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Freezing and phi-feature agreement: On the role of [PERSON]

Abstract: This paper investigates the empirical and theoretical relationship between two nominal phenomena: phi-agreement and subextraction. Previous accounts have proposed that nominals that undergo phi-agreement are frozen for subextraction. Building on that work, this paper begins by identifying several factors that must be controlled in order to accurately assess the proposed agreement–freezing connection. In particular, we emphasize the importance of limiting our attention to linguistic situations that involve genuine subextraction and genuine agreement. Many DPs that enter phi-agreement also move, making it difficult to tease apart agreement and movement as potential triggers for freezing to subextraction. We argue that, although controlling for such variables results in a smaller language sample, the resulting data pool is also cleaner than the sample produced in a large-scale investigation of agreement and freezing. Building on this background discussion, we identify several languages in which agreement appears to ind uce freezing (Basque, sign languages) and some in which it does not (primarily Tsez and Hindi). The resulting paradox paves the way for the analytical contribution of the paper, in which we argue that a DP that contains a [Person] feature is opaque to subextraction, regardless of whether this DP controls phi-agreement. It is the person specification that renders a DP opaque to subextraction. We conclude that the connection between agreement and subextraction is indirect and more abstract than has previously been argued.

Keywords: agreement, Basque, blocking effects, clitics/cliticization, Hindi, phi-features, sign languages, split NPs, subextraction, Tsez

1 Introduction

This paper examines the phenomenon of subextraction (also referred to as subscrambling), in which a subconstituent is displaced out of a nominal constituent. This process is exemplified below:

(1)   Which candidate$_i$ did MSNBC offer [new revelations on t_i]?

Subextraction is not always possible, as illustrated by the ungrammatical (2); in this example, the DP *a candidate of x party* is considered frozen (opaque) for subextraction:

(2)   *Which party$_i$ did you send [a candidate of t_i] your brochures?

It is important to distinguish subextraction from the process of *extraction*, which displaces an entire constituent. Subextraction and extraction are subject to different constraints which I will not review here (Lohndal 2011; Polinsky et al. 2013; Chesi and Bianchi 2014). To give just one example, locality restrictions tend to apply more rigidly to subextraction than to extraction (Lohndal 2011; Corver 2016). The received wisdom is that subextraction from a nominal constituent fails when (i) that constituent enters a checking domain (for instance, for case or the EPP) or (ii) that constituent participates in phi-feature agreement (Boeckx 2003, 2008; Lohndal 2011). In such instances, the host of subextraction undergoes *freezing*: it is no longer transparent for subextraction.

Until recently, constraint (ii) on subextraction was subsumed under (i), based on the intuition that case-checking follows agreement. On the assumption that there is a significant overlap between movement for case and movement for agreement (Baker 2008; 2013), phi-feature agreement (ii) and movement for case (i) do not need to be separated: any nominal constituent that participates in phi-feature agreement is expected to be frozen.[1] This intuition is formalized in Chomsky's (2000; 2001) "activity condition":

(3)   *Activity Condition*

> If an element α undergoes A-movement, it gets frozen: neither it nor any of its parts can undergo further movement operations. In its derived position, α is rendered ф-complete, and it cannot participate in any other computational operations.

However, in the past decade, important arguments have been advanced that favor either a complete separation of case-checking and agreement (Nevins 2004; Bobaljik 2008; Halpert 2012), or the inverse of the activity condition, in which agreement follows case-checking (Levin and Preminger 2015). Assuming that recent hesitancy toward the activity condition is well-founded, it is important to separate freezing attributed to case-checking and more generally movement to a checking domain (under the family of constraints in (i)) and freezing attributed to phi-feature agreement (under constraint (ii) above).

In this paper, I concentrate on the latter, examining the role of phi-feature agreement in constraining subextraction. In zeroing in on this phenomenon, (direct) objects, which do not have to leave their base position to participate in

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[1] That still leaves us with nominal constituents that undergo A-bar movement, under constraint (i), but such movement is not relevant for the present discussion.

agreement, are going to be particularly informative. As Lohndal writes, there is a "strong correlation between agreement and lack of sub-extraction. Notice, though, that since the direct object itself has not entered a checking domain, movement of the entire object is still possible. Thus there are now two ways in which sub-extraction of a DP becomes impossible: either by entering a checking domain (the case of subjects), or if there is agreement (in phi-features) between a verb and the DP (the case of objects)" (Lohndal 2011: 45). The general idea is that verb-object agreement makes the direct object φ-complete, which in turn leads to freezing. If this is on the right track, direct objects are particularly useful in allowing us to dissociate the effects of movement to a checking domain and the effects of agreement without such movement.

As internal arguments, direct objects invite a comparison with subjects of unaccusatives, which often differ from other subjects in being either completely or relatively transparent (Chomsky 2008). But since unaccusative predicates may be introduced by a functional head with properties different from the transitive functional head v, it is ~~better~~ to ponder the agreement-related properties of direct objects first.[2]

In the considerations of object opacity, it is φ-feature agreement in the narrow sense that induces opacity to subextraction, rather than the more abstract operation of Agree, which can create a number of dependencies (for instance, Pesetsky and Torrego 2007 propose a theory of Agree which does not involve phi-feature agreement at all). This distinction between agreement and the more abstract Agree operation is important. In a large body of research, the abstract operation Agree is viewed as a necessary condition on extraction (Richards 2001; Rackowski and Richards 2005; Pearson 2005; van Urk and Richards 2015). On this approach, island effects arise when a higher functional head cannot enter into an Agree relation with the extraction domain. To reiterate, this line of inquiry is concerned with Agree as an abstract operation, which is much broader than the agreement in phi-features discussed in this paper. Furthermore, most of the work on this approach has concentrated on extraction, rather than subextraction; in fact, the languages most often used to argue for the connection between Agree and transparency (Tagalog, Malagasy, Dinka) lack subextraction altogether.

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2 Adding unaccusatives to a cross-linguistic study would lead to another set of practical complications; unaccusativity diagnostics are not universally available, and it was only recently that researchers started paying attention to differences in subextraction between subjects of unaccusatives and all other subjects. As a result, the range of data available cross-linguistically is incomplete at best.

On the other side of the debate, researchers have argued that certain languages need to suspend agreement (not Agree!) before extraction of a particular clausal constituent can proceed; anti-agreement is the clearest case of this phenomenon (Baker 2008; Boeckx 2003; Ouhalla 1993, 2005; Schneider-Zioga 2007, a.o.).[3] Data from Basque, in particular, suggest that agreement between the extraction domain and v or T may block subextraction (Boeckx 2003; 2008; Lohndal 2011; Gallego 2010). It is this generalization, formalized in (4) below, that I explore in this paper:

(4) If an element α participates in phi-feature agreement, it gets frozen for subextraction

To fully investigate this generalization, we need to assemble both empirical and conceptual evidence. Empirically, we need observations on subextraction across languages. I tackle this task in sections 3 and 4; section 3 examines empirical cases that confirm (4), while section 4 presents empirical data that contradict this generalization. Conceptually, we need to thoroughly examine the relationship between agreement and movement out of a domain. Section 5 scrutinizes this relationship and argues that the connection between agreement and freezing, as stated in (4), is too general and needs to be refined. The refinement I propose, based on the amassed empirical evidence, establishes a connection between freezing and *person* agreement specifically.

Before proceeding to these tasks, however, it is crucial that we first establish a clear and consistent understanding of the phenomena we are trying to link: phi-feature agreement and subextraction. These two phenomena are discussed in section 2.

2 Agreement? Subextraction?

An old saw compares the act of engaging in philosophical inquiry to standing in a dark room and looking for a black cat that isn't there (Doniger 2011: 32–33). In the present paper, agreement and subextraction are the two cats we are after. All possibilities may look alike in the dark, so before we proceed, it is important that we shed some light on the situation and make sure we're all in the right room.

While *agreement* is a mechanism by which the features of a particular DP get transferred to another constituent, not all phenomena that meet this criterion

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3 I will discuss anti-agreement further in section 5.

constitute agreement; feature transfer can be achieved by a variety of other means, including concord (Norris 2014), binding, coindexation (Reuland 2011), and cliticization/clitic doubling (Arregi and Nevins 2008; Woolford 2006; Preminger 2009; Nevins 2011; Oxford 2014, a.o.). The distinction between clitic doubling and morphological agreement, in particular, can be quite subtle, although the driving forces behind the two phenomena are decidedly different (Harizanov 2014, Anagnostopoulou 2006). It is therefore important, especially in our initial examination, to ensure that the data we investigate truly instantiate the relationship of agreement, not cliticization, as the latter takes us back to abstract Agree and away from the more specific and narrowly defined φ-feature agreement.

The difference between morphological agreement and cliticization is especially pertinent with respect to apparent object agreement, which is notoriously heterogeneous (cf. Siewerska and Bakker 1996: 117–118; Baker 2013: 25). For instance, in a recent discussion of Amharic, Kramer (2012; 2014) draws together a number of criteria to illustrate that object markers in that language are best classified as doubled clitics. Assuming the validity of this analysis, Amharic is irrelevant for the examination of freezing in subextraction under the condition introduced in (4) above. Likewise, object (absolutive) agreement is found across Mayan languages, and in fact in some of these languages subextraction from objects is possible (Tzotzil: Aissen 1996; Chol: Coon 2009), which may seem to challenge the generalization in (4). In Mayan, however, the absolutive markers invariably bear a formal resemblance to freestanding pronouns and appear in variable positions within the verbal complex (while ergative morphemes are (while ergative morphemes do not resemble pronouns and have a fixed prefixal position). The consensus is that Mayan object (absolutive) markers are clitics (Coon et al. 2014).

In general, numerous diagnostics allow us to distinguish between agreement and clitic doubling (Zwicky and Pullum 1983; Anderson 2005; Harris 2002; Nevins 2011; Preminger 2009, a.o.), so there is little excuse to assume a language exhibits agreement without checking its performance on these diagnostics first.

Next, it is important to determine whether or not subextraction from noun phrases is possible in a given language. A main outcome of subextraction is a "split," whereby two non-string-adjacent expressions appear to be linked to a single clausal position. Because the main focus here is on nominal (non-clausal) internal arguments, I will be referring to such splits as "NP-splits".[4] NP-splits do not always arise through movement out of a single constituent (*subextraction* or

4 I use NP here atheoretically, without intending any significant contrast between DPs and NPs. However, see some discussion of the possible relationship between DP theory and subextraction in section 5 below.

subscrambling: (5)a; they may also occur as a result of ellipsis from two separately occurring constituents. This latter phenomenon is often referred to as *discontinuous constituency* (Fanselow and Cavar 2002; Ott 2012; Fanselow and Féry in prep.), which encompasses both partial ellipsis within two referentially linked constituents, without any movement involved: (5)b, and scattered (partial) ellipsis of both copies of a single constituent (post-movement: (5)c). The latter case takes us back to extraction of an entire XP, a phenomenon I have set aside for the purposes of this paper.[5]

(5)   a. X_i ... [$_{DP}$ ... t_i]   subextraction proper
      b. [X ~~WP~~]$_k$ ... [~~X~~ WP]$_i$ discontinuous constituency without movement
      c. [X ~~WP~~]$_i$ ... [~~X~~ WP]$_i$ discontinuous constituency with scattered deletion

It is easy to imagine contexts where subextraction and discontinuous constituency may be in complementary distribution. For example, in languages that observe the left-branch condition (Ross 1986),[6] the separation of left-branching modifiers from the head can serve as a clear sign of discontinuous constituency. The left-branch condition is far from universal, however (Corver 2016), and dislocated constituents outside the left branch of a noun phrase may be amenable to both analyses – so it is not always obvious what the right analysis for a given language may be.[7]

Luckily, as with agreement vs. cliticization, sufficient diagnostics exist to allow us to separate subextraction from other types of noun-phrase discontinuities. In particular, subextraction proper is expected to be sensitive to syntactic islands, to follow locality constraints, to obey cyclicity, to be unavailable if the specifier of the host DP is filled (6), and to manifest connectivity effects.

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5 The unavailable environments for extraction are a subset of the unavailable environments for subextraction&(Rizzi 2004). To reiterate, this subset relationship follows from the locality conditions: since subextraction is expected to be always as local or less local than extraction, contexts where subextraction is allowed but extraction is not, are unlikely to occur (but see Rizzi 2010 for possible counterexamples).

6 Ross's Left-Branch Condition states that left-branch elements in the nominal and adjectival domains are inaccessible to movement processes.

7 For instance, Gallego (2010: 304–315) examines a set of Spanish examples containing apparent subextraction and negation, as in (i), and argues that when such constructions are interpretable (only under a *de re* interpretation), they actually involve scattered deletion rather than subextraction:

(i) De qué autor no sabes [qué traducciones están a la venta...] of what author NEG know.2SG what translations be.3PL at the sale 'Of which author don't you know what translations are on sale...' (example due to Juan Uriagereka).

Furthermore, on the assumption that subextraction is A-bar movement, we can expect to observe reconstruction effects and no new binding possibilities.

(6) *Who$_i$ did Peter like [$_{DP}$ Mary [$_{D}$'s [$_{NP}$ picture of t$_i$]?

Languages that do not decisively exhibit subextraction cannot be used as data sources for the present investigation, whether or not they have agreement. For instance, although there is good evidence that person marking of objects on the verb in Algonquian is indeed agreement (Bruening 2009; Oxford 2014), the numerous discontinuous constituents in this language family are most likely base-generated (Reinholz 1999; Lochbiler 2012, a.o.), and thus do not meet our criteria. Georgian, too, has rich object agreement (Anderson 1984; Harris 1981; Foley 2015), but its pervasive NP-splits resist a subextraction analysis (Nash 2002; Fanselow and Féry in prep.). And Warlpiri fails to meet either of the methodological criteria set up here: its person/number cross-referencing is accomplished by clitics, not agreement (Legate 2008), and it has discontinuous constituency rather than subextraction (Legate 2011).

The mention of Warlpiri brings up yet another confounding factor. Warlpiri is a polysynthetic language. A scan of the sample of languages that have apparent object agreement shows that a number of them exhibit polysynthesis, for example, Mapudungun (Smeets 2008; Zuñiga 2000), Mohawk (Baker 1996, 2003, 2008). All other factors being equal, subextraction is outright impossible or highly question-able in such languages, which further limits the sample under consideration. In Northwest Caucasian languages, which also show polysynthesis (Testelets 2009), there appears to be subextraction (Caponigro and Polinsky 2011: 86–87), but then these languages are likely to have clitics rather than agreement.

In the discussion below, I will rely on languages for which independent evidence of subextraction from a s ingle constituent is available. The result is a much smaller sample (an issue I address below), but also a cleaner sample. By imposing these rigid limitations on the data set, we may be looking in fewer rooms – to return to the missing-black-cat metaphor alluded to at the beginning of this section – but we will be certain that our cats are to actually be found in the rooms we do search.

3 Agreement with objects leads to freezing: Empirical evidence

It was Basque that offered the initial inspiration for the proposal that objects which enter into phi-feature agreement with the verb are not transparent for

subextraction (Goenaga 1985; Uriagereka 1999: 395; Boeckx 2003: 72). Basque verbs agree with their subject and object in person/number. However, while Basque objects can freely A-bar move, subextraction out of these objects is impossible, reiterating the contrast between extraction and subextraction that I mentioned in the beginning of this paper. (7)b shows the subextraction of a wh-word, and (7)c,d, topicalization.[8,9] (In the ungrammatical examples, the verbal complex moves leftward over the object, and the object DP stays in its base position (Uriagereka 1999; Elordieta 2001, a.o.).)

(7) a. *pro* [Karlos$_i$ buruzko zurrumurru-ak] entzun
          Karlos.OBL about   rumor-ABS.PL   hear
       dituzu.   *Basque*
       AUX.2SG.SUBJ.3PL.OBJ
       'You have heard rumors about Karlos.'

   b. *[Nori   buruzko]$_i$ *pro* entzun dituzu
       who.OBL about   hear   AUX.2SG.SUBJ.3PL.OBJ
       [t$_i$ zurrumurru-ak]?
          rumor-ABS.PL
       ('Who did you hear rumors about?')

   c. *[Karlos$_i$ buruzko]$_i$ *pro* entzun dituzu
       Karlos.OBL about   hear   AUX.2SG.SUBJ.3PL.OBJ
       [t$_i$ zurrumurru-ak].
          rumor-ABS.PL
       ('About Karlos, you heard rumors.')

   d. *Karlos$_i$ *pro* entzun dituzu   [t$_i$ buruzko
       Karlos.OBL   hear   AUX.2SG.SUBJ.3PL.OBJ   about
       zurrumurruak t$_i$].
       rumor-ABS.PL
       ('Karlos, you heard rumors about.')

The freezing of Basque objects has received two explanations. One account holds that Basque objects must move to receive case (Vicente 2005); evidence in support of this movement-first account comes from adverb placement (manner adverbs follow the object and precede the verb) and scope facts. Once moved for case-licensing reasons, the objects are frozen for subextraction. If

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8 Example (7)c is similar to the example provided in Vicente (2005: 363), but his version lacks the locative genitive marker *ko,* which is a linker-like element (Laka 1996: section 4.1).
9 Example (7)d can be ungrammatical for independent reasons, namely, the impossibility of postposition stranding in Basque.

this account is on the right track, Basque is simply not informative for the discussion here, since agreement alone is not responsible for the freezing of its objects.

However, there are empirical and conceptual reasons to question Vicente's account of the Basque facts. On an empirical level, the adverb placement data are not as clear-cut as presented in Vicente (2005) (as he himself acknowledges) and it remains unclear whether the adverbs can serve as reliable road-posts for object movement (Itziar Laka, pers. comm.). Furthermore, the fact that Basque disallows subextraction from subjects in base position (i.e. subjects of unaccusatives) casts doubt on the freezing-through-movement account.

(8) *[Nori   buruzko]ᵢ gaur goizean [tᵢ zurrumurrua]
     who.OBL about   today morning   rumor.ABS
     beldugarria da?   *Basque*
     frightening AUX.3SG.ABS
     ('Who was the rumor about scary this morning?')

Conceptually, Vicente's analysis of Basque encounters a challenge from recent arguments supporting the idea that agreement and case are less closely linked than previously thought (and that, if anything, agreement follows case). As alluded to in section 1, several scholars have recently argued that case licensing (i.e. assignment) happens first, after which the agreeing probe inspects the landscape of already-case-marked nominals, searching for an appropriate goal (Bobaljik 2008; Baker 2012; Preminger 2014; Levin and Preminger 2015). If we accept that Basque objects do not need to move for case, the principle in (4) ("Phi-feature agreement leads to freezing") may offer the best explanation for Basque object freezing (Boeckx 2003, 2008; Baker and Collins 2006). If so, the Basque facts are relevant, in that the agreed-with nominal may in fact be frozen for subextraction.

Sign languages offer some novel and noteworthy examples of freezing associated with agreement. In Italian Sign Language (LIS), a head-final language, we observe a type of subextraction where the base DP appears in its original structural position and the wh-word is moved to the right periphery. This contrast is illustrated in the following examples from Branchini et al. (2015: ex. (10a, b)):[10]

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10 The superscript ——ˣ indicates a non-manual sign, for example, eyebrow raise or head tilt, marking a particular type of expression (wh-question, topic, etc.).

_____wh
(9) a.   LAURA t_i CHOOSE [CAR WHICH]$_i$ *LIS*

____wh
   b.   LAURA [CAR t_i] CHOOSE WHICH$_i$
        'Which car did Laura choose?'

Unfortunately for our purposes, all the subextraction examples cited for LIS in Branchini et al. (2015) involve non-agreeing verbs; I do not have more extensive data on LIS.

American Sign Language (ASL), however, definitely does display agreement. ASL is an SVO language (Liddell 1980, a.o.) with three classes of verbs differentiated by agreement: spatial verbs, plain verbs, and agreeing verbs (Padden 1988).[11] In what follows, I will concentrate on the two latter classes. Plain verbs include a number of predicates expressing perception or cognition, such as MEMORIZE or WANT. Agreeing verbs include a large number of regular transitive and ditransitive predicates: EAT, BLAME, ASK, WATCH, GIVE, etc. Simplifying things somewhat, agreement with the subject of an agreeing verb is signaled manually, by directing toward a location in the signing space that is associated with the person and number of the subject and object (Emmorey 2002). In addition, eye gaze, a non-manual sign, is used to index object agreement (see Thompson et al. 2006, 2009 for details and for a critical analysis of the literature). Plain verbs, conversely, do not index agreement with the subject and do not require eye gaze for object agreement (*pace* Bahan 1996; Neidle et al. 2000).

ASL does not show left-branch condition effects (Boster 1996), but it does exhibit subjacency effects (Lillo-Martin 1991). The language demonstrates at least two types of NP-splits (Boster 1996); one of these appears to be an instance of discontinuous constituency with a topicalized noun-phrase (QP-Topicalization, in Boster's terminology), and will not concern us here. The other is what Boster calls a Wh-NP-split (1996: 190ff.), illustrated in (10)b below. In both examples in (10), the non-manual wh-sign spreads over the entire utterance; crucially, no part of that utterance is topicalized. We can tentatively analyze (10)b as having subextraction out of the object DP:

_____wh
(10) a.   YOU WANT BOOK WH-MANY   *ASL*
          'How many books do you want?'

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11 I will return to the nature of ASL agreement below.

<div style="text-align:center">_____wh</div>

b.   WH-MANY$_i$ YOU WANT [BOOK t_i]
    'How many books do you want?' (Boster 1996: 161)

Within the division of classes illustrated above, we find that ASL subextraction is possible with objects of plain verbs, as shown in (10), but ungrammatical with objects of agreeing verbs, as shown in θ:

<div style="text-align:center">_____wh</div>

(11) a.   *WH-MANY$_i$ YOU$_a$ $_a$WATCH$_b$ [MOVIE t_i]$_b$ *ASL*
      ('How many movies did you watch?')

<div style="text-align:center">_____wh</div>

b.   *WH-MANY$_i$ JEFF$_a$ $_a$GIVE-YOU$_b$ [BOOK t_i]$_b$
      ('How many books did Jeff give you?')

It should be noted that there remains some controversy in the ASL literature concerning the nature of the language's (apparent) agreement; if true agreement is limited in ASL, the examples above may be dismissed. However, even the skeptics agree that a narrowly construed version of agreement, confined to [+human] objects, is attested in the language (see Mathur 2000; Mathur and Rathmann 2012: Ch. 9, for an insightful discussion). Even if we limit our examination to such objects, the relevant contrast still emerges:

<div style="text-align:center">_____wh</div>

(12) WH-MANY$_i$ YOU WANT [STUDENT t_i]   *ASL*
    'How many students do you want?'

<div style="text-align:center">_____wh</div>

(13) *WH-MANY$_i$ MARY$_a$ $_a$TEACH$_b$ LAST-YEAR [STUDENT t_i]$_b$
    ('How many students did Mary teach last year?')

In this section, I have presented evidence from several languages in which agreement with an internal argument blocks subextraction from that argument in the base position. In general, finding clear evidence of freezing for subextraction is not easy: in discussions of subextraction, linguists naturally focus on those languages that allow, rather than disallow, this phenomenon. For example, Corver's (2016) overview includes data from Germanic, Slavic, and Romance languages, with an occasional smattering from Hungarian. With the exception of Hungarian, none of the languages in his sample even has object agreement, and in Hungarian, those objects that enter agreement clearly undergo movement

(Kiss 1987), which renders them irrelevant to the present discussion.[12] Given this natural gap in the discussion on subextraction, amassing support for the generalization in (4) amounts to establishing negative evidence for a relatively rare phenomenon in an already circumscribed set of languages: those that demonstrate object agreement.

This natural limitation takes us back to a question raised in section 2 above: how common is phi-feature object agreement, narrowly defined? In their paper surveying subject and object agreement across languages, Siewerska and Bakker (1996) identify 125 languages with object agreement, many of them quite exotic and under-described.[13] Perhaps half of these languages might have genuine agreement, and half of that half might exhibit genuine subextraction – this seems a reasonable estimate, given that split nominals are not that common. If we are lucky, then, we may be able to compile a sample of thirty languages, and only a small subset of those will offer informative data.

As far as I can tell, languages that have reliable object agreement and resist subextraction from agreed-with objects include the Austronesian languages Palauan (Nuger 2016 and pers. comm.) and Rotuman (Kissock 2003; den Dikken 2003; Fanselow and Fery in prep.), the Papuan language Ranmo (Jenny Lee, pers.comm), the Siberian isolate language Ket (Georg 2007; Edward Vajda, pers. comm.), and the Paleo-Siberian language Itelmen (Jonathan Bobaljik, pers. comm.). Little is known about the status of agreed-with objects in these languages, including the question of whether these objects underwent movement.

Object agreement is common in Bantu languages, but there two additional complications arise. First, in several Bantu languages object agreement can only occur with a dislocated, never in situ, object (see Zeller 2015 for Zulu, Ranero 2016 for Luganda, a.o.). Second, even if we set these languages aside, there is no consensus among Bantu scholars as to whether or not object markers on the verb are manifestations of agreement or clitics (Bresnan and Mchombo 1987; Riedel 2009; Diercks et al. 2015, a.o.). If Bantu object agreement is cliticization, the absence of subextraction may be irrelevant to the discussion here.

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12 Similarly, in Turkish, freezing to subextraction is also limited to those objects that undergo movement (Kornfilt 2003).

13 In particular, the authors pinpoint Barai (Papuan) and Warao (isolate spoken in Venezuela) as two languages with object agreement only (Siewerska and Bakker 1996: 123). The data on Barai are so limited that it is impossible to draw any generalizations; Warao does not seem to have any agreement whatsoever (Romero-Figueroa 1985), so the attribution of object agreement to it by Siewerska and Bakker may be due to misunderstanding.

4 Agreement with objects does not lead to freezing: Empirical evidence

In this section, I consider several examples of languages that have agreed-with objects which are nevertheless transparent to subextraction. Tsez (Nakh-Dagestanian) is one such language. Tsez is a morphologically ergative head-final language with relatively free word order in root clauses. The verb agrees with the absolutive argument in gender (indicated in Roman numerals in the glosses) and number, so object agreement is obligatory. There are four genders in the singular and two in the plural (indicated as (n)IPL in the glosses below). The verbal exponent of agreement is always a prefix, although agreement is marked only on a subset of vowel-initial verbs (Polinsky and Potsdam 2001; Polinsky 2003).

In (14)a, the verb agrees with the absolutive subject, and in (14)b, with the absolutive object.

(14) a. Aw   ɣalbac'yo-ƛ-äy   b-ok'eł-si.   *Tsez*
          mouse.ABS.III mousetrap-SUB-ABL   III-set.out-PST.EVID
          'The/A mouse escaped from the mousetrap.'
     b. K'et'-ä aw   b-iqir-si.
          cat-ERG mouse.ABS.III III-obtain-PST.EVID
          'The/A cat caught a mouse.'

Tsez does not follow the left-branch condition on extraction, cf. (15)b; ergative and absolutive arguments alike can be split. The appearance of split arguments is associated with various interpretive effects (mainly contrast), which are not relevant for the discussion below (I have tried to make these effects explicit in the translations that follow).

(15) a. [Neła ɣʷˤay-ä] [pat'i-s   k'et'u]   ħan-si.   *Tsez*
          this dog-ERG Fatima-GEN cat.ABS.III bite-PST.EVID
          'This dog bit Fatima's cat.'
     b. Pat'i-s$_i$ neła   ɣʷˤay-ä̱ [t_i k'et'u]   ħan-si.
          Fatima-GEN this.OBL dog-ERG   cat.ABS.III bite-PST.EVID
          'Fatima's cat, this dog bit.'
     c. ɣʷˤay-ä$_i$ pat'i-s   k'et'u   [neła t_i] ħan-si.
          dog-ERG Fatima-GEN cat.ABS.III this.OBL bite-PST.EVID
          'Of dogs, this one bit Fatima's cat.' (Polinsky 2015)

At least three pieces of evidence confirm that Tsez NP-splits arise through sub-extraction: case connectivity, limitation of the discontinuity to ergatives and

absolutives (which would be impossible to explain under an ellipsis analysis, as in (5)b,c above), and sensitivity to negative islands.[14] For the last of these factors, consider the following examples, which are very similar to the French *combien*-splits (Obenauer 1984; Abrusan 2011; Spector 2005; a.o.). Just as in French, where *combien* cannot subextract out of objects under negation (whereas regular extraction is licit), Tsez does not allow subextraction out of absolutive objects or the subjects of unaccusatives under negation.

(16) a. [Combien de voitures]$_i$ n'a-t-il pas conduit t_i? *French*
     how.many of cars not.has-LINKER-he not driven
     'How many cars didn't he drive?'

   b. *Combien$_i$ n'a-t-il pas conduit [t_i de voitures]?
     how.many not.has-LINKER-he not driven of cars
     ('How many cars didn't he drive?')

(17) a. [Dice mašinabi]$_i$ nesä t_i r-egir-x-ānu? *Tsez*
     how.many cars.ABS.nIPL he.ERG nIPL-send-PRS-NEG
     'How many cars does he not drive?'

   b. *Dice$_i$ nesä [t_i mašinabi] r-egir-x-ānu?
     how.many he.ERG cars.ABS.nIPL nIPL-send-PRS-NEG
     ('How many cars does he not drive?')

Based on these data, we can conclude that Tsez allows subextraction out of agreed-with objects. Although we do not have comparably detailed data on subextraction in the other, quite numerous, Nakh-Dagestanian languages (most of which have verb-absolutive agreement in number and gender), the data we do have suggest that they allow NP-splits as well (Forker 2013: 737–738 for Hinuq; Dmitry Ganenkov, pers. comm. for Lak). If Tsez is not alone in its family in allowing subextraction out of objects under agreement, we may have the opportunity to slightly expand our overall sample of languages that attest both object agreement and subextraction.

  Hindi is another language that allows subextraction from agreed-with objects. Hindi is a split-ergative language whose verbs agree with the highest unmarked argument in person, number and gender (Kachru 2006: 163ff.), so when the subject is ergative (in the perfective) or dative (with experiencer verbs),

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14 A somewhat unusual property of Tsez is that it does not allow cross-clausal A-bar movement; movement takes constituents only as far as the periphery of the original clause (Polinsky and Potsdam 2001: 603). This situation limits the domains that can be tested for movement.

the verb can agree with the object. For third-person noun phrases, agreement distinguishes two genders in the singular: masculine and feminine. The default agreement is third-person masculine singular.

Like Tsez, Hindi is not subject to the left-branch condition, so prenominal possessors and modifiers can move out of the noun phrase forming NP-splits. Evidence in support of subextraction comes from locality. In particular, locality effects are observed on possessor extraction out of noun phrases: possessors cannot be extracted over the clausal expletive *yeh*, (18)a, whereas entire noun phrases can cross this expletive under A-bar movement, (18)b:[15]

(18) a. *Ram=kii$_i$(=to)   mujhe   yeh   lagtaa   hai   [ki   tumheN
            Ram-GEN.F-TOP 1SG.DAT EXPL seem   AUX.F that 2SG.DAT
            [*t$_i$* pehlii kitaab] pasand aaegii].   *Hindi*
              first   book.F like   come.FUT.F
          ('I think you will like Ram's first book.')
       b. [Ram-kii   pehlii   kitaab]$_i$ mujhe   (?yeh) lagtaa hai
            Ram-GEN.F first.F book.F   1SG.DAT EXPL   seem AUX.F
            [ki tumheN *t$_i$* pasand aaegii].
            that 2SG.DAT like   come.FUT.F
          'Ram's first book, it seems to me that you will like.'

How does this subextraction process in Hindi interact with object agreement (see also Alok 2016)? It turns out that agreeing subjects and objects are equally transparent to subextraction. Compare the ungrammatical example in (18), where *yeh* acts as the intervener, and the grammatical example below, where the agreed-with object is transparent to subextraction:

(19) Ram=kii$_i$=to   mujhe   lagtaa hai   [ki   tumheN
       Ram-GEN.F-TOP 1SG.DAT seem   AUX.F that 2SG.DAT
       [*t$_i$* pehlii kitaab] pasand aaegii].   *Hindi*
          first   book.F like   come.FUT.F
       'As for Ram, I think you will like his first book.'

Alok (2016) shows that overtly case-marked objects (with *ko*) are islands for subextraction, but it is precisely these objects that do not participate in phi-agreement. On Alok's analysis, overtly marked (DOM) objects constitute islands because they raise to a higher position (at the edge of the phase), whereas

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15 I am grateful to Rajesh Bhatt for bringing this contrast to my attention.

unmarked objects stay in situ. Thus, the Hindi data not only show the dissociation of agreement and case-checking, but also demonstrate that agreement does not necessarily block subextraction, contrary to (4).

(20) Hindi object marking, agreement, freezing, and movement

	Descriptive properties			Analysis
	Has overt case marking	Participates in agreement	Frozen for subextraction	Moves for case
Unmarked object	No	Yes	No	No
Object marked with *ko*	Yes	No	Yes	Yes

Mosetén, an isolate spoken in Bolivia, is another language that seems to contradict the generalization in (4). Mosetén is a head-final language with pronominal clitics that cross-reference person on the verb (Sakel 2004: 117–119): the verb agrees with third-person objects in gender and number (Sakel 2004: 81–91). The status of subextraction is not as clear in Mosetén as it is in Hindi or Tsez, but it appears that subextraction out of PPs is impossible in this language, whereas subextraction out of subjects and objects is permitted (Sakel 2004, and pers. comm.).

It is hard to build a robust theory of subextraction on such a small sample, but I will suggest here that the difference in object transparency between these languages and those discussed in Section 3 has to do with the type of phi-features that participate in agreement in each language. In languages where agreed-with objects are frozen for subextraction, agreement tracks [PERSON] (as well as other categories which are irrelevant for now). In Hindi, Tsez, and possibly in Mosetén, object agreement is in gender/number, but not [PERSON]. I discuss this distinction further in the next section.

5 The status of [PERSON]

5.1 Person is special

The starting generalization I explored in the opening sections of this article was the proposal that a noun phrase in its base position is an island for subextraction if it participates in agreement. This generalization now appears to be too strong; as the data in this section will show, [PERSON] seems to be the only phi-feature

blocking subextraction under agreement. The special status of [PERSON] is not new. In their feature geometry of referring expressions, Harley and Ritter (2002) identify [PERSON] (as related to the Participant node) as the highest feature – the one that needs to be recognized before any other features are identified. Indeed, a number of different (syntactic and extra-syntactic) approaches to phi-agreement identify agreement in [PERSON] as exceptional in its pertinence to the verbal domain and its necessity for predication (Corbett 1979; 1983; Baker 2008). [PERSON] is the feature that is probed first by an agreeing category and it stands out, compared to number and gender, in its need for licensing (at least for first and second person) (Bejar and Režać 2003, 2009; Baker 2008, 2011; Preminger 2014; Ackema and Neeleman 2016).

Simply identifying [PERSON] agreement as "special" does not constitute an explanation for its relationship with subextraction. Before I flesh out a possible explanation, I wish to review certain other contexts where the presence of the feature [PERSON] has strong syntactic effects. At least three sets of contexts come to mind.

The first place where [PERSON] plays a critical role is in the domain of anti-agreement. Anti-agreement is a phenomenon under which argument–verb agreement is altered or suspended when the argument is extracted (Henderson 2009; Ouhalla 1993, 2005; Schneider-Zioga 2007, a.o.). Anti-agreement is quite common cross-linguistically and takes different forms in different languages. Crucially, some languages suppress all phi-features under anti-agreement (as in Somali, Afro-Asiatic, Stoyanova 2008: 67–85, or in Matsigenka, Arawakan, Baier 2016: 16–18), while some languages suppress only [PERSON] under anti-agreement (as in Bantu: Henderson 2009), but there are no languages that suppress number and gender to the exclusion of [PERSON] in this context (see Baier 2016 for similar observations). This generalization stands regardless of the analysis of anti-agreement, which can vary both empirically (Henderson 2009) and conceptually, being tied variously to locality restrictions on binding (Ouhalla 1993), movement (Schneider-Zioga 2007; Cheng 2006), and agreement as such (Boeckx 2003; Henderson 2009).

Next, the feature [PERSON] is implicated in the Person-Case Constraint (PCC) (or *me-lui* constraint) (Perlmutter 1971, Bonet 1991, Haspelmath 2002, a.o.): the requirement that in a ditransitive clause in which both internal arguments are realized as phonologically weak elements, the direct object must be a third person. There are many variations on the PCC, but crucially for the present discussion, there is no Number-Case Constraint or Gender-Case Constraint. It is all about person.

The final set of contexts where [PERSON] plays a robust role concerns the island status of expressions that are inherently specified for this feature, and that

happens regardless of whether such expressions participate in agreement or not. So far, all the examples I have discussed involved agreement in third person, the subcategory of [PERSON] that shows the greatest amount of variation in its specification (I will return to this issue below). If the presence of the feature [PERSON] in general causes freezing, we should expect first- or second-person expressions to be islands for subextraction, regardless of whether they are agreed with or not. This prediction is not easy to test because pronouns expressing first and second person often resist the type of modification needed for subextraction. Instead, they may combine with appositives (Postal 1966; Delorme and Dougherty 1972), act as determiners (Postal 1966), or participate in partitive constructions, as shown in the following three examples, respectively:

(21) a. you honest politicians...
     b. we, the poor judges of character,...
     c. many of us...

Setting such structures aside as uninformative, some possibilities still avail themselves. In Russian – which lacks determiners, allows subextraction (especially in the more colloquial registers), and conveniently does not obey the left-branch condition (Bošković 2005; Corver 2016) – it is possible to test the distinction between first- and second-person pronouns and all other expressions with respect to subextraction. Russian objects are transparent when they appear in base position (Polinsky et al. 2013). Keeping the base position constant, then, we can observe a clear contrast between subextraction from noun phrases that include a third person expression, nominal or pronominal alike, and those that include a first or second person. NP-splits are particularly common in exclamatives, where the WH-expression must be fronted (Zimmermann 2008), and that's the context used in the examples below. Note that the modifier *skol'k-* is adjectival and agrees with the head noun in number, confirming that it is generated as a modifier and not as an adverbial:

(22) a. [Skol'kix   durakov]$_i$ po televizoru priglašajut
        [how.many idiots].ACC.PL on TV   invite.PRS.3PL
        vystupat' t_i!   *Russian*
        present.INF
     b. Skol'kix$_i$ po televizoru priglašajut   vystupat'
        how.many.ACC on TV   invite.PRS.3PL present.INF
        [t_i durakov]!
           idiots.ACC.PL
        'How many idiots they invite to talk on TV!'

(23) a. [Skol'kix   vas]ᵢ   po televizoru priglašajut
         [how.many 2PL].ACC.PL on TV   invite.PRS.3PL
         vystupat'   tᵢ! (Russian Nat'l Corpus)
         present.INF
         'How many of you they invite to talk on TV!'
     b. *Skol'kixᵢ   po televizoru priglašajut   vystupat'   [tᵢ vas]!
         how.many.ACC on TV   invite.PRS.3PL present.INF   2PL.ACC
         ('How many of you they invite to talk on TV!')

In English, the closest parallel to these Russian examples can be found in contexts that seem to induce island effects no matter what; even in these cases, however, we still observe a pronounced difference between first- and second-person pronouns, on the one hand, and all other expressions, on the other:

(24) a. He was pointing to [$_{DP}$ the children [$_{PP}$ in silly hats]] on the screen.
     b. ?What kind of hatsᵢ was he pointing to [$_{DP}$ the children [$_{PP}$ in t_i]] on the screen?

(25) a. He was pointing to [$_{DP}$ us [$_{PP}$ in silly hats]] on the screen.
     b. *What kind of hatsᵢ was he pointing to [$_{DP}$ us [$_{PP}$ in t_i]] on the screen?

In sum, [PERSON] stands out among the other phi-features in its ability to induce island effects in a particularly consistent and pronounced way. Why? I take this central question up in the next section.

5.2 Why [PERSON] is special and how that can be modeled

~~Let's~~ start by tackling the intuition behind the special status of [PERSON], before this intuition is formalized. The basic idea is very simple: [PERSON] makes the expression that it combines with functionally complete, converting it from a property denotation to an individual denotation. Hence, the connection between [PERSON], as an abstract feature, and pronouns, as carriers of this feature: essentially, the presence of [PERSON] makes a noun-phrase pronoun-like. Taking this notion one step further, consider the well-known parallel between pronouns and tenses (Partee 1973; Kratzer 1998). Pronouns and tenses share indexical, anaphoric, and bound variable uses and neither can denote or name their referents (Partee 1973). Just like [PERSON] turns property denotations to individual denotations (i.e. denotations that can be referred to by pronouns) (Longobardi 2005), [TENSE] turns

predications into propositions; in each case, the end result is a functionally complete entity (Harder 1996; Rothstein 2001). However, these are all semantic considerations. The real challenge is in figuring out how to convert these considerations into syntactic mechanisms. I do not have a full-fledged solution here, but I would like to offer some considerations that may help us in constructing one.

Building on the parallels between tenses and pronouns, we can ask two more specific questions: (i) what structural building blocks can bear the feature [PERSON], and (ii) how can these elements of structure be responsible for the fact that person-marked expressions are frozen to subextraction?

The answer to question (i) has been explored by a number of researchers, whose work converges on the idea that the [PERSON] feature is either included on the D head of nominal expressions (Benmamoun 2000; Roberts 2010; Miyagawa 2010) or constitutes the unique content of such D heads (Longobardi 1994, 2005, 2008). It is of course possible to establish a separate projection πP at the top of the nominal expression (something I will return to below), but the crucial generalization remains the same: the head that makes nominal expressions complete includes the [PERSON] feature. In contrast, number and gender features are projected lower in the noun phrase.

If the highest projection in nominal expressions bears the feature [PERSON], the next question we should ask – essentially a more targeted and specific variant of (ii) above – is how exactly the DP, with its status as a phase and a syntactic island, becomes frozen. A variety of proposals have been put forward concerning the modeling of island properties of DPs, and for the purposes of this paper, they may all be adequate. The solution I explore here has two analytical ingredients:

(26) [PERSON] in the DP
    a. location of [PERSON] in the DP
    b. parametric variation in third-person expressions

The [PERSON] feature may be represented in the DP as a separate projection, above all other projections, or it may be included in the featural content of the DP; here, I am assuming the latter representation, primarily out of economy considerations:

(27)

            DP
      /   \
DP[+PERSON]   D'
             / \
          D   NP
                 .....
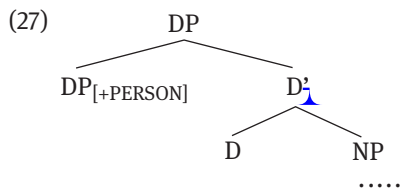
In DPs that denote participants, the specifier of the DP is always filled with the relevant pronominal element; this configuration ensures that participant-DPs are islands *regardless of agreement* – a claim supported by the impossibility of subextraction out of pronominal expressions (see section 5.1). To put it differently, if DPs (in a given language, or more generally) have an escape-hatch position, that position is blocked by the expression encoding person. The blocking effect of person is essentially the same as the blocking effect of possessor in English, as shown in example (6) above (cf. Szabolcsi 1983, 1994; Gavruseva 2000).

If the idea that [PERSON] is represented in the left periphery of a DP is on the right track, we can expect that the presence of that feature may induce blocking effects. At least two data points, drawn from Mandarin Chinese and Russian, suggest that this may be the case.

In Mandarin Chinese, the long-distance reflexive *ziji* cannot be bound by a further antecedent in the presence of a first- or second-person pronoun, as schematically illustrated below (Huang and Liu 2001; Pan 2001):

(28) a. 1person/2person$_i$ ... 3 person$_k$ *ziji*$_{i/*k}$
    b. 3person$_i$ ...   3 person$_k$ *ziji*$_{i/k}$
    c. 3person$_i$ ...   1person/2person$_k$ *ziji*$_{k/*i}$

The expression *zai-xia* 'your humble servant (lit.: located below)', although not specified morphologically for person, induces the same blocking effect as the regular first- and second-person pronouns (James Huang, pers. comm.):

(29) Lisi$_i$ bu   xihuan wo$_k$/zai-xia$_k$ guan   ziji$_{k/*i}$ de
    Lisi   not   like   1SG/humble-servant interfere self   LINKER
    shi.   *Mandarin*
    matter
    'Lisi does not like me interfering in my/*his business.'

In Russian, the equivalent speaker-referencing circumlocution is very similar to the English 'your humble servant' or 'yours truly'. When used to denote a non-participant, this expression is transparent, but when used in reference to the speaker, subextraction is impossible. Presumably, there is a more structure there, as shown in (31)a, and that extra structure blocks subextraction:

(30) a. Včera   xvalili   [$_{DP}$ vašego starogo prijatelja].   *Russian*
         yesterday praised.3PL   [your   old   friend].ACC

b. Prijatelja$_i$ včera   xvalili   [$_{DP}$ vašego starogo t_i].
    friend.ACC yesterday praised.3PL   [your   old].ACC
    'They praised your old friend yesterday.'

(31) a. Včera   xvalili   [$_{DP}$ ~~1st~~ [vašego pokornogo slugu]].
      yesterday praised.3PL   [your   obedient   servant].ACC
      (i) 'They praised your obedient servant yesterday.' (DP only)
      (ii) 'They praised me yesterday.' ([PERSON] projected)

    b. Slugu$_i$ včera   xvalili   [vašego pokornogo t_i].
      servant.ACC yesterday praised.3PL [your   obedient].ACC
      (i) 'They praised your obedient servant yesterday.'
      NOT: (ii) 'They praised me yesterday.'

These observations confirm that agreement with an expression which is a syntactic island is not *the source* of islandhood, but just a *symptom*: an indication that the relevant expression includes the [PERSON] feature and this feature is projected in the syntax of the DP. An expression specified for first and second person can be an island in the absence of agreement. On the other hand, default person agreement with a non-participant expression is not sufficient for that expression to be opaque to subextraction.

    Turning to non-participant DPs, let us start with the case where the feature [PERSON] is absent. In the absence of [PERSON], a probing head can continue scanning the DP for other phi-features (for example, number and gender). The derivation may still proceed; whatever agreement morphology is observed on the probe may be indicative of the obligatory default. Here I understand the default as the absence of a particular feature (rather than feature structures that do not force an interpretation, as in Ackema and Neeleman 2016). However, a DP denoting a non-participant ("third person") may still have a [PERSON] feature requiring agreement, in which case the syntactic structure of third person expression remains as in (27). This feature, expressed in the specifier of the highest projection in the DP, will determine the opacity of that agreed-with DP.

    With that in mind, we can now revisit and revise the generalization in (4).

(32) (Revised from (4): All factors being equal, if an element α participates in non-default person-feature agreement, it becomes an island for subextraction

The new generalization in (32) entails that the transparency of a DP varies depending on whether [PERSON] is projected. Earlier work has shown that that

status of DPs as islands or phases is ambiguous with respect to various diagnostics of phasehood (Matushansky 2005). We are now in a position to explain the ambiguity of these diagnostics; those DPs that include a projection of [PERSON] are frozen, and those that do not, are transparent.

5.3 When is [PERSON] projected?

I suggested that objects that do not undergo any movement are islands for subextraction if they explicitly include the feature [PERSON]. The main reason for their island status is the presence of that feature, not agreement. Since agreement is just a symptom indicating that a [PERSON] feature is present, we should not expect a one-to-one correspondence between the two; for instance, agreement in a language with a [PERSON] feature may be disrupted by syntactic interveners or may be unavailable for non-syntactic reasons.

Third-person expressions in particular cover a wide range of denotations and may vary widely – both within and across languages – in terms of whether or not they explicitly include the feature [PERSON] (cf. Citko 2014: Ch. 4; Torrego and Laka 2015). If the structure of a third-person denotation includes the [PERSON] feature, the generalization in (32) predicts that the respective DP should be frozen for subextraction and may be agreed with by the probing head. This is what happens with agreed-with third-person internal arguments in Basque and ASL.

Let me conclude by examining a possible correlation between transparency of noun phrases to subextraction and the classification of a given language as NP- rather than DP-type (Corver 1990, 1992; Bošković 2005, 2008, 2009). Even more perspicuously, the connection between the D head and the [PERSON] feature is known, and as I mentioned above, some researchers (most notably Longobardi 1994, 2005, 2008) directly equate D and that feature. In the small sample of languages discussed in this article, the predicted correlation seems to hold: all the languages that display [PERSON] agreement with objects instantiate the DP-type, including Basque, and (less clearly) the sign languages (see Abner 2012 for a discussion of ASL determiners). On the other end of the spectrum, Hindi, Tsez, and Mosetén lack overt determiners. So it may seem that we are back to the correlation between the absence of determiners and the possibility of left-branch extraction.

There are at least two sets of arguments against correlating the NP/DP-type distinction with transparency to subextraction: empirical and conceptual. On the empirical side, I will consider data Chamorro, a DP-language, with clear determiners. Chamorro has verb-subject agreement in person and number; in addition, it also has wh-agreement, extensively documented by Sandra Chung

(Chung 1998 and earlier work referenced there). Wh-agreement is of interest here because it is a type of agreement that does *not* involve φ-features such as person or number; instead, verb is indexed for the case of a moved Wh-phrase. For the purposes of the current discussion, it is relevant that the matrix verb is marked for the case of the entire CP out of which Wh-movement has most immediately occurred. For instance, an unaccusative verb may take a sentential subject agreeing with it in standard φ-features, but if subextraction takes place out of that sentential subject, the φ-feature agreement is superseded by wh-agreement – in other words, φ-feature agreement is suspended.

There is no object agreement in φ-features in Chamorro, but if subextraction takes place out of a sentential complement in the direct-object position, the matrix verb must be marked for wh-agreement with that sentential complement. In (33), the sentential complement does not determine agreement; the verb only agrees with the subject in φ-features; in (34), on the other hand, the verb must show wh-agreement with the embedded sentential object because subextraction has taken place out of that sentential object:[16]

(33) Guahu yä-hu   [na bai u-gäi-atungu'   taiguennao
      1SG   like-1SG that   1SG-have-friend like.that
      giya hagu].   *Chamorro*
      LOC   2SG
      'As for me, I like that I have friends like you.' (Chung 1998: 29)

(34) Hayi$_i$ si   Antonio sinangane-nña nu   hita [na   ma'a'ñao gui'
      who   DET Antonio tell-WH.AGR.OBJ OBL us   that afraid   3sg
      ha-chiku t_i]?
      WH.AGR.OBJ-kiss
      'Who did Antonio tell us that he is afraid to kiss?' (Chung 1991: 92)

Crucially, person agreement is absent whenever subextraction out of a sentential complement takes place, either by superseding the person agreement with the sentential subject (not shown above) or by adding dedicated wh-agreement as in (34).[17] These facts suggest that it is not the DP/NP distinction itself that is responsible for transparency of an object but the presence or absence of φ-feature agreement, and more specifically, agreement in [PERSON].

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16 The verbs in the embedded clause itself also show wh-agreement in in (34), but that is not relevant for the present discussion.
17 In addition to subextraction from sentential complements, Chamorro also has subextraction of possessors, with similar agreement effects (Chung 1998: 255).

Let's assume that Chamorro facts may be explained in some other way, for instance, by appealing to some kind of detransitivization. In that case, we are still left with a more general argument suggesting that the correlation between object transparency and lack of determiners may be spurious. The DP/NP parametric division, as proposed by Bošković, is associated with a cluster of properties of which several are empirically problematic; for example, polysynthetic languages are predicted to be of the NP-type, but Adyghe has clear determiners (Smeets 1984; Testelets 2009), while only DP-languages are predicted to have clitic doubling, yet such doubling is found in determinerless Slovenian (Marušič and Žaucer 2010). In terms of the internal structure of the noun phrase, putative NP-languages are not that different from languages with determiners, which suggests that explanations based on surface properties are not always accurate (cf. Pereltsvaig 2007 on Russian, Gillon and Armoskaite 2015 on Lithuanian, both languages lacking determiners, and Watanabe 2006, for extensive arguments that Japanese does have DP structure). It is possible that the proposed DP/NP distinction is not as categorical as has sometimes been claimed. The explanation proposed here are more targeted and less general; that in turn makes them more sustainable.

6 Conclusions

This paper has examined subextraction out of noun phrases in light of the putative relationship between island effects and agreement, taking as a starting point the generalization, proposed by a number of researchers, that phi-feature agreement alone can render noun phrases inaccessible to subextraction. In order to investigate this claim, I first separated out dubious candidate languages from definite candidate languages by pinpointing those object arguments that necessarily remain in the base position and undergo no feature-driven movement.

A closer examination of in-situ agreed-with noun phrases showed that the original hypothesis – that agreement in phi-features renders a noun phrase frozen for subextraction – is too strong. Subextraction from agreed-with object arguments in base position is possible in several languages. In response to these findings, I proposed that the real subextraction–agreement connection is between a noun phrase's opacity to subextraction in base position and its agreement in only one feature: [PERSON]. The feature [PERSON] is also responsible for the opacity of nominals that do not enter morphological agreement with a governing category. Such opacity is observed in nominals

denoting first- and second-person participants regardless of their ~~participation~~ in agreement. In other words, agreement in [PERSON] is not the *cause* of freezing, but simply a *symptom*, one of several indications that the presence of the feature [PERSON] on the nominal spine renders the noun phrase an island for subextraction.

There are many reasons to believe that the feature [PERSON] stands out among other phi-features and is structurally superior to them. While specification of the feature [PERSON] in expressions denoting participants is clear, there is strong cross-linguistic variation in the expression of this feature on noun phrases denoting non-participants. Moreover, at this stage of our knowledge, it is hard to tell what the underlying situation is: is the [PERSON] feature always present but not always specified, or is it only projected at all under certain conditions? This feature may even be relativized to particular syntactic structures, but not entire languages. Overall, this remains a large open question, one that is well beyond the scope of the preliminary generalizations drawn in this paper.

Finally, I would like to comment on the sheer numerical limitations on the languages that are relevant for the generalizations discussed here. At the outset, I proposed that we needed to carefully disentangle two main confounds in the data on agreement and subextraction: (i) the difference between arguments that move for a feature (for example, undergoing object shift) and arguments that stay in base position, and (ii) the difference between agreement and cliticization (since only the former is relevant to the purposes of this discussion). Once these initial cuts were made, we were left with a relatively small sample of languages, which was further pared down by excluding all the potential cases of non-subextraction (discontinuous constituency). Although the resulting sample is quite small, it is crucially constrained, and therefore allows us to arrive at meaningful correlations. Large-scale surveys that do not distinguish between subextraction and discontinuous constituency, or between agreement and cliticization, may be more impressive numerically, but stand too great a chance of missed generalizations.

Reynolds, and Robin Thompson (ASL), Itziar Laka and Luis Pastor (Basque), Deepak Alok, Archna Bhatia, Rajesh Bhatt, and Ashwini Deo (Hindi), Irina Dubinina, Elena Muravenko, and Sol Polinsky (Russian), Arsen and Ruwzanat Abdulaev, Paxruddin Magomedinov, and Ramazan Rajabov (Tsez). All errors are my own responsibility.

References

Abner, Natasha. 2012. There once was a verb: The predicative core of possessive and nominalization structures in American Sign Language. Ph.D. Dissertation, UCLA.

Abrusán, Márta. 2011. Presuppositional and negative islands: A semantic account. *Natural Language Semantics* 19: 257–321.

Ackema, Peter, and Ad Neeleman. 2016. Default person versus default number in agreement. Ms., University of Edinburgh and University College London.

Aissen, Judith. 1996. Pied-piping, abstract agreement, and functional projections in Tzotzil. *Natural Language and Linguistic Theory* 14: 447–491.

Alok, Deepak. 2016. The syntax of a split: The case of Hindi and Magahi. Paper presented at RULingXI, Rutgers University, April 2016.

Anagnostopoulou, Elena. 2006. Clitic doubling. In Martin Everaert and Henk van Riemsdijk (eds.) *The Blackwell Companion to Syntax*. Ch. 14. Malden, MA: Blackwell. doi: 10.1002/9780470996591.ch14

Anderson, Steven. 1984. On representations in morphology: Case marking, agreement and inversion in Georgian. *Natural Language & Linguistic Theory* 2: 157–218.

Anderson, Steven. 2005. *Aspects of the theory of clitics*. Oxford: Oxford University Press.

Arregi, Karlos, and Andrew Nevins. 2008. Agreement and clitic restrictions in Basque. In Roberta D'Alessandro, Susann Fischer, and Gunnar Hrafn Hrafnbjargarson (eds.) *Agreement restrictions*, 49–86. New York: Mouton de Gruyter.

Bahan, Benjamin. 1996. Non-manual realization of agreement in American Sign Language. Ph.D. Dissertation, Boston University.

Baier, Nico. 2016. A survey of anti-agreement effects. Ms., University of California Berkeley.

Baker, Mark C. 2003. Agreement, dislocation, and partial configurationality. In Andrew Carnie, Heidi Harley, and MaryAnn Willie (eds.). *Formal approaches to function in grammar. In honor of Eloise Jelinek*, 107–132. Amsterdam: John Benjamins.

Baker, Mark C. 1996. *The polysynthesis parameter*. Oxford: Oxford University Press.

Baker, Mark C. 2008. *The syntax of agreement and concord*. Cambridge: Cambridge University Press.

Baker, Mark C. 2011. When agreement is for number and gender but not person. *Natural Language and Linguistic Theory* 29: 875–915.

Baker, Mark C. 2012. On the relationship of object agreement and accusative case: Evidence from Amharic. *Linguistic Inquiry* 43: 255–274.

Baker, Mark C. 2013. On agreement and its relationship to case: Some generative ideas and results. *Lingua* 130: 14–32.

Baker, Mark C., and Chris Collins. 2006. Linkers and the internal structure of vP. *Natural Language and Linguistic Theory* 24: 307–354.

Béjar, Susana, and Milan Režać. 2003. Person licensing and the derivation of PCC effects. In Ana-Teresa Pérez-Leroux and Yves Roberge (eds.) *Romance linguistics: Theory and acqui-sition*, 49–62. Amsterdam: John Benjamins.

Béjar, Susana, and Milan Režać. 2009. Cyclic Agree. *Linguistic Inquiry* 40: 35–73.

Benmamoun, Elabbas. 2000. *The feature structure of functional categories: A comparative study of Arabic dialects*. Oxford: Oxford University Press.

Bobaljik, Jonathan. 2008. Where's Phi? Agreement as a post-syntactic operation. In Daniel Harbour, David Adger, and Susana Béjar (eds.) *Phi-Theory: Phi features across interfaces and modules*, 295–328. Oxford: Oxford University Press.

Boeckx, Cedric. 2003. *Islands and chains: Resumption as stranding*. Amsterdam: John Benjamins.

Boeckx, Cedric. 2008. Understanding minimalist syntax: Lessons from locality in long-distance dependencies. Oxford: Blackwell.

Bonet, Eulalia. 1991. Morphology after syntax: Pronominal clitics in Romance. Ph.D. Dissertation, MIT.

Bošković, Željko. 2005. On the locality of left branch extraction and the structure of NP. *Studia linguistica* 59: 1–45.

Bošković, Željko. 2008. What will you have, DP or NP?" In Emily Elfner and Martin Walkow (eds.) *Proceedings of the North East Linguistic Society* 37, 101–114. Amherst: University of Massachusetts.

Bošković, Željko. 2009. More on the No-DP analysis of article-less languages. *Studia Linguistica* 63: 187–203.

Boster, Carole T. 1996. On the quantifier-noun phrase split in American Sign Language and the structure of quantified noun phrases. In William Edmondson and Ronnie Wilbur (eds.) *International review of sign linguistics*, 159–208. Erlbaum.

Branchini, Chiara, Anna Cardinaletti, Carlo Cecchetto, Caterina Donati, and Carlo Geraci. 2015. WH-duplication in Italian Sign Language (LIS). In Pawel Rutkowski (ed.) *Signs and struc-tures: Formal approaches to sign language syntax*, 39–70. Amsterdam: John Benjamins.

Bresnan, Joan and Sam A. Mchombo. 1987. Topic, pronoun, and agreement in Chicheŵa. *Language* 63: 741–782.

Bruening, Benjamin. 2009. Algonquian languages have A-Movement and A-Agreement. *Linguistic Inquiry* 40: 427–445.

Caponigro, Ivano, and Maria Polinsky. 2011. Relative embeddings: A Circassian puzzle for the syntax/semantics inter face. *Natural Language and Linguistic Theory*. 29: 71–122.

Cheng, Lisa. 2006. Decomposing Bantu relatives. *Proceedings of NELS 36*. Amherst: University of Massachusetts, Amherst.

Chesi, Cristiano, and Valentina Bianchi. 2014. Subject islands, reconstruction, and the flow of the computation. *Linguistic Inquiry* 45: 525–569.

Chomsky, Noam. 2000. Minimalist inquiries: The framework. In Roger E. A.Martin et al. eds.) *Step by step: Essays on minimalist syntax in honor of Howard Lasnik* 89–155. Cambridge, MA: MIT Press.

Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz (ed.) *Ken Hale: A life in language*, 1–50. Cambridge, MA: MIT Press.

Chomsky, Noam. 2008. On phases. In Robert Freidin, Carlos P. Otero, and Maria-Luisa Zubizarreta (eds.), *Foundational issues in linguistics*, 133–166. Cambridge, MA: MIT Press.

Chung, Sandra. 1991. Sentential subjects and proper government in Chamorro. In Carol Georgopoulos, and Roberta Ishihara (eds.) *Interdisciplinary approaches to language: Essays in honor of S.-Y. Kuroda*, 75–100. Dordrecht: Springer.

Chung, Sandra. 1998. *The design of agreement*. Chicago: University of Chicago Press.

Citko, Barbara. 2014. *Phase theory: An introduction*. Cambridge: Cambridge University Press.

Coon, Jessica. 2009. Interrogative possessors and the problem with pied-piping in Chol. *Linguistic Inquiry* 40: 165–175.

Coon, Jessica, Pedro Mateo Pedro, and Omer Preminger. 2014. The role of case in A-bar extraction asymmetries: Evidence from Mayan. *Linguistic Variation* 14: 179–242.

Corbett, Greville. 1979. The agreement hierarchy. *Journal of Linguistics* 15: 203–224.

Corbett, Greville. 1983. *Hierarchies, targets and controllers: Agreement patterns in Slavic*. London: Croom Helm.

Corver, Norbert. 1990. The syntax of left branch extractions. PhD Dissertation, Tilburg University.

Corver, Norbert. 1992. On deriving certain left branch extraction asymmetries: A case study in parametric syntax. *Proceedings of the Northeast Linguistic Society* 22. GLSA: Amherst. 67–84.

Corver, Norbert. 2016. Subextraction. *Syntax Companion*, 2 ed.

Delorme, Evelyne, and Ray C. Dougherty. 1972. Appositive NP constructions: We, the Men; We Men; I, a Man. *Foundations of Language* 8: 2–29.

den Dikken, Marcel. 2003. *The structure of noun phrase in Rotuman*. München: Lincom.

Diercks, Michael, Rodrigo Ranero, and Mary Paster. 2015. Evidence for a clitic analysis of object markers in Kuria. In Ruth Kramer, Elizabeth Zsiga, and One Boyer (eds.) *Selected Proceedings of the 44th Annual Conference in African Linguistics*, 52–70. Somerville MA: Cascadilla Proceedings Project.

Doniger, Wendy. 2011. *The implied spider: Politics and theology in myth*. New York: Columbia University Press.

Elordieta, Arantzazu. 2001. Verb movement and consituent permutation in Basque. ~~Doctoral~~ Dissertation, Holland Institute of Generative Linguistics/Leiden University.

Gillon, Carrie, and Solveiga Armoskaite. 2015. The illusion of the NP/DP divide: Evidence from Lithuanian. *Linguistic Variation* 15: 69–115.

Emmorey, Karen. 2002. *Language, cognition, and the brain: Insights from sign language research*. Mahwah, NJ: Lawrence Erlbaum ~~and Associates~~.

Fanselow, Gisbert, and Damir Cavar. 2002. Distributed deletion. In Artemis Alexiadou (ed.) *Theoretical approaches to universals*, 65–107. Amsterdam: John Benjamins.

Fanselow, Gisbert, and Caroline Féry. in prep. *Discontinuous constituents*.

Foley, Steven. 2015. Is the subset principle violable? The view from Georgian agreement. Paper presented at the Eleventh International Tbilisi Symposium on Language, Logic, and Computation (TbiLLC XI). Tbilisi, Georgia. September 2015.

Forker, Diana. 2013. *Hinuq*. Berlin: Mouton de Gruyter.

Gallego, Ángel J. 2010. *Phase theory*. Amsterdam: John Benjamins.

Gavruseva, Elena. 2000. On the syntax of possessor extraction. *Lingua* 110: 743–772.

Georg, Stefan. 2007. A descriptive grammar of Ket (Yenisei-Ostyak). Leiden: Brill.

Goenaga, Patxi. 1985. Sintaxis vasca: complementación y nominalización. *Anuario del Seminario de Filologia Vasca Julio de Urquijo* 19 (2): 493–570.

Halpert, Claire. 2012. Case, agreement, EPP and information structure: A quadruple-dissociation in Zulu. In Jaehoon Choi et al. (eds.) *Proceedings of the 29th West Coast Conference on Formal Linguistics*, 90–98. Somerville, MA: Cascadilla Proceedings Project.

Harder, Peter. 1996. *Functional semantics: A theory of meaning, structure, and tense in English*. Berlin: Mouton de Gruyter.

Harizanov, Boris. 2014. Clitic doubling at the syntax-morphophonology interface: A-movement and morphological merger in Bulgarian. *Natural Language & Linguistic Theory* 32: 1033–1088.

Harley, Heidi, and Elizabeth Ritter. 2002. A feature-geometric analysis of person and number. *Language* 78: 482–526.

Harris, Alice. 1981. *Georgian syntax: A study in Relational Grammar*. Cambridge: Cambridge University Press.

Harris, Alice. 2002. *Endoclitics and the origins of Udi morphosyntax*. Oxford: Oxford University Press.

Haspelmath, Martin. 2002. Explaining the ditransitive person-role constraint: A usage-based approach. *Constructions* (online journal).

Henderson, Brent. 2009. Anti-agreement: Locality of movement or locality of agreement? The *Proceedings of the Chicago Linguistics Society* 45, 2, 89–102.

Huang, C.-T.James, and C.-S. Luther Liu. 2001. Logophoricity, attitudes, and *ziji* at the interface. In Peter Cole, Gabriella Hermon, and C.-T. James Huang (eds.) *Long distance reflexives*. (*Syntax and Semantics*, vol. 33.), 141–196. Amsterdam: Brill.

Kachru, Yamuna. 2006. *Hindi*. Amsterdam: John Benjamins.

Kiss, É. Katalin. 1987. *Configurationality in Hungarian*. Budapest: Akadémiai Kiado.

Kissock, Madelyn. 2003. Transitivity and objecthood in Rotuman. *Oceanic Linguistics* 42: 1–18.

Kornfilt, Jaklin. 2003. Scrambling, subscrambling, and case in Turkish. In Simin Karimi (ed.) *Word order and scrambling*, 125–155. Oxford: Blackwell.

Kramer, Ruth. 2012. Differentiating agreement and doubled clitics: Object markers in Amharic. In Bruce Connell and Nicholas Rolle (eds.) *Selected Proceedings of the 41st Annual Conference on African Linguistics*, 60–70. Somerville, MA: Cascadilla Proceedings Project.

Kramer, Ruth. 2014. Clitic doubling or object agreement: the view from Amharic. *Natural Language & Linguistic Theory* 32: 593–634.

Kratzer, Angelica. 1998. More structural analogies between pronouns and tenses. *Proceedings of SALT 8.*

Laka, Itziar. 1996. A brief grammar of Euskara, the Basque language. Online at http://www.ehu. eus/es/web/eins/a-brief-grammar-of-euskara

Legate, Julie A. 2008. Warlpiri and the theory of second position clitics. *Natural Language and Linguistic Theory* 26: 3–60.

Legate, Julie. A. 2011. Warlpiri Wh-scope-marking. *Syntax* 14: 97–121.

Levin, Theodore, and Omer Preminger. 2015. Case in Sakha: Are two modalities really necessary? *Natural Language and Linguistic Theory* 33: 231–250.

Liddell, Scott. 1980. *American Sign Language syntax*. The Hague: Mouton.

Lillo-Martin, Diane. 1991. Universal Grammar and American Sign Language: Setting the null argument parameters. Dordrecht: Kluwer.

Lochbiler, Bethany. 2012. Aspects of argument licensing. Ph. D. Dissertation, McGill University.

Lohndal, Terje. 2011. Freezing effects and objects. *Journal of Linguistics* 47: 163–199.

Longobardi, Giuseppe. 1994. Reference and proper names. *Linguistic Inquiry* 25: 609–665.

Longobardi, Giuseppe. 2005. Toward a unified grammar of reference. *Zeitschrift für Sprachwissenschaft* 24: 5–44.

Longobardi, Giuseppe. 2008. Reference to individuals, person, and the variety of mapping parameters. In Henrik Høeg Müller and Alex Klinge (eds.) *Essays on nominal determination: From morphology to discourse management*, 189–211. Amsterdam: John Benjamins.

Marušič, Franc, and Rok Žaucer. 2010. Clitic doubling in a determinerless language with second position clitics. In Gerhild Zybatow, Philip Dudchuk, Serge Minor, and Ekaterina

Pshehotskaya (eds.) *Formal Studies in Slavic Linguistics, Proceedings of FDSL 7.5*, 101–115. Frankfurt am Main: Peter Lang.

Mathur, Gaurav. 2000. Verb agreement as alignment in signed languages. Ph.D. Dissertation, MIT.

Mathur, Gaurav, and Christian Rathmann. 2012. *Sign languages*. Cambridge: Cambridge University Press.

Matushansky, Ora. 2005. Going through a phase. In Martha McGinnis and Novin Richards (eds.) *Perspectives on phases* 157–81. Cambridge, MA: MIT Working Papers in Linguistics.

Miyagawa, Shigeru. 2010. *Why Agree? Why Move? Unifying agreement-based and discourse-configurational languages*. Cambridge, MA: MIT Press.

Nash, Léa. 2002. Topics in Georgian syntax. Handout, MIT.

Neidle, Carol, Judy Kegl, Dawn MacLaughlin, Benjamin Bahan, and Robert G. Lee. 2000. *The syntax of American Sign Language: Functional categories and hierarchical structure*. Cambridge, MA: MIT Press.

Nevins, Andrew. 2004. Derivations without the Activity Condition. *MIT Working Papers in Linguistics* 49, 287–310.

Nevins, Andrew. 2011. Multiple Agree with clitics: Person complementarity vs. omnivorous number. *Natural Language and Linguistic Theory* 29: 936–971.

Norris Mark. 2014. A theory of nominal concord. Ph.D. Dissertation, University of California, Santa Cruz.

Nuger, Justin. 2016. *Building predicates*. Dordrecht: Springer.

Obenauer, Hans-Georg. 1984. On the identification of empty categories. *The Linguistic Review* 4: 153–202.

Ott, Dennis. 2012. *Local instability: Split topicalization and quantifier float in German*. Berlin: de Gruyter.

Ouhalla, Jamal. 1993. Subject extraction, negation and the anti-agreement effect. *Natural Language and Linguistic Theory* 11: 477–518.

Ouhalla, Jamal. 2005. Agreement feature, agreement, and anti-agreement. *Natural Language and Linguistic Theory* 23: 655–686.

Oxford, Will. 2014 Multiple instances of agreement in the clausal spine: Evidence from Algonquian. In Robert E. Santana-LaBarge (ed.) *Proceedings of the 31st West Coast Conference on Formal Linguistics* 335–343. Somerville, MA: Cascadilla Proceedings Project.

Padden, Carol. 1988. *Interaction of morphology and syntax in American Sign Language*. New York: Garland.

Pan, Haihua. 2001. Why the blocking effect? In Peter Cole, Gabriella Hermon, and C.-T. James Huang (eds.) *Long distance reflexives*. (*Syntax and Semantics*, vol. 33.), 279–316. Amsterdam: Brill.

Partee, Barbara Hall. 1973. Some structural analogies between tenses and pronouns in English. *The Journal of Philosophy* 70: 601–609.

Pearson, Matthew. 2005. The Malagasy subject/topic as an A'-element. *Natural Language and Linguistic Theory* 23: 381–457.

Pereltsvaig, Asya. 2007. The universality of DP: A view from Russian. *Studia Linguistica* 61: 59–94.

Perlmutter, David M. 1971. *Deep and surface structure constraints in syntax*. New York: Holt, Reinhart and Winston.

Pesetsky, David, and Esther Torrego. 2007. The syntax of valuation and the interpretability of features. In Simin Karimi, Vida Samiian and Wendy K. Wilkins (eds.) *Phrasal and clausal architecture: Syntactic derivation and interpretation. In honor of Joseph E. Emonds*, 262–294. Amsterdam: John Benjamins.

Polinsky, Maria. 2003, Non-canonical agreement is canonical. *Transactions of the Philological Society* 101: 279–312.

Polinsky, Maria. 2015. Tsez syntax: A description. lingbuzz/002315

Polinsky, Maria, Carlos Gómez Gallo, Peter Graff, Ekaterina Kravtchenko, Adam Milton Morgan, and Anne Sturgeon. 2013. Subject islands are different. In Jon Sprouse and Norbert Hornstein (eds.) *Experimental syntax and island effects*, 286–309. Cambridge: Cambridge University Press.

Polinsky, Maria, and Eric Potsdam. 2001. Long-distance agreement and topic in Tsez. *Natural Language and Linguistic Theory* 19: 583–646.

Postal, Paul. 1966. On so-called pronouns in English. In Francis Dinneen (ed.) *Report of the Seventeenth Annual Round Table Meeting on Linguistics and Language Studies*, 177–206. Georgetown: Georgetown University Press.

Preminger, Omer. 2009. Breaking agreements: Distinguishing agreement and clitic-doubling by their failures. *Linguistic Inquiry* 40: 619–666.

Preminger, Omer. 2014. *Agreement and its failures*. Cambridge, MA: MIT Press.

Rackowski, Andrea and Norvin Richards. 2005. Phase edge and extraction: A Tagalog case study. *Linguistic Inquiry* 36:565–599.

Ranero, Rodrigo. 2016. The syntax of object dislocation in Luganda. Paper presented at the 47th Annual Conference in African Linguistics, UC Berkeley.

Reinholz, Charlotte. 1999. On the characterization of discontinuous constituents: Evidence from Swampy Cree. *International Journal of American Linguistics* 65: 201–227.

Reuland, Eric. 2011. *Anaphora and language design*. Cambridge, MA: MIT Press.

Richards, Norvin. 2001. *Movement in language: Interactions and architectures*. Oxford: Oxford University Press.

Riedel, Kristina. 2009. *The syntax of object marking in Sambaa*. Utrecht: LOT Dissertations.

Rizzi, Luigi. 2004. On the form of chains: Criterial positions and ECP effects. Ms., University of Siena.

Rizzi, Luigi. 2010. On some properties of criterial freezing. In Phoevos Panagiotidis (ed.) *The Complementizer Phase: Subjects and operators*, 17–32. Oxford: Oxford University Press.

Roberts, Ian. 2010. *Agreement and head movement: Clitics, incorporation, and defective goals*. Cambridge, MA: MIT Press.

Romero-Figueroa, Andrés. 1985. OSV as the basic order in Warao. *Linguistics* 23: 105–121.

Ross, John R. 1986. *Infinite syntax!* Norwood, NJ: Ablex.

Rothstein, Susan. 2001. *Predicates and their subjects*. Dordrecht: Kluwer.

Sakel, Jeanette. 2004. *A grammar of Mosetén*. Berlin: Walter de Gruyter.

Schneider-Zioga, Patricia. 2007. Anti-agreement, anti-locality and minimality: the syntax of dislocated subjects. *Natural Language and Linguistic Theory* 25: 403–446.

Siewerska, Anna, and Dik Bakker. 1996. The distribution of subject and object agreement and word order type. *Studies in Language* 20: 115–161.

Smeets, Ineke. 2008. *A grammar of Mapuche*. Berlin: Mouton de Gruyter.

Smeets, Rijks. 1984. *Studies in West Circassian phonology and morphology*. Leiden: Hakuchi Press.

Spector, Benjamin. 2005. Aspects de la pragmatique des opérateurs logiques. Doctoral Dissertation, Université de Paris 7.

Stoyanova, Maria. 2008. *Unique focus: Languages without multiple Wh-questions*. Amsterdam: John Benjamins.

Szabolcsi, Anna. 1983. The possessor that ran away from home. *The Linguistic Review* 3: 89–102.

Szabolcsi, Anna. 1994. The noun phrase. In Ferenc Kiefer and É. Katalin Kiss (eds.) *Syntax and Semantics* 27: *The syntactic structure of Hungarian*, 179–274. New York: Academic Press.

Testelets, Jakov (ed.). 2009. *Aspekty polisintetizma. Očerki po grammatike adygejskogo jazyka*. Moscow: RGGU.

Thompson, Robin L., Karen Emmorey, and Robert Kluender. 2006. The relationship between eye gaze and agreement in American Sign Language: An eye-tracking study. *Natural Language and Linguistic Theory* 24: 571–604.

Thompson, Robin L., Karen Emmorey, and Robert Kluender. 2009. Learning to look: The acquisition of eye gaze agreement during the production of ASL verbs. *Bilingualism: Language and Cognition* 12: 393–409.

Torrego, Esther, and Itziar Laka. 2015. The syntax of φ-features: Agreement with plural DPs in Basque and Spanish. In Beatriz Fernández and Pello Salaburu (eds.) *Ibon Sarasola, Gorazarre. Homenatge, Homenaje*, 633–646. Bilbao: UPV/EHU.

Uriagereka, Juan. 1999. Minimal Restrictions on Basque Movements. *Natural Language and Linguistic Theory* 17: 403–444.

van Urk, Coppe, and Norvin Richards. 2015. Two components of long-distance extraction: Successive cyclicity in Dinka. *Linguistic Inquiry* 46: 113–1551.

Vicente, Luis. 2005. Licensing objects with and without movement. In John Alderete et al. (eds.) *Proceedings of the 24th West Coast Conference on Formal Linguistics*, 361–369. Somerville, MA: Cascadilla Proceedings Project.

Watanabe, Akira. 2006. Functional projections of nominals in Japanese: Syntax of classifiers. *Natural Language and Linguistic Theory* 24: 241–306.

Woolford, Ellen. 2006. Case-agreement mismatches. In Cedric Boeckx (ed.) *Agreement systems*, 317–339. Amsterdam: John Benjamins.

Zeller, Jochen. 2015. Argument prominence and agreement: explaining an unexpected object asymmetry in Zulu. *Lingua* 156: 17–39.

Zimmermann, Ilse. 2008. On the syntax and semantics of *kakoj* and *čto za* in Russian. *Journal of Slavic Linguistics* 16: 289–305.

Zuñiga, Fernando. 2000. *Mapudungun*. München: Lincom Europa.

Zwicky, Arnold, and Geoffrey K. Pullum. 1983. Cliticization vs. inflection: English N'T. *Language* 59: 502–513.