leaving stems like  $o\check{s}\check{c}utit'$  without a possible realization in the 1sg.

This is an insightful approach to paradigm gaps, but as far as we can tell, it does not readily extend to the kind of cases of morphological defectivity considered here. In the case of Basque, the VIs in (61) are exceptionless and hence uncontroversially productive. For example, in (74) neither the process of *n*-prefixation triggered by the 1sG specification nor the process of *d*-prefixation triggered by the 3sG present specification have any lexical exceptions, so it seems clear that both qualify as productive under the Tolerance Principle. While this is not, of course, an argument against the Tolerance Principle or Yang's approach to paradigm gaps, it does mean that morphological ineffability cannot be reduced to the absence of a productive morphological process in all cases. We conclude that the simultaneous availability of two productive mechanisms may result in ineffability as well, in line with the logic we have pursued here. This conclusion is reinforced by other cases of morphological ineffability, such as Right-Node Raising and ATB-movement (Citko 2005, Asarina 2011, 2013), free relatives (Lumsden 1992), Icelandic nominative objects (Schütze 2003), and the English *go-get* construction (Bjorkman 2016). Here as well, the competing morphological processes are clearly productive, yet ineffability results.

The rescuing effect of ellipsis in (96) then follows from (94). Because the source of the ineffability of the 1sG forms lies in the failure of vocabulary insertion to determine a VI to insert, it follows that the structures are grammatical if vocabulary insertion does not apply. As mentioned, Merchant (1999, 2001, 2015), Kennedy & Merchant (2000), Abels (2019), Mendes (2020), Mendes & Nevins (2023), and Privizentseva (2021, 2023) argue for similar effects of ellipsis on morphological conflicts in other languages and constructions, all of which support (94).

In conjunction with the independently motivated view in (94), the gluttony account immediately explains why verbal ellipsis obviates PCC violations in Basque. Representative examples of this effect are repeated in (98a) (=(10a)), using gapping in a ditransitive structure, and in (98b) (=(22)), using a split question with a psych-verb.

(98) a. Jon-ek alkatea-ri Mikel saldu d-i-o, eta zu-k *harakina-ri* Jon-erg mayor-dat Mikel.abs sold 3abs-aux-3dat and you-erg butcher-dat

ni  $\Delta$ .

I.ABS

'Jon sold Mikel to the mayor, and you me to the butcher.' ( $\sqrt{3}DAT > 1ABS$ )

b. Nor-i gusta-tzen z-ai-o nor, [zu-ri ni  $\Delta$ ] ala [ni-ri who-dat like-impf 3abs-aux-3dat who.abs you-dat I.abs or I-dat

$$\mathbf{z}\mathbf{u}$$
  $\Delta$  ]?

you.ABS

'Who likes whom, you me or I you?'

 $(\sqrt{2}\text{DAT} > 1\text{ABS} / \sqrt{1}\text{DAT} > 2\text{ABS})$ 

Syntactically, the elliptical sentences in (98) have the same structure as the non-elliptical counterparts in (68)/(69) and (90a)/(91), in line with the view that ellipsis amounts to non-pronunciation of otherwise regular syntactic structure. Thus, the Agree structure for (98a) involves gluttony, as shown in (99). The structure for (98b) is analogous.

Ordinarily, the gluttonous  $\phi$ -probe on v would create a fatal conflict for vocabulary insertion. But if v is elided, it is not targeted by vocabulary insertion as per (94), and no conflict between VIs arises in (99). The coexistence of two  $\phi$ -values on the gluttonous probe in (99) is thus harmless if v is elided.

(100)  $\phi$ -value on v in (99)  $\rightarrow$  no vocabulary insertion  $\rightarrow$  no conflict

$$\left[ \varphi = \left\{ \begin{bmatrix} \text{pers} \end{bmatrix}, \begin{bmatrix} \text{pers} \\ | \\ \text{part} \\ | \\ \text{spkr} \end{bmatrix} \right\} \right]$$

This analysis derives the pervasive effect of verbal ellipsis on the PCC documented at length in section 2: constructions that ordinarily exhibit the PCC no longer do so whenever the agreeing auxiliary is elided. By locating the problem that underlies the PCC in the morphological realization of verbal agreement (rather than in failed DP licensing or in gluttony itself), this analysis explains why verbal ellipsis interacts with the PCC even if it leaves the argument DPs unaffected. This derives the generalization in (93), and it attributes it to the same, more general mechanism that also explains the effect of ellipsis on defective verbs in Russian and other languages. (93) thus emerges as an instance of a more general pattern.

The generality of (94) also explains the pervasiveness of the effect. Because *any* ellipsis process that includes the verb will suspend vocabulary insertion into it, all such ellipsis processes obviate the PCC, including gapping, stripping, fragment answers, split questions, and comparative deletion. This derives the full range of the generalization in (93) and of the evidence in section 2.

Finally, this analysis also derives the absence of PCC effects in nonfinite clauses that lack verb agreement altogether (see (28)–(32)). Our account derives this fact in two conceivable ways, which are not necessarily in opposition to each other. One is to assume that these clauses simply lack a  $\phi$ -probe (see Preminger 2011b, 2019, Coon & Keine 2021). Without a  $\phi$ -probe, no gluttony—and hence no morphological conflict—will arise. Alternatively, it is conceivable that these clauses syntactically do contain a  $\phi$ -probe but that this  $\phi$ -probe is simply not morphologically realized (contra Preminger 2019). In this case, gluttony would obtain without any morphological conflict. In either case, the account predicts such structures to be grammatical, as indeed they are.

#### 6. Conclusion and outlook

We showed that the Basque PCC is subject to the two empirical generalizations in (101), and we argued that these generalizations emerge from the interplay of the syntax of  $\varphi$ -Agree on the one hand and of the PF realization of  $\varphi$ -Agree on the other. The key empirical contribution of this paper is the generalization in (101a), instantiated by a range of ellipsis phenomena. In order to derive (101a), the analysis must be sensitive to the overt realization of a  $\varphi$ -probe, hence to PF properties. On the other hand, to derive (101b), the analysis must be directly sensitive to the syntactic relationship between the DP arguments. In order to derive *both* conditions in (101), the analysis needs to be conditioned by both syntactic and morphological/PF factors. In this sense, it must be cross-modular in nature.

- (101) a. Basque PCC effects disappear in clauses that do not contain an overtly realized verbal φ-probe.
  - b. Basque PCC effects arise only if the dative DP *c*-commands the absolutive DP (a relationship that is neutralized in the agreement morphology).

We then developed a feature-gluttony account of the Basque PCC. The crucial property of this account is that the Basque PCC is unrelated to nominal licensing and instead due to morphological ineffability that results if a probe agrees with more than one DP. It is this specific constellation of properties that enables an account of both sides of (101). Ineffability results if a gluttonous  $\phi$ -probe

is targeted by vocabulary insertion. Whether or not a probe is gluttonous is conditioned by the syntactic arrangement of the DPs, deriving (101b). Whether a probe is targeted by vocabulary insertion is conditioned by whether it is overtly realized or not, deriving (101a).

While we developed the account for Basque, the logic of the approach generalizes. The basic approach is that the PCC is the result of a single probe agreeing with two DPs, resulting in gluttony and a multivalued probe. This multivalued probe then overwhelms the morphological-realization process, which leads to ineffability. Due to segment-based Agree, the conditions under which gluttony arises are clearly defined: gluttony results if (i) the search space of a  $\phi$ -probe contains at least two accessible goals, (ii) the probe contains at least two segments, (iii) the higher goal matches some of these segments but not all, and (iv) the lower goal lower matches a segment that is not present on the higher goal. Gluttony leads to a multivalued probe, and such multivaluation results in ineffability in the vocabulary insertion process because both values must be expressed, but only one may be. Finally, ellipsis bleeds vocabulary insertion into a head, circumventing any conflict that would result in the course of vocabulary insertion. The basic principles of the account are repeated in (102).

## (102) Principles of the account

- Segment-based φ-Agree

   (e.g., Béjar 2003, 2008, Béjar & Rezac 2009, Béjar & Kahnemuyipour 2017, Coon & Keine 2021),
- b. Late insertion of vocabulary items (e.g., Halle & Marantz 1993, 1994, et seq.)
- c. Ineffability in vocabulary insertion arising from multivaluation (Schütze 2003, Citko 2005, Van Riemsdijk 2006, Kratzer 2009, Asarina 2011, 2013, Bjorkman 2016, Citko & Gračanin-Yuksek 2021, Coon & Keine 2021, Privizentseva 2021, 2023, Bhatia & Bhatt 2023),
- d. Ellipsis bleeds vocabulary insertion (Merchant 1999, 2001, 2015, Kennedy & Merchant 2000, Abels 2019, Mendes 2020, Privizentseva 2021, 2023, Mendes & Nevins 2023)

While the gluttony approach is novel in analyzing the PCC in terms of these principles, we emphasize that these principles are independently motivated on the basis of facts and phenomena unrelated to the PCC. While in particular (102c) and (102d) have not traditionally been used to analyze PCC effects, they offer a new analytical window into PCC effects, and they connect the PCC to the other phenomena that have motivated these principles.

As noted, in contrast to standard nominal-licensing-based accounts of the PCC, the gluttony approach eschews the PLC or other requirement that DPs agree with verbal heads, it locates the source of the PCC in the  $\phi$ -probe rather than the DP(s), and (for Basque, at least) it attributes the PCC to a downstream morphological problem incurred by a multiple-Agree configuration. PCC obviation under ellipsis then falls out as a natural consequence of the account.

In addition to the general principles in (102), the account also involves points of parametrization, and it is here that Basque-specific properties of the PCC arise. Points of variation include (i) the

specification of the  $\phi$ -probe (which determines what configurations result in gluttony and hence results in different strengths of the PCC), (ii) whether dative DPs are encased in a KP shell, and (iii) the inventory of VIs used to realize  $\phi$ -probes. See Coon & Keine (2021) and fn. 26 for discussion and illustration of these points of variation outside of Basque.<sup>30</sup>

The Basque evidence presented here thus provides an empirical argument in favor of a gluttony approach to PCC effects. The extent to which this argument applies to the PCC in other languages remains to be investigated. Given the generality of the principles in (45), we expect analogous effects to arise in other languages as well. Of course, this question is much too large to attempt to answer here, but we note that similar PCC obviation under verbal ellipsis has been observed for the Algonquian language Oji-Cree by Keine et al. (2022), and also see Bhatia & Bhatt (2023) for obviation of hierarchy effects in copular constructions in Hindi-Urdu.<sup>31</sup>

A further dimension of this question is brought about by the distinction between  $\varphi$ -agreement and clitic doubling. The account of Basque is based on  $\varphi$ -agreement, which involves valuation of a probe and subsequent morphological realization of this probe. Many other instances of the PCC arise with clitics, however, and the predictions of the account interact with assumptions about the syntax of clitic doubling. If clitic doubling reduces to  $\varphi$ -Agree (see Paparounas & Salzmann 2023a,b and the references cited there), then we expect PCC obviation under ellipsis in these cases as well. On the other hand, if clitic doubling involves Agree-triggered syntactic movement of a D head without morphological realization of a  $\varphi$ -probe (see Anagnostopoulou 2003, Preminger 2019, and the references there), then the predictions depend on how ellipsis interacts with this movement. To illustate, Coon & Keine (2021) treat clitic doubling as syntactic head movement. For them, gluttony creates a *syntactic* problem with clitic doubling (in particular, which DP to clitic-double). The predictions of

The reviewer also wonders about predictions that our account might make with respect to the processing of PCC violations under ellipsis. While this is an intriguing question, our syntactic proposals are primarily about the structure in the ellipsis site (i.e., full syntactic structure without morphological information) and the derivational timing of ellipsis (i.e., prior to vocabulary insertion). Again, any processing predictions would crucially depend on assumptions about how and when the parser utilizes this syntactic information. In addition, such predictions depend on assumptions about the processing of ellipsis, in particular ellipsis of otherwise ungrammatical structure, a question that, as far as we know, is largely an open one (see Frazier & Clifton 2005 for island obviation under sluicing). Finally, Phillips & Parker (2014) emphasize that processing work on ellipsis has led to significant insights into the time course of parsing elided structure, but these findings do not bear on hypotheses about the nature of the representation at the ellipsis site, the structure the parser postulates for elided expressions, or the derivational timing of ellipsis. For these reasons, it is not clear to us that our syntactic account of the Basque facts in and of itself makes clear and distinctive predictions for language processing, so we will leave an exploration of this question for the future. We thank Brian Dillon, Lyn Frazier, and Jesse Harris for help with, and discussions of, these issues.

Relatedly, there is significant variation in the morphology of Basque auxiliaries (see, e.g., de Yrizar 1992). But because the basic principles that underlie our account are thus general in nature, our account predicts the interactions of the PCC with ellipsis to be unaffected by such variation, with the exception of syncretism patterns, discussed in fn. 23, a potential direction for future research.

A reviewer notes that the gluttony account also potentially makes distinctive predictions about the real-time processing of these configurations. The reason is that, whereas a nominal-licensing account locates the source of the PCC in an unlicensed DP, the gluttony account locates it in a gluttonous φ-probe. Importantly, however, predictions about real-time processing also crucially depend on various other factors, in particular the parser's ability and propensity to predict upcoming structure. For example, while the gluttony account locates the source of the PCC in a gluttonous φ-probe, the parser might well predict the content of the φ-probe upon encountering the relevant DPs, and any processing effect of the gluttonous probe might then manifest well in advance of the agreeing auxiliary. For this reason, our proposal makes predictions about real-time processing only in conjunction with specific assumptions about how the parser operates, which we cannot assess in the scope of this paper.

this account with respect to ellipsis crucially depend on whether ellipsis suspends clitic doubling in the same way it suspends vocabulary insertion. If it does (perhaps in conjunction with ungrammaticality repair under ellipsis), the PCC is predicted to be obviated by ellipsis in such cases as well. If it does not, the PCC is predicted to persist even under ellipsis in such languages. Our results thus point to a new direction for future work—i.e., how hierarchy effects behave under ellipsis—that has the potential to provide an important novel analytical tool to advance our understanding of the PCC and the principles that underlie it.

### **Acknowledgments:**

For insightful discussions and comments, we thank two reviewers, Karlos Arregi, Jason Merchant, Maria Polinsky, and Omer Preminger, as well as audiences at UCLA, the University of Maryland, the University of Chicago, the University of Leipzig, the University of Göttingen, and UC Berkeley.

#### References

- Abels, Klaus. 2019. On "sluicing" with apparent massive pied-piping. *Natural Language and Linguistic Theory* 37: 1205–1271.
- Adger, David & Daniel Harbour. 2007. Syntax and syncretisms of the Person Case Constraint. *Syntax* 10: 2–37.
- Albizu, Pablo. 1997. Generalized Person-Case Constraint: A case for a syntax-driven inflectional morphology. In: *Theoretical Issues at the Morphology–Syntax Interface*, ed. by Amaya Mendikoetxea & Myriam Uribe-Etxebarria, Bilbao: Euskal Herriko Unibertsitatea, pp. 1–33.
- Anagnostopoulou, Elena. 2003. *The Syntax of Ditransitives: Evidence from Clitics*. Berlin: Mouton de Gruyter.
- Anagnostopoulou, Elena. 2005. Strong and weak person restrictions: A feature checking analysis. In: *Clitic and Affix Combinations: Theoretical Perspectives*, ed. by Lorie Heggie & Francisco Ordóñez, Amsterdam: John Benjamins, pp. 199–235.
- Anagnostopoulou, Elena. 2017. The Person Case Constraint. In: *The Wiley Blackwell Companion to Syntax, 2nd edition, Vol. V*, ed. by Martin Everaert & Henk van Riemsdijk, Hoboken, NJ: Wiley, pp. 3001–3047.
- Anderson, Stephen. 1992. A-Morphous Morphology. Cambridge: Cambridge University Press.
- Arregi, Karlos. 2010. Ellipsis in split questions. Natural Language and Linguistic Theory 28: 539-592.
- Arregi, Karlos & Andrew Nevins. 2008. Agreement and clitic restrictions in Basque. In: *Agreement Restrictions*, ed. by Roberta D'Alessandro, Susann Fischer & Gunnar H. Hrafnbjargarson, Berlin: de Gruyter, pp. 49–86.
- Arregi, Karlos & Andrew Nevins. 2012. *Morphotactics: Basque Auxiliaries and the Structure of Spellout*. Dordrecht: Springer.
- Asarina, Alevtina (Alya). 2011. Case in Uyghur and beyond. Ph.D. dissertation, MIT, Cambridge, MA.

- Asarina, Alya. 2013. Neutrality vs. ambiguity in resolution by syncretism: Experimental evidence and consequences. In: *Proceedings of the 41st Annual North East Linguistic Society (NELS 41)*, ed. by Yelena Fainleib, Nicholas LaCara & Yangsook Park, Amherst, MA: GLSA, pp. 43–56.
- Atlamaz, Ümit & Mark Baker. 2018. On partial agreement and oblique case. *Syntax* 21: 195–237.
- Baerman, Matthew, Dunstan Brown & Greville Corbett. 2005. *The Syntax–Morphology Interface: A Study of Syncretism*. Cambridge: Cambridge University Press.
- Baker, Mark. 2008. *The Syntax of Agreement and Concord*. Cambridge: Cambridge University Press. Baker, Mark. 2011. When agreement is for number and gender but not person. *Natural Language and Linguistic Theory* 29: 875–915.
- Béjar, Susana. 2003. Phi-syntax: A theory of agreement. Ph.D. dissertation, University of Toronto.
- Béjar, Susana. 2008. Conditions on phi-Agree. In: *Phi-Theory: Phi-Features Across Modules and Interfaces*, ed. by Daniel Harbour, David Adger & Susana Béjar, Oxford: Oxford University Press, pp. 130–154.
- Béjar, Susana & Arsalan Kahnemuyipour. 2017. Non-canonical agreement in copular clauses. *Journal of Linguistics* 53(3): 463–499.
- Béjar, Susana & Milan Rezac. 2003. Person licensing and the derivation of PCC effects. In: *Romance Linguistics: Theory and Acquisition*, ed. by Ana Teresa Pérez-Leroux & Yves Roberge, Amsterdam: John Benjamins, pp. 49–62.
- Béjar, Susana & Milan Rezac. 2009. Cyclic Agree. Linguistic Inquiry 40: 35-73.
- Berro, Ane & Beatriz Fernández. 2019. Applicatives without verbs. *Natural Language and Linguistic Theory* 37: 1273–1317.
- Bhatia, Sakshi & Rajesh Bhatt. 2023. Copular agreement in Hindi-Urdu. Glossa 8: 1-40.
- Bianchi, Valentina. 2006. On the syntax of personal arguments. Lingua 116: 2023-2067.
- Bierwisch, Manfred. 1967. Syntactic features in morphology: General problems of so-called pronominal inflection in German. In: *To Honor Roman Jakobson, Vol. 1*, The Hague/Paris: Mouton, pp. 239–270.
- Bjorkman, Bronwyn. 2016. Go get, come see: Motion verbs, morphological restrictions, and syncretism. *Natural Language and Linguistic Theory* 34: 53–91.
- Bjorkman, Bronwyn & Hedde Zeijlstra. 2019. Checking up on (φ-)Agree. *Linguistic Inquiry* 50: 527–569.
- Bobaljik, Jonathan. 1993. Ergativity and ergative unergatives. In: *Papers on Case and Agreement II*, ed. by Colin Phillips, MIT: Cambridge, MA: MITWPL, MIT Working Papers in Linguistics 19, pp. 45–88.
- Bonet, Eulàlia. 1991. Morphology after syntax: Pronominal clitics in Romance. Ph.D. dissertation, MIT, Cambridge, MA.
- Bonet, Eulàlia. 1994. The Person–Case Constraint: A morphological approach. In: *The Morphology-Syntax Connection*, ed. by Heidi Harley & Colin Pillips, Cambridge, MA: MITWPL, MIT Working Papers in Linguistics 22, pp. 33–52.
- Borsley, Robert. 1983. A note on the Generalized Left Branch Condition. *Linguistic Inquiry* 14: 169–174.
- Bošković, Željko. 2011. Rescue by PF deletion, traces as (non)interveners, and the *that*-trace effect. *Linguistic Inquiry* 42: 1–44.

- Bošković, Željko. 2014. Now I'm a phase, now I'm not a phase: On the variability of phases with extraction and ellipsis. *Linguistic Inquiry* 45: 27–89.
- Chomsky, Noam. 1972. Some empirical issues in the theory of transformational grammar. In: *Goals of Linguistic Theory*, ed. by Stanley Peters, Englewood Cliffs, NJ: Prentice-Hall, pp. 63–130.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In: *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, ed. by Roger Martin, David Michaels & Juan Uriagereka, Cambridge, MA: MIT Press, pp. 89–155.
- Chomsky, Noam. 2001. Derivation by phase. In: *Ken Hale: A Life in Language*, ed. by Michael Kenstowicz, Cambridge, MA: MIT Press, pp. 1–52.
- Citko, Barbara. 2005. On the nature of Merge: External Merge, Internal Merge, and Parallel Merge. Linguistic Inquiry 36: 475–496.
- Citko, Barbara & Martina Gračanin-Yuksek. 2021. *Merge: Binarity in (Multidominant) Syntax*. Cambridge, MA: MIT Press.
- Coon, Jessica, Nico Baier & Theodore Levin. 2021. Mayan Agent Focus and the Ergative Extraction Constraint: Facts and fictions revisited. *Language* 97: 269–332.
- Coon, Jessica & Stefan Keine. 2021. Feature gluttony. Linguistic Inquiry 52: 655–710.
- Corbett, Greville & Norman Fraser. 1993. Network morphology: A DATR account of Russian nominal inflection. *Journal of Linguistics* 29: 113–142.
- de Yrizar, Pedro. 1992. *Morfología del verbo auxiliar vizcaíno: Estudio dialectológic*. Bilbao: Euskaltzaindia, accessible at: http://www.euskaltzaindia.net/mvav.
- Deal, Amy Rose. 2015. Interaction and satisfaction in φ-agreement. In: *Proceedings of the 45th North East Linguistic Society (NELS 45)*, ed. by Thuy Bui & Deniz Özyıldız, Amherst, MA: GLSA, pp. 179–192.
- Deal, Amy Rose. 2023. Interaction, satisfaction, and the PCC. Linguistic Inquiry 55: 39-94.
- De Rijk, Rudolf. 2008. *Standard Basque: A Progressive Grammar, Vol. 1: The Grammar.* Cambridge, MA: MIT Press.
- Doliana, Aaron. 2013. The super-strong Person Case Constraint: Scarcity of resources by scale-driven impoverishment. In: *Rule Interaction in Grammar*, ed. by Fabian Heck & Anke Assmann, Universität Leipzig, pp. 177–202, Linguistische Arbeits Berichte 90.
- Dyła, Stefan. 1984. Across-the-board dependencies and case in Polish. *Linguistic Inquiry* 15: 701–705.
- Foley, Steven & Maziar Toosarvandani. 2022. Extending the Person-Case Constraint to gender: Agreement, locality, and the syntax of pronouns. *Linguistic Inquiry* 53: 1–40.
- Fox, Danny. 2000. Economy and Semantic Interpretation. Cambridge, MA: MIT Press.
- Fox, Danny & Howard Lasnik. 2003. Successive-cyclic movement and island repair: The difference between sluicing and VP-ellipsis. *Linguistic Inquiry* 34: 143–154.
- Franks, Steven. 1995. Parameters of Slavic Morphosyntax. Oxford: Oxford University Press.
- Frazier, Lyn & Charles Clifton. 2005. The syntax-discourse divide: Processing ellipsis. *Syntax* 8: 121–174.
- Hale, Ken & Samuel Jay Keyser. 1993. On argument structure and the lexical expression of syntactic relations. In: *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, ed. by Ken Hale & Samuel Jay Keyser, Cambridge, MA: MIT Press, pp. 53–109.

- Halle, Morris. 1994. The Russian declension: An illustration of the theory of Distributed Morphology. In: *Perspectives in Phonology*, ed. by Jennifer Cole & Charles Kisseberth, Stanford, CA: CSLI Publications, pp. 29–60.
- Halle, Morris. 1997. Distributed Morphology: Impoverishment and fission. In: *PF: Papers at the Interface*, ed. by Benjamin Bruening, Yoonjung Kang & Martha McGinnis, Cambridge, MA: MITWPL, MIT Working Papers in Linguistics 30, pp. 425–449.
- Halle, Morris & Alec Marantz. 1993. Distributed Morphology and the pieces of inflection. In: *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, ed. by Ken Hale & Samuel Jay Keyser, Cambridge, MA: MIT Press, pp. 111–176.
- Halle, Morris & Alec Marantz. 1994. Some key features of Distributed Morphology. In: *Papers on Phonology and Morphology*, ed. by Andrew Carnie, Heidi Harley & Tony Bures, Cambridge, MA: MITWPL, MIT Working Papers in Linguistics 21, pp. 275–288.
- Harley, Heidi & Rolf Noyer. 2003. Distributed Morphology. In: *The Second GLOT International State-of-the-Article Book*, ed. by Lisa Cheng & Rint Sybesma, Berlin: Mouton de Gruyter, pp. 463–496.
- Harley, Heidi & Elisabeth Ritter. 2002. Person and number in pronouns: A feature-geometric analysis. *Language* 78: 482–526.
- Hartmann, Jutta & Caroline Heycock. 2022. Person effects in agreement with Icelandic low nominatives: An experimental investigation. *Natural Language and Linguistic Theory* Online First.
- Hoover, Jacob. 2021. Accounting for variation in number agreement in Icelandic dative-nominative constructions. In: *Proceedings of the 38th West Coast Conference on Formal Linguistics (WCCFL 38)*, ed. by Rachel Soo, Una Chow & Sander Nederveen, Somerville, MA: Cascadilla Press, pp. 231–241.
- Hualde, José Ignacio. 2003a. Case and number inflection of noun phrases. In: *A Grammar of Basque*, ed. by José Ignacio Hualde & Jon Ortiz de Urbina, Berlin: Mouton de Gruyter, pp. 171–186.
- Hualde, José Ignacio. 2003b. Verbs: Finite forms. In: *A Grammar of Basque*, ed. by José Ignacio Hualde & Jon Ortiz de Urbina, Berlin: Mouton de Gruyter, pp. 205–246.
- Jakobson, Roman. 1962. Beitrag zur allgemeinen Kasuslehre: Gesamtbedeutungen der russischen Kasus. In: *Selected Writings II*, The Hague and Paris: Mouton, pp. 23–71.
- Kalin, Laura. 2019. Nominal licensing is driven by valued (phi-)features. Nordlyd 43: 15–29.
- Keine, Stefan. 2010. Case and Agreement from Fringe to Core: A Minimalist Approach. Berlin: de Gruyter.
- Keine, Stefan. 2020. Probes and Their Horizons. Cambridge, MA: MIT Press.
- Keine, Stefan, Will Oxford & Jessica Coon. 2022. Person restrictions depend on overt agreement, not nominal licensing. In: *Proceedings of the 52nd North East Linguistic Society (NELS 52)*, ed. by Özge Bakay, Breanna Pratley, Eva Neu & Peyton Deal, Amherst, MA: GLSA, p. 139–148.
- Keine, Stefan, Michael Wagner & Jessica Coon. 2019. Hierarchy effects in copula constructions. *Canadian Journal of Linguistics* 64: 617–648.
- Kennedy, Christopher. 2002. Comparative deletion and optimality in syntax. *Natural Language and Linguistic Theory* 20: 553–621.
- Kennedy, Christopher & Jason Merchant. 2000. Attributive comparative deletion. *Natural Language* and *Linguistic Theory* 18: 89–146.

- Kratzer, Angelika. 2009. Making a pronoun: Fake indexicals as windows into the properties of pronouns. *Linguistic Inquiry* 40: 187–237.
- Laka, Itziar. 1993a. The structure of inflection: A case study in X<sup>0</sup> syntax. In: *Generative Studies in Basque Linguistics*, ed. by José Ignacio Hualde & Jon Ortiz de Urbina, Amsterdam: John Benjamins, pp. 21–70.
- Laka, Itziar. 1993b. Unergatives that assign ergative, unaccusatives that assign accusative. In: *Papers on Case and Agreement I*, ed. by Jonathan Bobaljik & Colin Phillips, MIT: Cambridge, MA: MITWPL, MIT Working Papers in Linguistics 18, pp. 149–172.
- Laka, Itziar. 1996. A Brief Grammar of Euskara, the Basque Language. Leioa-Donostia: Euskal Herriko Unibertsitatea (University of the Basque Country), Open-access grammar, accessible at: https://www.ehu.eus/en/web/eins/basque-grammar.
- Lechner, Winfried. 2004. Ellipsis in Comparatives. Berlin: de Gruyter.
- Lechner, Winfried. 2018. Comparative deletion. In: *The Oxford Handbook of Ellipsis*, ed. by Jeroen van Craenenbroeck & Tanja Temmerman, Oxford: Oxford University Press, pp. 624–656.
- Lumsden, John. 1992. Underspecification in grammatical and natural gender. *Linguistic Inquiry* 23: 469–486.
- Mendes, Gesoel. 2020. Investigations on salvation and non-salvation by deletion. Ph.D. dissertation, University of Maryland, College Park, MD.
- Mendes, Gesoel & Andrew Nevins. 2023. When ellipsis can save defectiveness and when it can't. *Linguistic Inquiry* 54: 182–196.
- Merchant, Jason. 1999. The syntax of silence: Sluicing, islands, and identity in ellipsis. Ph.D. dissertation, University of California, Santa Cruz.
- Merchant, Jason. 2001. *The Syntax of Silence: Sluicing, Islands, and the Theory of Ellipsis.* Oxford: Oxford University Press.
- Merchant, Jason. 2004. Fragments and ellipsis. Linguistics and Philosophy 27: 661–738.
- Merchant, Jason. 2008. Variable island repair under ellipsis. In: *Topics in Ellipsis*, ed. by Kyle Johnson, Cambridge: Cambridge University Press, pp. 132–153.
- Merchant, Jason. 2013. Voice and ellipsis. Linguistic Inquiry 44: 77-108.
- Merchant, Jason. 2015. On ineffable predicates: Bilingual Greek–English code-switching under ellipsis. *Lingua* 166: 199–213.
- Merchant, Jason. 2019. Ellipsis: A survey of analytical approaches. In: *The Oxford Handbook of Ellipsis*, ed. by Jeroen van Craenenbroeck & Tanja Temmerman, Oxford: Oxford University Press, pp. 19–45.
- Müller, Gereon. 2004a. A Distributed Morphology approach to syncretism in Russian noun inflection. In: *Proceedings of the 12th Formal Approaches to Slavic Linguistics (FASL 12)*, ed. by Olga Arnaudova, Wayles Browne, Maria Luisa Rivero & Danijela Stojanovic, University of Ottawa, pp. 353–373.
- Müller, Gereon. 2004b. On decomposing inflection class features: Syncretism in Russian noun inflection. In: *Explorations in Nominal Inflection*, ed. by Gereon Müller, Lutz Gunkel & Gisela Zifonun, Berlin: Mouton de Gruyter, pp. 189–227.

- Müller, Gereon. 2005. Syncretism and iconicity in Icelandic noun declensions: A Distributed Morphology approach. In: *Yearbook of Morphology 2004*, ed. by Geert Booij & Jaap van Marle, Dordrecht: Springer, pp. 229–271.
- Nevins, Andrew. 2007. The representation of third person and its consequences for person-case effects. *Natural Language and Linguistic Theory* 25: 273–313.
- Noyer, Rolf. 1992. Features, positions, and affixes in autonomous morphological structure. Ph.D. dissertation, MIT, Cambridge, MA.
- Noyer, Rolf. 1997. *Features, Positions and Affixes in Autonomous Morphological Structure*. New York: Garland Publishing.
- Odria, Ane. 2017. Differential object marking and datives in Basque syntax. Ph.D. dissertation, University of the Basque Country (UPV/EHU).
- Odria, Ane. 2019. DOM and datives in Basque: Not as homogeneous as they might seem. *Lingvisticæ Investigationes* 42: 7–30.
- Ormazabal, Javier. 2000. A conspiracy theory of case and agreement. In: *Step by Step: Essays on Syntax in Honor of Howard Lasnik*, ed. by Roger Martin, David Michaels & Juan Uriagereka, Cambridge, MA: MIT Press, pp. 235–260.
- Ormazabal, Javier & Juan Romero. 1998. On the syntactic nature of the *me-lui* and the Person-Case Constraint. *Anuario del Seminario de Filología Vasca "Julio de Urquijo"* 32: 415–434.
- Ormazabal, Javier & Juan Romero. 2001. A brief description of some agreement restrictions. In: *Kasu eta Komunztaduraren gainean. On Case and Agreement*, ed. by Beatriz Fernández & Pablo Albizu, Euskal Herriko Unibertsitatea, pp. 215–241.
- Ormazabal, Javier & Juan Romero. 2007. The object agreement constraint. *Natural Language and Linguistic Theory* 25: 315–347.
- Ott, Dennis. 2014. An ellipsis approach to contrastive left-dislocation. *Linguistic Inquiry* 45: 269–303. Pancheva, Roumyana & Maria Luisa Zubizarreta. 2018. The Person Case Constraint: The syntactic encoding of perspective. *Natural Language and Linguistic Theory* 36: 1291–1337.
- Paparounas, Lefteris & Martin Salzmann. 2023a. First conjunct clitic doubling in Modern Greek: Evidence for Agree-based approaches to clitic doubling. *Natural Language and Linguistic Theory* Online First.
- Paparounas, Lefteris & Martin Salzmann. 2023b. First conjunct clitic doubling, the Person Case Constraint, and first conjunct agreement: Insights from Modern Greek. *Glossa* 8: 1–54.
- Perlmutter, David. 1971. *Deep and Surface Structure Constraints in Syntax*. New York: Holt, Rinehart and Winston, Inc.
- Phillips, Colin & Dan Parker. 2014. The psycholinguistics of ellipsis. *Lingua* 151: 78–95.
- Preminger, Omer. 2009. Breaking agreements: Distinguishing agreement and clitic doubling by their failures. *Linguistic Inquiry* 40: 619–666.
- Preminger, Omer. 2011a. Agreement as a fallible operation. Ph.D. dissertation, MIT, Cambridge, MA. Preminger, Omer. 2011b. Asymmetries between person and number in syntax: A commentary on Baker's SCOPA. *Natural Language and Linguistic Theory* 29: 917–937.
- Preminger, Omer. 2012. The absence of an implicit object in unergatives: New and old evidence from Basque. *Lingua* 122: 278–288.
- Preminger, Omer. 2014. Agreement and Its Failures. Cambridge, MA: MIT Press.

- Preminger, Omer. 2019. What the PCC tells us about "abstract" agreement, head movement, and locality. *Glossa* 4: 13.
- Preminger, Omer. to appear. Phi-feature agreement in syntax. In: *The Cambridge Handbook of Minimalism*, ed. by Kleanthes Grohmann & Evelina Leivada, Cambridge: Cambridge University Press.
- Privizentseva, Mariia. 2021. Morphological ineffability due to feature conflicts: Gender and declension in Russian. In: *Proceedings of the 51st North East Linguistic Society (NELS 51)*, ed. by Alessa Farinella & Angelica Hill, Amherst, MA: GLSA, pp. 153–166.
- Privizentseva, Mariia. 2023. Gender, declension, and morphological ineffability, Ms., Universität Leipzig, to appear in *Natural Language and Linguistic Theory*.
- Rezac, Milan. 2003. The fine structure of cyclic Agree. Syntax 6: 156–182.
- Rezac, Milan. 2004. Elements of cyclic syntax: Agree and Merge. Ph.D. dissertation, University of Toronto.
- Rezac, Milan. 2006. Agreement Displacement in Basque: Derivational Principles and Lexical Parameters. Monograph draft.
- Rezac, Milan. 2008a. Phi-Agree and theta-related case. In: *Phi Theory: Phi-Features Across Interfaces and Modules*, ed. by Daniel Harbour, David Adger & Susana Béjar, Oxford: Oxford University Press, pp. 83–129.
- Rezac, Milan. 2008b. The syntax of eccentric agreement: The Person Case Constraint and absolutive displacement in Basque. *Natural Language and Linguistic Theory* 26: 61–106.
- Rezac, Milan. 2009. Person restrictions in Basque intransitives. *Lapurdum* 13: 305–322.
- Rezac, Milan. 2010. On the unifiability of repairs of the Person Case Constraint: French, Basque, Georgian, and Chinook. In: *Beñat Oihartzabali Gorazarre Festschrift for Beñat Oyharçabal*, ed. by Ricardo Etxepare, Ricardo Gómez & Joseba A. Lakarra, UPV-EHU, Special issue of *Anuario del Seminario de Filología Vasca "Julio de Urquijo" XLIII*: 1–2, pp. 769–790.
- Rezac, Milan. 2011. Phi-Features and the Modular Architecture of Language. Dordrecht: Springer.
- Rezac, Milan, Pablo Albizu & Ricardo Etxepare. 2014. The structural ergative of Basque and the theory of Case. *Natural Language and Linguistic Theory* 32: 1273–1330.
- Rezac, Milan & Beatriz Fernández. 2012. Dative displacement in Basque. In: *Variation in Datives: A Microcomparative Perspective*, ed. by Beatriz Fernández & Ricardo Etxepare, Oxford: Oxford University Press, p. 256–282.
- Richards, Marc. 2008. Quirky expletives. In: *Agreement Restrictions*, ed. by Roberta d'Alessandro, Susann Fischer & Gunnar H. Hrafnbjargarson, Berlin: de Gruyter, pp. 181–213.
- Ross, John Robert. 1969. Guess who? In: *Chicago Linguistics Society: Papers from the Fifth Regional Meeting*, ed. by Robert Binnick, Alice Davison, Georgia Green & Jerry Morgan, Chicago, IL, pp. 252–286.
- Sag, Ivan. 1976. Deletion and logical form. Ph.D. dissertation, MIT, Cambridge, MA.
- Schütze, Carson. 2003. Syncretism and double agreement with Icelandic nominative objects. In: *Grammar in Focus: Festschrift for Christer Platzack, Vol. 1*, ed. by Lars-Olof Delsing, Cecilia Falk, Gunlög Josefsson & Halldór Ármann Sigurðsson, Lund University: Department of Scandinavian Languages, pp. 295–303.

- Sigurðsson, Halldór Ármann & Anders Holmberg. 2008. Icelandic dative intervention: Person and number are separate probes. In: *Agreement Restrictions*, ed. by Roberta d'Alessandro, Susann Fischer & Gunnar H. Hrafnbjargarson, Berlin: de Gruyter, pp. 251–280.
- Stegovec, Adrian. 2020. Taking case out of the Person-Case Constraint. *Natural Language and Linguistic Theory* 38: 261–311.
- Stump, Gregory. 2001. *Inflectional Morphology: A Theory of Paradigm Structure*. Cambridge: Cambridge University Press.
- Stump, Gregory. 2016. *Inflectional Paradigms: Content and Form at the Syntax–Morphology Interface*. Cambridge: Cambridge University Press.
- Trask, Robert. 1981. Basque verbal morphology. In: *Iker-1: Euskalarien Nazioarteko Jardunaldiak*, Bilbao: Euskaltzaindia, pp. 285–304.
- Ussery, Cherlon. 2017. Dimensions of variation: Agreement with nominative objects in Icelandic. In: *Syntactic Variation in Insular Scandinavian*, ed. by Höskuldur Thráinsson, Caroline Heycock, Hjalmar Petersen & Zakaris Svabo Hansen, Amsterdam: John Benjamins, p. 165–197.
- Van Craenenbroeck, Jeroen. 2010. *The Syntax of Ellipsis: Evidence from Dutch Dialects*. Oxford: Oxford University Press.
- Van Craenenbroeck, Jeroen & Jason Merchant. 2013. Ellipsis phenomena. In: *The Cambridge Hand-book of Generative Syntax*, ed. by Marcel den Dikken, Cambridge: Cambridge University Press, pp. 701–745.
- Van Riemsdijk, Henk. 2006. Grafts follow from merge. In: *Phases of Interpretation*, ed. by Mara Frascarelli, Berlin: de Gruyter, pp. 17–44.
- Walkow, Martin. 2012. Goals, big and small. Ph.D. dissertation, University of Massachusetts Amherst. Walkow, Martin. 2013. Locating variation in person restrictions. In: *Proceedings of the 36th Annual Penn Linguistics Colloquium*, ed. by Kobey Shwayder, pp. 247–256, University of Pennsylvania Working Papers in Linguistics 19.1, accessible at: https://repository.upenn.edu/pwpl/vol19/iss1/28.
- Weir, Andrew. 2014. Fragments and clausal ellipsis. Ph.D. dissertation, University of Massachusetts Amherst.
- Williams, Edwin. 1981. Argument structure and morphology. The Linguistic Review 1: 81-114.
- Wunderlich, Dieter. 1996. Minimalist morphology: The role of paradigms. In: *Yearbook of Morphology* 1995, ed. by Geert Booij & Jaap van Marle, Dordrecht: Kluwer, pp. 93–114.
- Wurmbrand, Susi. 2017. Stripping and topless complements. Linguistic Inquiry 48: 341–366.
- Yang, Charles. 2016. The Price of Linguistic Productivity: How Children Learn to Break the Rules of Language. Cambridge, MA: MIT Press.
- Yokoyama, Tomohiro. 2019. The Person Case Constraint: Unconditional interfaces and faultless derivations. Ph.D. dissertation, University of Toronto.