Binding of Reflexives in Polish as Agree, Move, and Late Spell-Out

Jacek Witkoś

Abstract: This paper considers components necessary for a successful account of A-binding relations in Polish, a language with subject-oriented reflexives and a binding domain delimited by the Tensed Sentence Condition. Following the presentation of major relevant data points in Polish, two comprehensive theories of binding—the Agree-based theory, presented in Reuland 2011, and the Move-based theory, presented in Boeckx et.al. 2008—are briefly outlined and applied to said data. It turns out that the two theories, in their most orthodox forms, fall short of achieving empirical adequacy. Subsequently, a positive theory of A-binding is proposed which combines upward Agree, movement (and copy pronunciation) of the bound element, similar to movement of clitic/weak pronoun in Polish, and a lexicalization algorithm modeled upon the proposals in Safir 2014 and Nikolaeva 2014. It is shown in a number of derivations with possessives how both the subject and the object engage in binding relations as antecedents and how their dependents become lexicalized as either reflexive or pronominal.

1. Introduction and Key Data Points

This paper considers components necessary for a successful account of Argument-binding relations in Polish, a language with subject-oriented binding respecting the Tensed Sentence Condition (TSC). It is of particular interest how A-binding data are captured by two major reductionist approaches to binding: binding as Agree (Reuland 2011) and binding as Move (Hornstein 2001; Boeckx et. al. 2008). These two theories grow out of and rely on empirical findings and theoretical achievements of the data-rich research in comparative linguistics since the 1980s and 1990s (Chomsky 1981, 1986; Manzini and Wexler 1987; Belletti and Rizzi 1988; Rappaport 1986; Burzio 1996; Hellan 1988; Progovac 1992, 1993; Avrutin 1994, etc.). It is shown below how the two theories, in their most orthodox forms, fall short of achieving empirical adequacy with respect to Polish data. A positive theory of A-binding is proposed which combines elements of both approaches plus a competition-based component (Nikolaeva 2014; Safir 2004, 2014).

Journal of Slavic Linguistics 30(2): 275–328, 2022.

In Polish, binding is subject-oriented, and objects, either dative- or accusative-marked, cannot bind anaphors in other object or adjunct positions, as presented in (1–3):[1]

(1) Jan_1 opowiedział Marii_2 o $\text{sobie}_{1,*2}$/?niej_2 (samej)/*nim_1.
Jan_{NOM} told Maria_{DAT} about self her alone him
'Jan told Maria about himself/her.'[2]

(2) Jan_1 pokazał Marii_2 [$\text{swoje}_{1,*2}$/jej_2 /*jego_1 zdjęcie].
Jan_{NOM} showed Maria_{DAT} self her his picture_{ACC}
'Jan showed Maria his/her picture.'

(3) Piotr_1 pokazał Marii_2 węża [obok
Piotr_{NOM} showed Maria_{DAT} snake next.to
$\text{siebie}_{1,*2}$/niej_2/$\text{swojej}_{1,*2}$/jej_2 torby].
self her self's her bag
'Piotr showed to Maria a snake next to him/her/his bag/her bag.'

Both the reflexive pronoun and the reflexive possessive are oriented towards the nominative subject, while dative and accusative objects look like infelicitous binders in (1–3). Whatever the reason, it cannot be lack of (asymmetric) c-command between the objects. As shown in Witkoś et al. 2020 and Witkoś and Łęska 2020, variable binding shows that there is c-command between both objects, in line with their surface order and irrespective of their case marking.[3] This c-command relation can be illustrated with relations involving

[1] See Willim 1989, Reinders-Machowska 1991, or Rappaport 1986 for almost identical data in Russian.

[2] The following abbreviations are used: N = neuter; F = feminine; M = masculine; SG = singular; PL = plural; NOM = nominative; ACC = accusative; GEN = genitive; DAT = dative; LOC = locative; INF = infinitive; FIN = finite; PAST = past tense; PERF = perfective; PRT = preterite; PRTC = participle; COND = conditional; VIR = virile; REFL = reflexive; CL = clitic; CLF = classifier.

[3] The order of objects with Polish ditransitive verbs seems relatively free, although its core variant is mostly assumed to be DAT – ACC (Tajsner 2008; Wiland 2016; Citko 2011; but see Dornisch 1998 for an opposite view). I assume that whenever the accusative object precedes the dative one, it has been moved overtly to the edge of the vP phase. In her recent study of ditransitive verb phrases in Polish, Łęska (2020) identifies two major classes of such verbs, with the majority class (the *dawać* 'give'-type) showing the DAT – ACC underlying word order and the minority class (the *podporządkować* 'subject'-type) showing the ACC – DAT underlying word order. Both classes allow for the scrambling of objects and show the effects seen in (4–5), where the preceding object c-commands the following one.

pronominal variables (see (4–5)), commonly believed to require c-command by their QP antecedents:[4]

(4) Jan pokazał każdemu zawodnikowi$_1$ jego$_1$ nowego trenera.
Jan$_{NOM}$ showed every player$_{DAT}$ his new coach$_{ACC}$
'Jan showed every player his new coach.'

(5) Jan pokazał każdego trenera$_1$ jego$_1$ nowym zawodnikom.
Jan$_{NOM}$ showed every coach$_{ACC}$ his new players$_{DAT}$
'Jan showed every coach to his new players.'

Another confirmation of the relation of c-command holding between both objects comes from the binding of reciprocal pronouns; unlike reflexives, reciprocals allow for antecedents placed in the object position (Willim 1989; Reinders-Machowska 1991; Rappaport 1986 for Russian):[5]

[4] Obligatory c-command in this context is questioned by Barker (2012: 623–24), who lists a number of examples where the QP does not seem to c-command the pronominal variable, but the bound variable reading is available nevertheless:

(i) She [copied each$_i$ book] without hurting it$_i$.

(ii) The grade [that each$_i$ student receives] is recorded in his$_i$ file.

Although lack of c-command in variable binding reflects a minority view, the argument from reciprocal binding provided in this section confirms that one object c-commands the other in Polish ditransitive constructions.

[5] Upon closer inspection, it turns out that reciprocals substantially differ from reflexives in Polish; not only do they allow for object binders, but they cannot be bound across a closer potential antecedent, such as a nominal possessor in [Spec, NP] or the PRO subject of the infinitive. A non-local reciprocal interpretation is not available, though a non-local reflexive interpretation is:

(i) Pisarze$_1$ czytali wspomnienia o sobie$_1$.
writers$_{NOM}$ read reminiscences$_{ACC}$ about self$_{LOC}$
'Writers read reminiscences about each other.'

(ii) *Pisarze$_1$ czytali [wspomnienia Tołstoja o sobie$_1$].
writers$_{NOM}$ read reminiscences$_{ACC}$ Tolstoj$_{GEN}$ about self$_{LOC}$
(Intended: 'Writers read the reminiscences of Tolstoj about each other.')

(iii) My$_1$ kazaliśmy im$_2$ [PRO$_2$ nalać sobie$_{*1/2}$/jeden drugiemu$_{*1/2}$ herbaty].
we$_{NOM}$ asked them$_{DAT}$ pour$_{INF}$ self$_{DAT}$ each other$_{DAT}$ tea$_{ACC}$
'We asked them to pour each other tea.'

Certainly, the issue of the difference between the reflexive and the reciprocal interpretation of *siebie* 'self' and *swoje* 'self's' deserves further attention and analysis.

(6) Policjanci$_1$ wypytywali ich$_2$ o
policemen$_{NOM}$ questioned them$_{ACC}$ about
siebie$_{1,2}$/jednego o drugiego$_2$.
self$_{ACC}$ each$_{ACC}$ about other$_{ACC}$
'The policemen$_i$ questioned them$_j$ about each other$_{i/j}$.'

(7) Chłopcy$_1$ czytali dziewcząt$_2$ wspomnienia o sobie$_{*?1/2}$
boys read girls$_{GEN}$ memories about self
'The boys read the girls' memories about themselves/them.'

Example (8) shows that Polish allows for the binding of the reflexive pronoun by a remote antecedent, as long as they are in the same tensed sentence. Here both the root and the embedded clause subjects (*Maria* and PRO controlled by *Piotr*) are felicitous antecedents for the reflexive possessive. Interestingly, they can also both function as antecedents for pronominal possessives:

(8) Maria$_1$ kazała Piotrowi$_2$ [PRO$_2$ pozdrowić swoich$_{1,2}$ /jego$_2$ /jej$_1$
Maria$_{NOM}$ told Piotr$_{DAT}$ greet$_{INF}$ self's his her
przyjaciół].
friends
'Maria told Piotr to greet his/her friends.'

Next, Polish has dative experiencers (DAT OEs) with certain psych predicates, and these function as antecedents for anaphoric pronouns, (9a), unlike object datives. Rather surprisingly, they serve as antecedents to either pronominal or reflexive possessives, (9b):

(9) a. Marii$_1$ było żal siebie$_1$ /*?jej$_1$ (samej).
Maria$_{DAT}$ was$_{3SG.N}$ sorrow$_{3SG.M}$ self$_{GEN}$ *?her$_{GEN}$ alone
'Maria felt sorry for herself.'

b. Marii$_1$ było żal swojej$_1$ /jej$_1$ koleżanki.
Maria$_{DAT}$ was$_{3SG.N}$ sorrow self's$_{GEN}$ her$_{GEN}$ friend$_{GEN}$
'Maria felt sorry for her female friend.'

There is a split between psychological predicates with DAT OEs licensing the other argument in genitive (usually these are non-verbal predicates) and those licensing an argument in nominative (typically verbal predicates); see (9–10). The latter, such as the predicate *podobać się* 'appeal to', show a varied pattern: the possessive pronoun in the nominative argument is strongly pre-

ferred to the possessive reflexive, when bound, as in (10).[6] However, Witkoś (2008) shows that a preverbal DAT OE can be involved in anaphoric binding of an element bearing a case different from nominative but embedded in the nominative-marked constituent; see (11):

(10) Marii$_1$ spodobała się ?*swoja$_1$/jej$_1$ nowa książka.
Maria$_{DAT}$ liked REFL ?*self's her new book$_{NOM}$
'Maria liked her new book.'

(11) [Nowakom$_2$] spodobała się nowa książka (Kowalskich$_1$)
Nowaks$_{DAT}$ liked REFL new book$_{NOM}$ Kowalskis$_{GEN}$
o sobie$_{1,2}$.
about self
'The Nowaks liked the new book (by the Kowalskis) about themselves/them.'

In (9b) the DAT OE functions as antecedent for both reflexive and pronominal possessives which are indexically dependent on it. In terms of the classical Binding Theory of Chomsky (1981, 1986; Manzini and Wexler 1987), it "binds" both reflexive and pronominal possessives in the same syntactic domain. This is an obvious problem for the view that pronouns and reflexives remain in complementary distribution (Chomsky 1981, 1986).[7] The empirical picture emerging so far is as follows:

[6] Witkoś et al. (2020) credit this fact to an extended application of the Anaphor Agreement Effect (AAE) of Rizzi 1990:

(i) Anaphors do not occur in syntactic positions construed with agreement.

(ii) Practically, the AAE prevents anaphors from appearing in the subject position. The possessive reflexive in (10) shows the ϕ-features of the subject and constitutes its subpart.

[7] Moreover, Witkoś et al. (2020) show that the dependency between the pronominal possessor and the DAT OE is not accidental co-reference, as this option is also available in equivalent examples with QPs as antecedents:

(i) Każdemu studentowi$_1$ było żal siebie$_1$/*?jego$_1$ (samego).
every student$_{DAT}$ was$_{3SG.N}$ sorrow self *?him alone
'Every student felt sorry for himself.'

(ii) Każdemu studentowi$_1$ było żal swojej$_1$/jej$_1$ koleżanki.
every student$_{DAT}$ was$_{3SG.N}$ sorrow self's her friend$_{GEN}$
'Every student felt sorry for his female friend.'

The sloppy identity reading is available with both the reflexive and pronominal possessives.

(12) Anaphoric binding in Polish:

a. The nominative subject acts as antecedent for reflexive pronouns and reflexive possessives.

b. The object (dative or accusative) does not act as antecedent for a reflexive pronoun/reflexive possessive in the other object or adjunct.

c. The object (dative or accusative) acts as antecedent for a pronominal possessive in the other object NP.

d. The DAT OE acts as antecedent for (i) reflexive pronouns, (ii) reflexive possessives, and (iii) pronominal possessives.

e. The DAT OE marginally acts as an antecedent for reflexive possessives embedded in nominative constituents.

The biggest difference between the characteristics in (12) and binding data in English, apart from the lack of a dedicated morphological form for the reflexive possessive, comes in the binding capacity of the object, which functions as antecedent to reflexives in ditransitive constructions:

(13) John_1 showed Mary_2 herself_2/himself_1 in the mirror.

(14) John_1 showed Mary_2 to herself_2/himself_1 in the mirror.

(15) John_1 showed Mary_2 to her_2 friend/his_1 friend in the mirror.

A comparison of (1–4) and (8–11) on the one hand and (13–14) on the other, in terms of both the morphological composition and interpretation of "bound" elements, confirms an observation made in Safir 2004, 2014. Safir claims that the classical Binding Theory collapsed two related but not isomorphic phenomena: the dependent identity relations relevant for the LF interpretation and the lexicalization of the dependent identity relation on the dependent element, relevant at the PF interface. For instance, in (1) above, the c-commanding object functions as an antecedent for a possessive element in a local domain (it binds it in the LF-relevant sense), but the possessive is lexicalized as pronominal, despite being both indexically dependent on the superior object and c-commanded by it. In (9–10) above, the DAT OE functions as antecedent for possessives. These possessives are lexicalized either as reflexive or pronominal. However, the nominative antecedent in (2) is associated only with the reflexive possessive. It appears that the domain of the Polish clause is divided into three sections with respect to the placement of antecedents for possessives: the antecedent placed in the high domain ([Spec, TP]) binds only reflexive possessives, the nominal placed in the low VP-internal position functions as antecedent for pronominal possessives only, and the nominal placed in the

medial position ([Spec, vP]) can function as antecedent for both reflexive and pronominal possessives.[8]

A successful account of binding in Polish needs to capture the subject orientation of reflexives and the intriguing status of the DAT OE as antecedent. These examples are treated as a litmus test for the two major approaches to binding, one based on Agree and the other on Move.[9]

[8] A reviewer for *JSL* observes that experiencers could also be placed in the specifier position of the Applicative Phrase, as proposed in Cuervo 2003, rather than in [Spec, vP]. I subscribe to this point in the general sense, but I decided against introducing ApplPs into the paper for reasons of space and clarity. Furthermore, this would also add further complexity to the analysis. The general point my analysis is meant to capture is that in Polish, DAT experiencers occupy a higher structural position than other DAT-marked arguments (goals and benefactives), which remain VP-internal. I therefore follow Woolford (2006) and Nikolaeva (2014), who propose that DAT experiencers are licensed in [Spec, vP]. Cuervo's approach to dative constructions based on ApplP achieves a similar result and is more detailed, but Cuervo also introduces another Appl head licensing lower DAT arguments. In this way, the structure of ditransitive and monotransitive clauses would be quite distinct, while I aim at providing a more general picture here.

[9] Two caveats must be made before I proceed further. (a) The construction involving the expression *swoje miejsce* 'its/their place' may produce the illusion that the object can serve as an antecedent in reflexive binding in Polish:

(i) Jan$_1$ odłożył książki$_2$ na swoje$_{1/2}$ miejsce.
Jan$_{NOM}$ put.back books$_{ACC}$ on self's place
'Jan put the books back in their place.'

However, this construction is to be treated as a fixed/idiomatic expression that shows very little productivity, if any:

(ii) Jan$_1$ odłożył książkę$_2$ do swojej$_{1/*?2}$ szuflady.
Jan$_{NOM}$ put.back book$_{ACC}$ in self's drawer
'Jan put the book back in his drawer.'

(iii) Jan$_1$ odwiózł Marię$_2$ do swojego$_{1/*2}$ mieszkania.
Jan$_{NOM}$ brought.back Maria$_{ACC}$ to self's flat
'Jan brought Maria back to his flat.'

(b) I also abstract away from the adjectival non-reflexive use of *swój* 'self's' meaning 'well-known, familiar', which does not require any lexical antecedent, see (v) below:

(iv) Jan to swój człowiek.
Jan$_{NOM}$ is familiar person
'Jan is one of our own.'

(v) Swój człowiek przewiózł pieniądze przez granicę.
self's man brought money$_{ACC}$ across border
'One of our own brought the money across the border.'

2. Binding as Agree

The most prominent proposal that anaphoric binding relies on Agree is presented in Reuland 2011, building on Reinhart 1983 and Reinhart and Reuland 1993. The driving force of this analysis is the postulate that index-based binding should be dispensed with as non-minimalist in nature. In its place, a more parsimonious procedure is proposed that observes the Inclusiveness Condition and exploits three basic operations of minimalist grammar: Merge (both external and internal), Match (conceived of as feature checking or Agree), and Delete (confined by the recoverability condition). So the gist of the analysis presented in Reinhart and Reuland 1993 is preserved but re-modeled to accommodate minimalist assumptions. The first one is that indices can be replaced with copies, not only in the obvious case of movement but also in the case of A-chains.

Reuland (2011) conducts a meticulous analysis of feature composition and feature deletion and proposes that feature checking and deletion (valuation) is instrumental in the binding of reflexive pronouns, seen as the sharing of the same ϕ-features between the antecedent DP and the reflexive pronoun. He postulates that feature checking and deletion (valuation) under Agree implies that the features deleted on the goal are recoverable from the antecedent via a combined chain dependency whose general outline is represented below (Reuland 2011: 146):

(16) DP….T….V….SE
R1 R2 R3

Anaphoric binding follows from a conspiracy of independent syntactic processes: R1 stands for subject-verb agreement, R2 stands for the verb-tense dependency, and R3 for a structural case dependency. Once these dependencies are combined, binding (envisaged as sharing of the same ϕ-features) holds between DP and SE. General principles of derivational and representational economy favor reflexives over pronouns:

(17) Bound Variable (BV) Rule (Reuland 2011: 156)

NP A cannot be A-bound by NP B if replacing A with C, C an NP such that B heads an A-chain tailed by C, yields an indistinguishable logical syntax representation.

Reuland discusses in detail the process of binding the Dutch SE reflexive (*zich* 'self') where anaphoric binding piggy-backs on Agree for ϕ-features. He proposes two technical applications of this idea, one based on Chomsky 1995

and feature movement and the other on Pesetsky and Torrego's (2007) feature-sharing approach (Reuland 2011: 149–51):

(18) a. Oscar voelde zich wegglijden.
Oscar$_{NOM}$ felt self$_{ACC}$ slide.away$_{INF}$
'Oscar felt himself slide away.'

b. *Oscar voelde hem wegglijden.
Oscar$_{NOM}$ felt him$_{ACC}$ slide.away$_{INF}$

Let me present an outline of the latter execution of the core proposal. Reuland follows the postulate of feature sharing between constituents. In a nutshell: SE in the object position gets the value for its ϕ-features from the subject because it becomes involved in an interlocking chain of Agree relations, where the subject DP values the ϕ-features of T, which is involved in Agree with v, which, in turn, is involved in Agree with the SE object. The derivation starts with the following structure:

(19) $[_{T'}\ T_{[uT][u\phi]}\ [_{vP}\ DP_{S\ [uT][v\phi]}\ [_{v'}\ v_{[vT][u\phi]}\ [_{VP}\ V\ SE_{[u\phi]}]]]]$

Tense, the subject, and v are involved in an Agree relation for (nominative) case ([uT] in Pesetsky and Torrego's terminology), with the interpretable instance of the [T] feature introduced by T and the valued instance provided by V. The sharing of ϕ-features between the three elements is a consequence of the sharing of the [T] feature. So far, the SE object remains out of the frame, as T does not become involved with it in any direct manner. The crucial derivational step, which, according to Reuland, brings the SE object into the picture, is its raising to [Spec, vP], driven by the EPP property of v, which places it above the subject in the position of the outer specifier:

(20) $[_{T'}\ T_{[uT][u\phi]}\ [_{vP}\ SE_{[u\phi]}\ [_{v'}\ DP_{S\ [uT][v\phi]}\ [_{v'}\ v_{[vT][u\phi]}\ [_{VP}\ V\ <SE_{[u\phi]}>]]]]]$

But clearly, for this movement to be feasible, the object must necessarily bear a structural case. When T probes for the ϕ-features of the subject, it first encounters [uϕ] features of SE and looks past them to [vϕ] features of DP_S. But as a result, the [vϕ] features on DP_S provide a value to all the members of the ϕ-feature-sharing chain, including v. Thus, the ϕ-features of the DP_S and the SE objects are shared, which is sufficient to establish the binding relation. Reuland's Agree-based theory of anaphoric binding feeds on movement; the movement of the object is an indispensable component of the Agree-based theory. Yet, this is also a limitation of this account: the procedure presented above makes a clear prediction that the SE anaphor must bear structural case licensed by v. If the object were marked for a different case, it would not move

to [Spec, v]. But if it did not move, it would not become a member of the extended chain within which ϕ-features are shared.[10]

Reuland's index-free proposal for binding is based chiefly on Agree and feature sharing, and it is attractive on conceptual grounds.[11] Yet it is quite programmatic, as the author admits himself.[12] This index-free program for binding theory requires further meticulous application to the range of constructions we are concerned with. Specifically, (a) it straightforwardly covers only constructions in which both the binder and the bindee bear structural cases, (b) it does not easily extend to applications where either the binder or the bindee bear inherent/quirky cases, and (c) it typically places the binder in the subject position of [Spec, TP], with little discussion of cases where it occurs elsewhere.

Furthermore, Safir (2014: 111–12) provides an empirical argument against the correlation between A-binding and subject-verb agreement. This is evident in cases where the verb (T) agrees with a nominative object, while its subconstituent is bound by a dative antecedent:

[10] In fact, Reuland (2011) indicates that it is case that distinguishes between Dutch SE and Frisian. Instead of the expected SE, Frisian uses a plain dative pronoun here:

(i) Willem$_1$ skammet him(??sels)$_1$.
William$_{NOM}$ shames him$_{DAT}$
'William is ashamed of himself.'

Reuland sees (i) as confirmation of the idea that ϕ-feature sharing, involved in structural case marking via Agree, is a key vehicle for reflexivization. There is neither structural case, nor ϕ-feature sharing, nor a reflexive pronoun in Frisian (i). This account of Frisian is critically reviewed in Rooryck and Vanden Wyngaerd 2011. A critical review of Reuland 2011 is presented in Antonenko 2012.

[11] Reuland also touches upon the question of reflexive possessives. Relying on the articulated structure of the nominal phrase in Longobardi 2001, he observes that there is a correlation between the licensing of reflexive possessives and phase-edge phenomena caused by the DP phase. He assumes that the DP phase boundary disallows the placement of reflexive possessives in the complement position to D. Yet reflexive possessives can appear at the edge of DP as a result of movement. Despić (2015) observes that not only NP-languages have reflexive possessives, but also DP-languages in which the determiner postmodifies the lexical noun (e.g., Norwegian and Danish). He proposes that, in these languages, the head D bears an Edge Feature (EF), forcing the possessor to move to the phase-edge position, in line with the analysis in Delsing 1993.

[12] Reuland (2011: 146): "Recall that my main goal is to show that syntactic encoding of interpretive dependencies obeying the inclusiveness condition is in principle possible. I will therefore limit discussion as much as possible to environments and subcases needed for this goal."

(21) a. Henni þykir bróðr sinn / *hennar leiðinlegar.
she$_{DAT}$ thinks brother$_{NOM}$ self's her boring
'She finds her brother boring.'

b. Konunginum voru gefnar ambáttir í höll sinni / ?hans.
king.the$_{DAT}$ were given slaves$_{NOM}$ in palace self's his
'The king was given slaves in his palace.'

In this Icelandic example, the possessive reflexive *sinn* 'self's' is bound by the dative subject, which does not agree with the verb. If subject-verb agreement is a morphological reflection of Agree between T (and V) and the nominative DP, then this cannot be the same relation as A-binding, as this would exclude A-binders non-agreeing with the verb. Dative antecedents for reflexives would be fairly unexpected, contrary to fact with respect to the Icelandic data in (21) and Polish DAT OEs in (9–11).

These reservations notwithstanding, developing applications of Reuland's index-free minimalist theory of binding to the constructions mentioned in §1 is an intriguing and challenging research task, worth pursuing independently of the current study. In this context, Zubkov (2018) proposes an application of Reuland's (2011) proposal to anaphoric binding in Russian. His study develops the general idea that anaphoric binding stems from Agree for ϕ-features and acknowledges the feature-valuation mechanism from Pesetsky and Torrego 2007. Right at the outset, Zubkov rejects the idea that structural case, or any other case for that matter, is implicated in ϕ-feature agreement (so the role of the condition on A-chains is minimized). Agree for ϕ-features is triggered by a functional head (one or more) placed above the domain of the clause where argument structure is articulated, so probably above vP. This functional head drives Agree and valuation of ϕ-features for number and/or person, although both features can be probed for separately by separate probes. Sharing [+number] features only is typical of non-nominative antecedents. The probe that carries both [+number] and [+person] features overpowers the one that carries only the [+number] feature. The [+person] feature is valued on the relevant probe (Zubkov's equivalent to T) by the goal that carries nominative case. The placement of the ϕ-probe above the argument domain of the clause, plus the idea that Agree is in principle multiple (Landau 2000; Hiraiwa 2001; Pesetsky and Torrego 2007; Reuland 2011), straightforwardly predicts subject orientation. The probe shares its values with the closest DP in its c-command domain. The ϕ-features of this DP are then shared via a feature-sharing mechanism, with reflexives embedded further down in the c-command domain of the probe:

(22) a. $T_{[-\text{val person, }-\text{val number}]}\ldots>\ldots DP_{1[+\text{val person, }+\text{val number}]}\ \ldots,\ \ldots DP_{2[-\text{val person, }-\text{val number}]}$

b. $Pr_{[-\text{val number}]}\ldots>\ldots DP_{1[+\text{val person, }+\text{val number}]}\ \ldots,\ \ldots DP_{2[-\text{val person, }-\text{val number}]}$

The probes T and Pr(obe) have their features valued by DP_1 (the privileged argument) and spread them down their c-domain to DP_2. DP_1 need not c-command DP_2. Intervention effects in Agree for ϕ-features are caused by intervening probes, not potential goals, as probing is in principle multiple. Non-privileged arguments (i.e., either object of a ditransitive predicate) never get to bind the NPs they c-command. This effect results from the assumption that there is only one ϕ-feature probe per argument domain and this probe is placed immediately above this domain, earmarking the highest argument (the subject) as the only privileged argument.

Zubkov's proposal solves the problem that Reinhart and Reuland 1993 and Reuland 2011 faced in the form of the correlation between structural case and binding or ϕ-feature sharing.[13] Once the two procedures get separated, the antecedent need not be nominative and the reflexive need not appear in the position where accusative is licensed. Either can be dative, genitive, or any other case. At the same time, it raises the question of how this mechanism applies to languages in which subject orientation does not hold and the superior object becomes privileged (the English case of examples (13–15)).[14]

Another approach where Agree (combined with Move) figures prominently and is divorced from case valuation is presented in Rooryck and Vanden Wyngaerd 2011. These authors analyze reflexive constructions in Dutch in great detail and against the backdrop of reflexives in other languages. Key components of their analysis involve a direct relation of Agree holding between the reflexive and its antecedent (without any mediating role of T), syntactic movement, and Late Spell-Out regulated by principles of Distributed Morphology (Halle 1997). They propose distinct derivations for the simple reflexive *zich* 'self' and the complex one *zichzelf* 'himself', but in both derivations, the reflexive element functions as probe, with unvalued ϕ-features (person, number, and gender), and at a certain derivational step, it c-commands its antecedent as goal and has its ϕ-features valued. Rooryck and Vanden Wyngaerd take the reflexive *zich* 'self' to be merged as a component of a larger

[13] Another interesting account of binding in Russian based on Agree in the context of feature sharing (Pesetsky and Torrego 2007) is presented in Antonenko 2012, where the reflexive interpretation is obtained via a combination of Agree for ϕ-features and a ϱ (rho) feature, present on selected heads (T, v, V) and responsible for establishing coreference between the anaphor and its antecedent within the domain of a particular head. The limits of this contribution do not allow me to discuss Antonenko's account in detail.

[14] The virtue of Reuland's original proposal lies in the minimalist and fundamentalist parsimony of the system: no features tailor-made to address A-binding are put to work. Yet, paradoxically, without being called the "binding" feature, Zubkov's multiple Agree for non-case-related ϕ-feature seems to be doing exclusively and only that. So it shares more with Hicks 2009, Rooryck and Vanden Wyngaerd 2011, and Antonenko 2012 than an avid adherent to Reuland's (2011) approach would have desired.

constituent, corresponding to den Dikken's (2006) analysis of possessive constructions involving the Relator Phrase (RP):

(23) a. Milo heeft zich bezeerd.
Milo has REFL hurt
'Milo has hurt himself.'

b. [bezeren [$_{RP}$ [$_{DP_1}$ zich$_{POSSESSUM}$] [R [$_{DP_2}$ Milo$_{POSSESSOR}$]]]]

The VP has unaccusative syntax. The reflexive c-commands its antecedent at an early stage of the derivation and has its ϕ-features valued by the relevant features of the antecedent:

(24) a. [$_{VP}$ V [$_{RP}$ [$_{DP_1}$ {P:_, N:_, G:_}] R [$_{DP_2}$ {P:3, N:sg, G:m}]]]
bezeer zich Milo

b. [$_{VP}$ V [$_{RP}$ [$_{DP_1}$ {P:3*, N:sg*, G:m*}] R [$_{DP_2}$ {P:3, N:sg, G:m}]]]
bezeer zich Milo

The valued feature is marked (here, with an asterisk), and this marking is relevant for Spell-Out. Thanks to the asterisk, lexical insertion rules distinguish between features valued during the derivation and features assigned in the Lexicon. The former lead to the spell-out (lexical insertion) of the form *zich* 'self', while the latter lead to the spell-out of an equivalent pronoun. At a later stage of the derivation of (23–24), the antecedent DP moves out of the RP phrase to its case position and functions as the subject. Rooryck and Vanden Wyngaerd extend this account to constructions with reflexive possessives in other languages, assuming that the possessive (and the specifier in general) should be treated as an adjunct, in line with Kayne 1994. Thus, a reflexive in this position c-commands outside the DP it is a specifier of and values its features against those of the antecedent.

(25) a. Jan bezeert zich / zijn voet.
Jan hurts REFL his foot
'Jan hurts himself/his foot.'

b. … T [$_{VP}$ bezeer [$_{RP}$ [$_{DP}$ zich/zijn voet] R [$_{DP}$ Jan]]]]

These derivations beg at least two questions in the context of the Polish data. First, it is not clear how to account for subject orientation of Polish reflexives, as the movement of the antecedent out of RP should obey regular locality conditions, and in constructions with ditransitive verbs, it is predicted to target the position of the object (leading to the object orientation of the reflexive) rather

than the more remote position of the subject.[15] Second, the movement of the antecedent becomes even more challenging in constructions with long-distance binding, as in (8), where the issue of the locality conditions comes to the fore (for instance, in order to become the subject of the main clause, the antecedent should move across both the object-controlled PRO and the object itself).

As for the complex reflexive *zichzelf* 'himself', Rooryck and Vanden Wyngaerd propose to treat it like an intensifier or floating quantifier, having established their common distribution pattern. Crucially, these elements are adjoined to vP. The complex reflexive is first merged in the object position (complement to V in (26b)) and then moved to a vP-adjoined position in (26c), from which it c-commands the subject (its typical antecedent). Next, the ϕ-features of the reflexive are valued against the subject under Agree in (26d):

(26) a. Pete invited himself.

b. $[_{vP}\ [_{DP_1}$ {P:3, N:sg, G:m}] $[_{VP}$ V $[_{DP_2}$ {P:_, N:_, G:_}]]]
Pete invited himself

c. $[_{vP}\ [_{DP_2}$ {P:_, N:_, G:_}] $[_{vP}\ [_{DP_1}$ {P:3, N:sg, G:m}] $[_{VP}$ V $[_{\sout{DP_2}}$ {~~P:_, N:_, G:_~~}]]]
himself invited Pete

d. $[_{vP}\ [_{DP_2}$ {P:3*, N:sg*, G:m*}] $[_{vP}\ [_{DP_1}$ {P:3, N:sg, G:m}] $[_{VP}$ V $[_{\sout{DP_2}}$ {~~P:_, N:_, G:_~~}]]]
himself invited Pete

Subsequently, the subject is raised to [Spec, TP]. Although the raising of the complex reflexive to the vP-adjoined position is an all-important element of their analysis, Rooryck and Vanden Wyngaerd do not define its nature and causes precisely (see Rooryck and Vanden Wyngaerd 2011: ch. 3, note 14).[16] An application of the derivation of constructions with the complex reflexive to Polish data above also raises the question of subject orientation; if the binding of the complex reflexive is similar to the properties and distribution of floated quantifiers or intensifiers, then Polish has intensifiers and floated quantifiers modifying the subject in (27a), the accusative object in (27b), and the dative object in (27c), as evidenced by case concord:[17]

[15] Rooryck and Vanden Wyngaerd's approach shares this property with Kayne 2002 and Zwart 2002, approaches in which the antecedent and the reflexive initially form a constituent from which the antecedent moves.

[16] They also admit that, depending on the nature of one's views on object shift in English, the movement of the complex reflexive to the vP-adjoined position could be either overt or covert, with no consequences for their account.

[17] These examples are modeled on the examples in Rooryck and Vanden Wyngaerd 2011 (esp. ch. 3).

(27) a. Chłopcy by wszyscy poszli na mecz.
boys$_{NOM}$ would all$_{NOM}$ go$_{PRT}$ to match
'The boys would all go to the match.'

b. Jan zaprosił nas wtedy wszystkich.
Jan$_{NOM}$ invited us$_{ACC}$ then all$_{ACC}$
'Jan invited all of us then.'

c. Maria pomogła nam wtedy wszystkim.
Maria$_{NOM}$ helped us$_{DAT}$ then all$_{DAT}$
'Maria helped all of us then.'

Yet, certainly, the latter two do not bind reflexives in Polish, so probably these phenomena need to be kept distinct.[18] Still, it must be duly noted that the approach developed in Rooryck and Vanden Wyngaerd 2011 has an unquestionable advantage in comparison to Reuland's (2011) analysis: in no way is the relation of ϕ-feature sharing between the antecedent and the reflexive conditioned by the licensing of structural case. The relations of binding and case valuation are kept distinct.

3. Binding as Move

The idea that syntactic movement is implicated in the A-binding relation has been developed by a number of authors, most notably Chomsky (1986), Chomsky and Lasnik (1993), Pica (1991), Huang (1983), Hestvik (1992), Avrutin (1994), Kayne (2002), Zwart (2002), Safir (2004), Hornstein (2001), and Boeckx et. al. (2008).[19] The Movement Theory of Reflexivization (MTR) is formulated in Boeckx et al. 2008 and is akin to Hornstein's (2001, 2003) and Hornstein and

[18] Rooryck and Vanden Wyngaerd (2011: ch. 4) note that while the two strategies of reflexivization they have outlined are universal (one based on the RP containing the simple reflexive *zich* 'self' and the other based on independent movement of the complex reflexive *zichzelf* 'himself' to the edge of vP), particular grammars can use them in distinct ways. So, for instance, the clitic reflexive *se* 'self' in French can also participate in a derivation suitable for the Dutch *zichself* 'himself'.

[19] I focus on the latest and most detailed analysis in Boeckx et. al. 2008, but earlier clues implicating movement in binding appear in Chomsky 1986 (esp. pp. 174–75), where the following two examples are considered:

(i) they told us that [[pictures of each other] would be on sale]
(ii) they told us about each other (themselves)

Chomsky proposes to capture the configuration in which the subject is the binder via movement:

(iii) they α_i-INFL [$_{VP}$ tell us about e_i]

Polinsky's (2010) Movement Theory of Control (MTC). On the basis of data from San Lucas Quiavini Zapotec and Hmong, the authors show that certain languages may spell out copies of the binders (antecedents) in the position of the bindees (anaphors):[20]

(28) B-gwa Gye'eihlly Gye'eihlly (Zapotec)
shave$_{PERF}$ Mike Mike
'Mike shaved himself.'

(29) Pov yeej qhuas Pov. (Hmong)
Pao always praise Pao
'Pao always praises himself.'

MTR accounts for the facts of Zapotec, Hmong, and English in the following manner: the antecedent is first merged in the position of the reflexive, and then it (or its sub-constituent) moves to another thematic position and onward to another case position. Ultimately, a chain of copies is formed:

(30) a. John likes himself.
b. [$_{TP}$ John [$_{T'}$ T [$_{vP}$ John v [$_{VP}$ likes John-self]]]]
c. John λx [x likes x]

Languages differ as to how the copies spell out. In English the lexical element *–self* fulfills an important function: it is able to absorb case, licensed in the position of the object. It is also a clitic, so it requires lexical support, which is provided through the insertion of *him-* . Zapotec and Hmong allow for a derivation of reflexive constructions in which their equivalent to *–self*, able to receive and bear case, is a null morpheme. A superficial scrutiny of example

[20] The examples in (28–29) involve bound dependent forms, functioning like reflexives in English, which is evident from sloppy identity readings in the context of ellipsis:

(i) Pov yeej qhuas Pov; Maiv los kuj ua le hab. (Hmong)
Pao always praise Pao May TOP also do as too
'Pao always praises himself and so does May.'

This example can only mean that May also praises himself, rather than him (that is, Pao).

At the same time, these languages also have a more "regular" version of the reflexive construction, in which a pronoun appears with a reflexive marker:

(ii) Pov yeej qhuas nwg tug kheej. (Hmong)
Pao always praise 3SG CLF self
'Pao always praises himself.'

(30b) reveals three copies of *John*, but only one of these is pronounced. This is because elements are typically pronounced in positions where they show case; the top copy is pronounced where nominative is licensed, and *(him)self* is pronounced at the bottom, where objective is licensed. No case is licensed in the middle position. Pronunciation of copies is ruled by Kayne's (1994) Linear Correspondence Axiom (LCA), with further refinements proposed in Nunes 1995. In principle, only one copy per chain should be pronounced and linearized. However, when copies in the chain are rendered invisible to the LCA, more than one copy can appear. Nunes shows that copies become invisible to the LCA if they are incorporated (morphologically fused) with word-like categories, on the assumption that the LCA cannot access word-internal material. Boeckx et al. (2008) assume that in Zapotec and Hmong, multiple copies are visible precisely because they are morphologically fused with a silent X^0-level category. The silent X^0-level category in (28–29) plays a dual role: it absorbs objective case and screens the copy from the LCA, thus allowing for its pronunciation.[21]

Yet Hornstein's MTR appears to face a number of challenges in Polish. One concerns subject orientation, shared with subject control in (32), i.e., indifference to the presence of the superior and c-commanding object, which should violate minimality conditions on movement:

(31) a. Maria$_1$ pokazała Janowi$_2$ w lustrze siebie$_{1,*2}$ /swoje$_{1,*2}$
Maria$_{NOM}$ showed Jan$_{DAT}$ in mirror self self's
odbicie.
reflection$_{ACC}$
'Maria showed to Jan herself/her reflection in the mirror.'

b. Maria$_1$ pokazała Jana$_2$ w lustrze sobie$_{1,*2}$/swojemu$_{1,*2}$
Maria$_{NOM}$ showed Jan$_{ACC}$ in mirror self self's
bratu.
brother$_{DAT}$
'Maria showed Jan to herself/her brother in the mirror.'

[21] This is their account of wh-copy constructions in some German dialects, analyzed in McDaniel 1986:

(i) Wen glaubt Hans wen Jakob gesehen hat?
who$_{ACC}$ thinks Hans$_{NOM}$ who$_{ACC}$ Jakob$_{NOM}$ seen has
'Who does Hans think Jakob saw?'

(ii) *Wessen Buch glaubst du wessen Buch Hans liest?
whose book think you$_{NOM}$ whose book Hans$_{NOM}$ reads
(Intended: 'Whose book do you think Hans is reading?')

This strategy has a limitation: absorption and blending within X^0 works best for elements with little structure, preferably only heads.

(32) $Maria_1$ obiecała $Janowi_2$ [PRO_1 wyprowadzić psa].
$Maria_{NOM}$ promised Jan_{DAT} $walk_{INF}$ dog_{ACC}
'Maria promised John to walk the dog.'

One way of accounting for subject orientation is to apply the treatment of *promise*-type verbs sketched in Hornstein and Polinsky 2010, where the intervener is placed in a silent PP. This strategy raises at least three questions. The first is how consistent this PP encapsulation is, because some datives—DAT OEs in (9–11)—are not encapsulated within the PP, since they function as binders for reflexives and movement should target only c-commanding positions (unless sideward movement is applied in this case; but if so, it could be applied in (31a) as well). The second question concerns case; neither dative nor accusative objects can bind a reflexive embedded in the other object. It would be quite idiosyncratic to propose a PP-"wrapping" for an object with structural accusative in (31b), because it shifts to genitive under clausal negation, a tell-tale property of structural accusative. Third, a somewhat less radical conclusion on c-command from within PPs is drawn in Yadroff and Franks 2001, where the so-called "functional" PPs are in the c-domain of their NP-complements:

(33) *$Maria_1$ mówiła do $niego_2$ o $Tomku_2$.
$Maria_{NOM}$ spoke to him_{GEN} about $Tomek_{LOC}$
(Intended: '$Maria_1$ spoke to him_2 about $Tomek_2$.')

The example above is ruled out as a Condition C violation, so using the PP-encapsulation as a strategy for putting the object out of harm's way does not seem effective.[22] Furthermore, as stressed already in Willim 1982, the analogy between binding and control in Polish cannot be pushed too far, as while reflexives are subject-oriented, obligatory control appears in both versions: object and subject control. Chomsky and Lasnik (1993: 556) capitalize on Willim's observation and illustrate it with Polish data:

(34) Jan_i opowiadał $Marii_j$ o $swoim_{i/*j}$ ojcu.
$John_{NOM}$ was.telling $Mary_{DAT}$ about self's $father_{LOC}$
'John was telling Mary about his/*her father.'

[22] Bruening (2014) proposes that the notions relevant for binding are linear precedence and phase-command, where the first phase projection confines the c-domain of the binder. He takes the PP not to constitute the phase, so the complement of P freely c-commands outside PP.

(35) Jan_i kazał Marii_j [PRO_j napisać artykuł].
John_{NOM} told Mary_{DAT} write article_{ACC}
'John told Mary to write an article.'

As (34) shows, anaphoric binding in Polish is subject-oriented, while obligatory control in (35) is not, and the object makes a perfect controller. Moreover, while controllers are designated by control predicates (see (36)), binders are not, and either argument can function as antecedent in an English-type language:

(36) a. John_j told Mary_i [PRO_i to leave].
b. *John_j told Mary_i [PRO_j to leave].

(37) a. John_j told Mary_i about herself_i.
b. John_j told Mary_i about himself_j.

In conclusion, binding and control must be kept apart, although they share quite a few similarities. This observation implies that they may not be reducible to each other, even given latest theoretical advances.

But what needs to be perceived as particularly challenging to the MTR is the issue of the spell-out of the copy of the antecedent; how do we account for the fact that a DAT OE can have its copy spelled out as either a reflexive possessive or a pronominal possessive with identical interpretations? And why must it be spelled out only as the reflexive pronoun when it is a co-argument of the DAT OE, as in (38) below:

(38) a. Marii_1 żal było siebie_1 / *?jej_1 (samej).
Maria_{DAT} sorrow $\text{was}_{3SG.N}$ self *?her alone_{GEN}
'Maria felt sorry for herself.'
b. Marii_1 żal było swojej_1 /jej_1 koleżanki.
Maria_{DAT} sorrow $\text{was}_{3SG.N}$ self's her friend_{GEN}
'Maria felt sorry for her female friend.'

The impression one gets from getting acquainted with Hornstein's (2001) analysis of binding is that in the English-type language, the pronoun coindexed with its antecedent spells out a non-movement or resumptive relationship, for instance, when the dependent element is embedded in an island. This is certainly not the case for the dependents of the DAT OE considered here.[23]

[23] The same issue appears in the case of long-distance reflexivization in (8).

Another movement-based proposal is formulated in Franks 2021. A-binding follows two broadly defined UG-given strategies, exemplified in such languages as English and Polish and other members of the Slavic family. Franks assumes the following two general structures for reflexive phrases:

(39) a. $[_{DP_1}\ [_{D_1}$ him] $[_{ReflP}\ [_{Refl}$ self] $[_{DP_2}$ the man]]]
b. $[_{DP}\ [_{ReflP}$ siebie/sebja/sebe]]

Franks proposes to implement the process of reflexivization through either moving the head Refl (the Slavic option) or the associate DP of this head (the English option). The Slavic option leads to the formation of a reflexive predicate, as in Reinhart and Reuland 1993, while the English option establishes a relation of two coreferential arguments. The key element of the analysis is the reflexive element Refl, treated as a syntactic head and projecting its own phrase embedded within a larger nominal constituent (DP).

The reflexivization strategy employed in English operates in a way similar to Hornstein's proposal:

(40) $[_{XP}$ [the man]… $[_{DP_1}\ [_{D_1}$ him] $[_{ReflP}\ [_{Refl}$ self] $[_{DP_2}$ ~~the man~~]]]]

English Refl has a DP_2 complement, which becomes its future antecedent. The derivation of the English reflexive construction involves movement: DP_2 moves to other thematic and case positions, transiting through the edge of DP_1 to agree with Refl for ϕ-features and leaving *him* as a marker of this agreement. *Him* also receives objective case from v. Subsequently, DP_2 moves on to other thematic positions, such as object or subject, c-commanding its source position. Finally, it reaches a position where it has its case valued. This procedure results in forming a pair of coreferential arguments:

(41) $[_{DP_2}$ the man] … > … $[_{DP_1}\ [_{D_1}$ him] $[_{ReflP}\ [_{Refl}$ self] *t*]]

DP_2 can terminate its A-movement in the position of the other object as well as the subject, depending on other factors involved in the derivation, such as the choice of the verbal predicate and its subcategorization properties. Significantly, such a derivation of the reflexive construction does not provide for subject-oriented binding to be expected.

In most Slavic languages, the head Refl has no DP complement (Bulgarian and Macedonian are special cases discussed separately). Franks submits that it pursues the other available reflexivization strategy and moves by itself, adjoining to v (and with it to T), and ultimately gives rise to a subject-oriented reflexive predicate. Further movement of Refl, together with v or independently, leads to long-distance binding effects:

(42) Magda [$_{vP}$ ~~siebie~~+zobaczyła [$_{VP}$ ~~zobaczyła~~ [$_{DP}$ siebie [$_{Refl(P)}$ ~~siebie~~]]]]
Magda self saw saw self self
'Magda saw herself.'

The content of ReflP (*siebie*) moves to D, as expected within nominal phrases, and then to v. The verb moves from V to v (silent copies are marked with a strikethrough). Franks sets his analysis in the context of the multi-attachment theory of movement and is not excessively explicit about the details of the movement of *siebie* 'self'. On the one hand, it is supposed to be associated with v via head movement of Refl, but on the other, *siebie* 'self' has the internal phrase structure in (39b) and (42), and therefore it is not pronounced as attached to v (as its clitic counterpart *się* 'SE' in Polish would be) but as the bottom copy in the chain.

As far as movement of the reflexive is concerned, this proposal converges on the one presented below. Specifically, the reflexive element is not identical with the antecedent; it (covertly) moves and targets the positions of functional heads relevant for the licensing of the morphosyntax of the verb: v and T, which derives the effect of subject orientation. It is also pronounced, via a similar strategy of copy pronunciation, at the bottom of the movement chain. Yet Franks's approach and the one presented here differ on three counts. First, I will be dealing not only with the reflexive pronoun *siebie* 'self', but also with the possessive reflexive *swój* 'self's', whose distributions are not always strictly identical. Second, I will be arguing for a close correlation between the position of the antecedent and the spell-out form of the possessive element (reflexive or pronominal). Third, I try to be more specific about the nature of movement of the reflexive element in different construction types.

4. A Positive Proposal: Binding as Agree and Move

The account of A-binding presented below draws from the Agree-based, Move-inspired, and competition-based theories. It is inspired by a proposal developed for Russian in Nikolaeva 2014, with significant modifications. Nikolaeva (2014) defines A(rgument)-binding in a conservative manner, as the sharing of the index between an antecedent and an anaphor. Building on Chomsky (1986), Vikner (1985), Pica (1987, 1991), Hestvik (1992), and Avrutin (1994), she proposes that binding involves a configuration between the DP antecedent and the pronoun/anaphor wherein pronouns and anaphors are Indices that covertly rise as heads to the positions of v and T. The core of Nikolaeva's (2014: 68) proposal is as follows:

(43) a. Movement: an Index (a reflexive or a pronoun) must undergo covert Index Raising unless it is at a reflexivization site or movement is no longer possible.

(43) b. Reflexivization site: an Index is a sister to a node with label D/v/T and is c-commanded by a specifier.

c. Co-argumental reflexivization: if an Index is at a reflexivization site and is coindexed with a specifier which is its co-argument, the Index has to be realized as reflexive.

d. Reflexivization at Spell-Out: when the sentence is sent to Spell-Out, if an Index is coindexed with a specifier of the projection to which it is adjoined, the Index has to be realized as reflexive.

e. Pronominal is an elsewhere condition: if an Index has not been realized as reflexive, it is realized as pronominal.

Covert movement of the Index is understood as taking place on the same syntactic cycle as overt movement but with copy pronunciation (see Fox 1999, 2002). VP is not a reflexivization site by definition, and the overt position of the Index (pronoun or anaphor) is mostly ignored in the calculation of its binding. A related set of ideas is presented by Safir (2014), who emphasizes that an element which is dependent on another for its interpretation may be spelled out as either a reflexive or a pronoun, depending on morphological resources.[24] Safir submits that, generally, an indexically dependent element (his "D-bound", a terminological convention I shall adopt) is phase-internally c-commanded by its antecedent. It assumes the morphological form of an anaphor, while a further removed D-bound spells out as a pronoun. Phase-internal procedures of Spell-Out depend on morphological choices available to particular languages; such a procedure is proposed for Polish below. Potentially, a D-bound can be indexically dependent on its antecedent under c-command in the LF-relevant representation, but it can be lexicalized as a pronoun when the c-command condition does not hold of the PF-relevant representation or the antecedent is phase-external. In what follows, I take the antecedent to c-command the reflexive (placed at its reflexivization site: T/v) from its case

[24] Safir defines properties of D-bound in the following way (adapted from 2014: 91–92):

(i) Always a variable: D-bound is the same object in SEM (the syntactic input to semantic interpretation) in all cases; it is interpreted as a bound variable regardless of its ϕ-features.

(ii) Always A-bound: the binder of D-bound (its antecedent) must c-command it from an A-position; that is, the D-bound form is A-bound.

(iii) Always feature-compatible: D-bound must be feature-compatible with its antecedent (informally, this property may be termed *antecedent agreement*).

(iv) Spell-out of the morphological shape of D-bound is potentially sensitive to whether A-binding is phase-internal.

(v) Agreement compatible with morphological shape may be determined by phase-internal factors locally distinct from antecedent agreement.

(vi) Anywhere phase-internal shape is not required, D-bound receives default pronominal shape.

position ([Spec, TP] for the nominative subject and [Spec, vP] for the DAT OE). The account of A-binding that addresses the empirical issues raised by examples in (1–3) and (8–11) above rests on four pillars.

First, I propose that the LF-relevant aspect of A-binding (captured through co-indexation in classical Binding Theory) is based on Agree for the ϕ-features, interpretable and valued on R-expressions and pronouns and unvalued on anaphors (D-bounds). Second, I subscribe to what Nikolaeva takes to be Index Raising; I treat it as overt movement of the D-bound with copy pronunciation and show that it has a near equivalent in overt movement in Polish in the form of the distribution of the clitic/weak pronoun (CL/WP). The CL/WP leaves the VP, moves into the functional domain, and optionally climbs into the main clause out of the infinitive. Thus, the movement mentioned in (43a) receives independent overt exemplification. Third, in contrast to clitics/weak pronouns, the chain of D-bound movement shows copy pronunciation, that is, the head of the chain is not pronounced, although the landing site of its movement directly determines the pronunciation of the bottom copy. Fourth, because the D-bound bears two relevant features (one that drives its CL/WP-like movement and the other relevant for its interpretation), either can be valued/satisfied first.

4.1. A-Binding as Upward/Downward Agree

I assume that the D-bound and its antecedent share ϕ-features, but the features of the former need to be valued by the latter:

(44) D-bound: ϕ-features: gender [+int, −val]
number [+int, −val]
person [+int, −val]

Under regular circumstances, the antecedent (prototypically the subject) c-commands the D-bound (prototypically the object), so when one takes the unvalued ϕ-features on the D-bound to function as a probe, one needs to allow for the probe to seek its goal in a c-commanding position (unless a derivation-internal switching of these positions takes place). I assume that this fact calls for the loosening of the strictures of typical downward probing; when the D-bound in (44) cannot find any matching goal in its own c-domain, it can probe upwards within the immediate derivational phase, in line with Rezac 2004, Béjar and Rezac 2009, Hicks 2009, and Zeijlstra 2012. I adopt the following definition of Agree from Biskup (2020: 27):[25]

[25] The issue of upward/downward Agree is at the center of a heated debate. While Zeijlstra (2012) and Bjorkman and Zeijlstra (2014) advocate the idea that upward Agree is the only canonical mode for Agree, Preminger (2013) and Preminger and Polinsky (2015) vehemently argue against it. The original advocates of upward Agree, Rezac

(45) Agree: α agrees with β iff:

a. α has an unvalued feature;

b. β has a matching valued feature;

c. there is a c-command relation between α and β;

d. β is the closest goal to α.

The definition above is suitable for both the downward and upward modes of Agree, because the clause (45c) does not specify whether the probe or the goal should be in the c-commanding position.

In his analysis of binding in English, Hicks (2009) submits that the reflexive shows the following internal structure:[26]

(46) $[_{DP}\ [_{D[\phi]}\ \text{him}]\ [_{NP}\ \text{self}]]$

I adopt (46) for English and take this syntactic object to be equivalent to the D-bound of Safir 2014 and the Index of Nikolaeva 2014. In the English example below, upward Agree operates as follows:

(47) $[_{TP}\ \text{John}_{[3.\text{SG.M}]}\ [_{vP}\ <\text{John}_{[3.\text{SG.M}]}>\ \text{likes}\ [_{VP}\ [_{DP}\ [_{D[*\phi]}\ \_\_]\ [_{NP}\ \text{self}]]]]]$

The unvalued ϕ-features of $[_{D[*\phi]}\ \_\_]$ serve as the probe, search upwards for a matching goal, and find it in the DP *John* in [Spec, vP]; the unvalued features on the D-bound become valued and spelled out as *himself* once the vP phase is completed, with the three steps looking as follows:[27]

(2004) and Béjar and Rezac (2009), argue in favor of a middle position; in principle, Agree should be allowed to operate in both modes (i.e., "flipping" Agree). I subscribe to the idea of the flipping Agree. Were it not for the upward Agree, the D-bound would have to move to a position above its antecedent, after which the antecedent should move across the D-bound again to produce the surface word order. In many cases, there is little evidence for such a scenario and a (last-resort) possibility of upward Agree looks more economical.

[26] In fact, Hicks (2009) has $[_{DP}\ [_{D[\_var]\,[\phi]}\ \text{him}]\,[_{NP}\ \text{self}]]$ probe upward through its [var(iable)] feature, which is always valued on the nominal or pronominal antecedent but unvalued on the reflexive. The valuation of the reflexive's ϕ-features piggy-backs on the Agree for the [var(iable)] feature.

[27] Driven by the need to limit the size of diagrams and representations, I adopt the convention whereby the unvalued ϕ-feature of the D-bound is marked [*ϕ], rather than [−p(erson), −n(umber), −g(ender)], as the Inclusiveness Condition of Chomsky 1995 would have required, as pointed out by a reviewer. The same feature valued after Agree is marked [^3.SG.M], for example, with the diacritic indicating the derivational origin of the feature values. In more complex examples, this is simplified to [^ϕ1], where 1 stands for the ϕ-feature set of the antecedent. My presentational convention is not meant to undermine the Inclusiveness Condition.

(48) $[_{DP}\ [_{D[*\phi]}\ \_\_]\ [_{NP}\ \text{self}]] \rightarrow [_{DP}\ [_{D[\hat{}3.SG.M]}\ \_\_]\ [_{NP}\ \text{self}]] \rightarrow [_{DP}\ [_{D}\ \text{him}]\ [_{NP}\ \text{self}]]$

Thus, a relation of Agree for ϕ-features largely replaces the GB-era index sharing, as applied to Binding Theory of the 1980s.

I take the Polish reflexive pronoun and the reflexive possessive to have representations analogous to (46):

(49) a. $[_{DP}\ [_{[\phi]}\ D]\ [_{NP}\ \text{siebie}]]$
self

b. $[_{NP_1}\ [_{DP}\ [_{[\phi]}\ D]\ [_{NP_2}\ \text{swój}]]\ [_{NP_1}\ \text{dom}]]$
self's house

The reflexive pronoun is a DP. The reflexive (or pronominal) possessive is a DP adjoined to the NP it modifies. The placement of the possessive in the position of the adjunct to NP is advocated in Despić 2013, 2015 and Bošković 2005, 2012 on the basis of the following contrast between Serbo-Croatian (SC) and English:

(50) *Njegov$_i$ najnovij film je zaista razočarao Kusturicu$_i$.
his latest movie is really disappointed Kusturica

(51) His$_i$ latest movie really disappointed Kusturica$_i$.

(52) *Jego$_i$ siostra bardzo pocieszyła Janka$_i$.
his sister$_{NOM}$ very comforted Janek$_{ACC}$
(Intended: 'His sister comforted Janek very much.')

Bošković and Despić interpret this contrast in the following manner: in English, a DP language, the pronominal possessor is placed in the specifier position of DP and its c-domain does not extend beyond DP. The possessor in SC is an adjunct to NP and its c-domain extends beyond it, causing an anti-cataphora effect, a violation similar to a Condition C effect. The Polish example (52) follows SC: the pronominal possessor c-commands outside the NP, triggering the same effect. Assuming that the reflexive possessive is in the same position as its pronominal equivalent, I adopt the structure in (49b).[28]

[28] As discussed in Witkoś 2021a, pronominal possessives in Polish and SC behave in the same way in terms of both (a) causing the anti-cataphora effect and (b) doing so only within the same tensed clause domain (as confirmed in Srdanović and Rinke 2020). Polish differs from SC in the way nominal possessives behave; in the former they are genitive-marked postmodifiers, while in the latter they are adjective-like premodifiers.

4.2. A-Binding and Clitics/Weak Pronouns

The D-bound in Polish shares an important property with the clitic/weak pronoun (hence CL/WP): they both leave the VP and move into the functional domain of the clause. In Polish, the domains for both A-binding and CL/WP distribution overlap (in line with the Tensed Sentence Condition of Chomsky 1981):

(53) a. Jan$_1$ (**go**$_2$) kazał (**go**$_2$) Marii$_3$ [PRO$_3$ (**go**$_2$) CL/WP
Jan$_{NOM}$ him$_{CL.ACC}$ told Maria$_{DAT}$
pokazać **go**$_2$ w lustrze *__go__$_2$].
show$_{INF}$ in mirror
'Jan told Maria to show him in the mirror.'

b. Jan$_1$ (**się**$_{1/2}$) kazał (**się**$_{1/2}$) Marii$_2$ [PRO$_2$ (**się**$_{1/2}$) SELF
Jan$_{NOM}$ REFL told Maria$_{DAT}$
obejrzeć **się**$_{1/2}$ w lustrze].
watch$_{INF}$ in mirror
'Jan told Maria to show him in the mirror.'

(54) Maria$_1$ • kazała • Piotrowi$_2$ [PRO$_2$ • pozdrowić • BIND
Maria$_{NOM}$ told Piotr$_{DAT}$ greet$_{INF}$
swoich$_{1,2}$ przyjaciół].
self's friends
'Maria told Piotr to greet his/her friends.'

In (53a) the CL/WP in Polish can occupy a variety of positions in the clause, but the right-most one must be right-adjacent to the lexical verb. I take this position to be v. It can climb out of the infinitive into the main clause; in the process, it typically occupies positions corresponding to v or T, or positions in their minimal domains. Crucially for my parallel treatment of A-binding and CL/WP distribution, the clitic form of the reflexive pronoun shows the same distribution pattern in (53b).[29] Example (54) shows that the same domain allows for long-distance binding, where the reflexive can be bound either lo-

[29] I also assume that the patterns of distribution of the full form of the reflexive pronoun *siebie* 'self' and its clitic equivalent *się* 'SE' are the same. Kupść (2000) confirms that, in general, this is the case, but there are rare cases when particular verbs select only for the strong form:

(i) Jan siebie/?*się lubi / rozumie / kocha.
Jan self SE likes understands loves.
'Jan likes/understands/loves himself.'

cally, by an object-controlled PRO, or non-locally, by the subject of the main clause. It is proposed below that syntactic movement similar to that of the CL/WP is relevant for A-binding, as the local domains for both phenomena overlap.[30] I assume that the positions of the bullets in (54) correspond to positions called "reflexivization sites" in Nikolaeva 2014. CL/WP is impoverished in its set of ϕ-features: only the [number] and [gender] features are both interpretable and valued in it, but not the [person] feature, which is interpretable but unvalued (see Franks 2017 for an analysis of CL/WPs along these lines):

(55) Clitic/weak pronoun:

gender	[+int, +val]
number	[+int, +val]
person	[+int, −val]

Due to lack of value of the [person] feature, CL/WP cannot express its ϕ-features in situ and moves to a position of v (and T), where the valuation of the [person] feature takes place, in line with upward Agree and the following principle (Béjar and Rezac 2003: 53):

(56) Person as Probe: an interpretable person feature must be licensed by entering into an Agree relation with a functional category.

Béjar and Rezac assume that v bears the [−int, +val] person feature and some form of the [+EPP], either as an independent property or a sub-feature of the [person] feature, as in Pesetsky and Torrego 2001, to generate displacement. The CL/WP moves to this head position, or its minimal domain, to become ϕ-complete.[31] Its further movement to T and onwards is equivalent to clitic climbing. I submit that the D-bound follows a similar derivational path, but unlike CL/WP, it bears no valued ϕ-features at all; indexically dependent elements end up carrying the ϕ-features of their antecedents, which produces the effect of antecedent agreement. The D-bound shows the following features:

Kupść suggests that the predicate may lexically select for a particular form (strong/weak) of the reflexive. I leave this issue for further research.

[30] The analogy between Index Raising and clitic movement is forcefully argued in Hestvik 1992.

[31] I assume the idea that the Polish CL/WP bears an unvalued [person] feature, while v bears a valued [person] feature, following Béjar and Rezac (2003) and Franks (2017), who elaborate on this arrangement of features further and find it useful for explanation of the Person Case Constraint (PCC) and CL/WP ordering in the pronominal cluster in many Slavic languages.

(57) D-bound/Index: ϕ-features:

gender	[+int, −val]
number	[+int, −val]
person	[+int, −val]

I assume that in constructions with the D-bound, v bears an unvalued person feature ([−int, −val]), which is nevertheless equipped with the [+EPP] property.[32] Crucially, it attracts the D-bound just like it attracts CL/WPs. Analogously, $[_{[*\phi]}$ D] of the D-bound is able to move further to v/T within the domain determined by the Tensed S-Condition of Chomsky 1981, according to the scenario sketched out in Roberts 2009, where clitic climbing involves attraction/sharing of the feature between the D-bound and the v/T heads.

I have been stressing the parallel between CL/WP climbing and A-binding because they are both confined to the tensed sentence and neither can leave it. This is the key distinction between CL/WP and phrasal arguments in Polish, which can also occupy all the positions marked with the bullets in (54), but additionally, they can be moved out of the subjunctive CP domain, as shown below. Willim (1989) and Tajsner (1990) show that Polish tensed clauses are opaque to extraction of phrasal elements via A' movement, with the exception of extraction out of subjunctive clauses selected by *chcieć* 'want'. These clauses are quite transparent to phrasal wh-movement and topicalization/scrambling; see (58–59). However, they are not transparent to either CL/WP (60), reflexive clitic (61), or binding domain extension (62):

(58) Którą książkę chcesz [żeby [studenci przeczytali *t* ?]]
which $book_{ACC}$ $want_{2SG}$ so.that $students_{NOM}$ $read_{PERF.PAST}$
'Which book would you like the students to read?'

(59) Tamtą książkę Jan chce [żeby [studenci przeczytali *t* ?]]
that $book_{ACC}$ Jan $want_{3SG}$ so.that $students_{NOM}$ $read_{PERF.PAST}$
'Jan would like the students to read THAT BOOK.'

(60) *Jan go chce [żeby [studenci pozdrawiali]]
Jan_{NOM} him_{ACC} wants so.that $students_{NOM}$ greeted
(Intended: 'Jan wants the students to greet him.')

(61) *Jan się chce [żeby [studenci golili *t* co rano]]
Jan_{NOM} REFL wants so.that $students_{NOM}$ shaved every morning
(Intended: 'Jan wants the students to shave every morning.')

[32] Pesetsky and Torrego (2007) allow for Agree (and movement relations) involving probes/goals that share unvalued features, which obtain a value at a later stage of the derivation. The unvalued [person] feature on v later receives the value of the [person] feature of the antecedent to the D-bound.

(62) Jan_1 chce [żeby [$studenci_2$ patrzyli na $siebie_{*1/2}$]]
Jan_{NOM} wants so.that $students_{NOM}$ looked at self
'Jan wants the students to look at themselves/each other/him.'

If both CL/WP climbing and D-bound raising were to constitute a subtype of phrasal A'-movement, they should be extractable from *żeby* 'so that'-complement clauses. Infinitives, on the other hand, are transparent domains to all types of movement in Polish, including the most demanding one in the form of head movement. Needless to say, taking clitic climbing and binding as reflexes of head movement has a long-line ancestry in linguistic research: Hestvik 1992, Avrutin 1994, Safir 2004, Nikolaeva 2014, Franks 2021, etc. Yet I am aware of the fact that the status of the CL/WP as the head or maximal projection is not clear. On the one hand, it shares many distributional properties with pronominal clitics in other Slavic languages, but on the other, it behaves more like a maximal projection than a head; it does not target a strictly defined position in the clause (see (63a–b)),[33] it does not form rigid clusters (see Franks and King 2000; Migdalski 2016), and even when it does, the order in the cluster may be flexible (Franks 2017: 264):

(63) a. ?Pokazali mu cię wczoraj.
$showed_{VIR}$ him_{DAT} you_{ACC} yesterday
'They showed him you yesterday.'

b. Pokazali cię mu wczoraj.
$showed_{VIR}$ you_{ACC} him_{DAT} yesterday
'They showed you to him yesterday.'

Furthermore, Franks (2017) compiles data from Slavic languages showing that the neat division of pronominal categories into X^0/XP status and their classification in Cardinaletti and Starke 1994 need to be reconsidered. Additionally, analyses presented in Cetnarowska 2003 and Migdalski 2016 indicate that the set of Polish CL/WPs is not homogenous; the X-bar status of $mi_{1SG.DAT}$ and $ci_{2SG.DAT}$ may be different from the X-bar status of $mu_{3SG.M.DAT}$ and $go_{3SG.M.ACC}$. It is then plausible that the overt stage of movement of the CL/WP is followed by a covert stage, where v/T is targeted. Thus, for want of a better term, I content myself with the conclusion that whatever the CL/WP is,

[33] The CL/WP does not always attach to the T head in overt syntax:

(i) Ja bym przecież go wtedy rozpoznał.
I AUX_{COND} thus $him_{3SG.M.ACC}$ then $recognized_{PRTC}$
'But I would recognize him then.'

The clitic/weak pronoun cannot occupy the position of v/T, as it is separated from both the conditional auxiliary (assuming it occupies T) and the main verb (at v) by adverbs.

its movement trajectory in overt syntax corresponds to that of the D-bound in covert syntax. Significantly for my account of binding, both the D-bound and the CL/WP move upward out of the VP, and they can (but do not have to) move out of infinitive complements. These two properties of their landing site options suffice to provide for complex anaphoric binding facts in Polish, as discussed at length in Witkoś et al. 2020 and Witkoś and Łęska 2020.[34]

Other types of covert movement have been proposed to account for binding in Slavic. For example, Safir (2004) assumes that binding relations employ movement of different types, but while English uses A-movement (for the binding of the subject of the ECM complement) and French and German use clitic movement (overt and covert, respectively), Russian (close to Polish) does not. Because Russian reflexives are subject-oriented and respect the TSC, Safir objects to extending the covert clitic-movement strategy, as excorporation of adjoined heads is impossible, among other issues. Instead, he proposes that Russian (and Hindi) use covert A'-movement; this operator movement has its overt equivalent in the form of English *tough*/*worth*-constructions, where the movement respects TSC:

(64) ?Alex_1 is tough to persuade Anna_2 [$_{\text{TP}}$ OP_1 [$_{\text{TP}}$ PRO_2 to talk to t_1]]

(65) *Alex_1 is tough to persuade Anna_2 [$_{\text{CP}}$ that [$_{\text{TP}}$ OP_1 [$_{\text{TP}}$ she_2 should talk to t_1]]]

[34] As a *JSL* reviewer observes, CL/WP needs to move past V, which points to a phrasal status of this movement; yet at the same time, it cannot leave the infinitive, which points to head movement; see (60). In fact, a procedure of V-to-v movement solves the issue of moving CL/WP to V, as V becomes a component of v. In Witkoś and Łęska 2020, it is proposed that CL/WP should move as a minimal/maximal projection in the sense of Bare Phrase Structure (Chomsky 1995). A technical alteration to the structure in (49) is introduced, so that it should become more compatible with what Bošković (2002) proposes for clitic pronouns and clitic auxiliaries; [$_{\text{D[ϕ]}}$ Ø] must be placed in the specifier position of an empty head, because it cannot project and branch:

(i) [$_{\text{DP}}$ [$_{\text{D[ϕ]}}$ Ø] [Ø$_{\text{D}}$ [NP …]]]

With Matushansky (2006), Vicente (2007), Landau (2006), and Franks (2017), Witkoś and Łęska (2020) assume that the X^0/XP can move via the path accessible to XPs. Hence, from the structure in (i), the minimal/maximal [$_{\text{D[ϕ]}}$ Ø] moves out into [Spec, vP] and/or [Spec, TP], possibly each time tucking in under the primary specifier position filled with the subject argument or DAT OE:

(ii) [$_{\text{vP}}$ $\text{DP}_{SUB/DAT\ OE}$ [$_{\text{v'}}$ [$_{\text{D[ϕ]}}$ Ø] [$_{\text{v'}}$ v [$_{\text{VP}}$ (DP_{IO}) [$_{\text{V'}}$ V [$_{\text{DP}}$ [$_{\text{D[ϕ]}}$ Ø] [Ø$_{\text{D}}$ [NP …]]]]]]]

This movement meets the empirical requirements placed on both clitic climbing and A-binding domain extension if we make a conservative assumption that an X^0/XP constituent must meet locality conditions which are common to both head and phrasal movement.

Yet this movement displays idiosyncratic properties; Safir assumes that the operator adjoins to TP or right below. The operator can target the lower TP, so either PRO or *professor* is the antecedent for the reflexive in (66) below:

(66) a. Professor$_1$ poprosil assistenta$_2$ [PRO$_2$ čitat' svoj$_{1/2}$ doklad]
professor$_{NOM}$ asked assistant$_{ACC}$ read$_{INF}$ self's report
'The professor asked the assistant to read his report.'

b. Professor$_1$ poprosil assistenta$_2$ [$_{TP}$ svoj$_2$ [$_{TP}$ PRO$_2$ čitat' svoj$_{1/2}$
professor asked assistant read self's
doklad]]
report

c. [$_{CP}$ [$_{TP}$ svoj$_1$ [$_{TP}$ Professor$_1$ poprosil assistenta$_2$ [$_{TP}$ svoj$_1$ [$_{TP}$ PRO$_2$
professor asked assistant
čitat' svoj$_{1/2}$ doklad]]]]]
read self's report

Yet I remain committed to the analogy between A-binding and CL/WP distribution for several reasons. First, Polish shows that the scope of overt clitic/weak pronoun distribution overlaps with the scope of A-binding, while it does not show an overt equivalent to the English *tough*-construction. Second, excorporation is less of a problem if the reflexive element [$_{[\phi]}$ D] is a CL/WP and is both [+minimal/+maximal] in terms of Bare Phrase Structure. Third, Polish has dative experiencers with binding properties distinct from the binding properties of nominative subjects placed in [Spec, TP]; see (9–11). On the analysis in Safir 2004, DAT OEs placed in [Spec, vP] should not c-command the operator adjoined to TP from their case position to license a reflexive form.

4.3. A-Binding and Copy Pronunciation

So far, the similarity between the [$_{[\phi]}$ D] head and CL/WP was crucial: they share the deficiency in the [person] feature licensing. Yet there is one respect in which they are different from each other. Franks (2017) postulates that CL/WPs are deficient in three dimensions: semantic, structural, and phonological. The last property distinguishes [$_{[\phi]}$ D] from CL/WP. In (54) above, [$_{[\phi]}$ D] moves from [$_{DP}$ [$_{[\phi]}$ D] [$_{NP}$ …]] to the head v/T. Yet the D-bound is not phonologically impoverished the way clitics are. Movement of [$_{[\phi]}$ D] forms a chain in which the copy is pronounced (compare the positions of *się* 'SE' in (53b), where *się* is pronounced at the head of the movement chain, and *swój* 'self's' in (54), where *swój* is pronounced at the tail of the movement chain). The valuation of the ϕ-features under Agree with the antecedent NP in [Spec, vP/TP] is a signal for [$_{DP}$ [$_{[\phi]}$ D] [$_{NP}$ …]] in the VP-internal position to be pronounced as a reflexive/

reflexive possessive (*siebie/swój* 'self/self's').[35] In other cases, the VP-internal [[$_{DP}$ [$_{[\phi]}$ D] [$_{NP}$ …]]] is pronounced as a pronoun/pronominal possessive.

In view of the discussion so far, the following Lexicalization Rule emerges:

(67) The D-bound Lexicalization Rule:

The D-bound contributes to the lexicalization of [[$_{DP}$ [$_{[\phi]}$ D] [$_{NP}$ …]]] as reflexive when

a. [$_{[\phi]}$ D] is adjoined to v/T, and

b. the ϕ-features of the [$_{[\phi]}$ D] are valued under Agree against the ϕ-features of the NP in [Spec, vP/TP], and

c. the antecedent must occupy its case position.

d. Otherwise, the D-bound/Index is lexicalized as a pronoun.[36]

The rule in (67) implies that the lexical form of [[$_{DP}$ [$_{[\phi]}$ D] [$_{NP}$ …]] depends not only on the ϕ-features valued on it by the antecedent (as in Reuland 2011 or Rooryck and Vanden Wyngaerd 2011), but also on the relative positioning of [$_{[\phi]}$ D] with respect to the antecedent, an option envisaged in Safir 2014 and Nikolaeva 2014. The procedure of Spell-Out scans the domain not only for the features valued in the derivation (the ϕ-features of the D-bound), but also for the relative positioning of the antecedent with regard to the D-bound (does the former c-command the latter? Are they both in the same derivational phase?). As a result, subject and non-subject antecedents lead to distinct lexicalizations of the binding relation. For example, in (68) on the opposite page, [$_{[\phi]}$ D] moves out of the VP and adjoins to v/T, in line with (67a). As the subject NP is the only potential local antecedent, [$_{[\phi]}$ D] can become involved in Agree and have its ϕ-features valued by the c-commanding subject (3SG.F) in situ before this movement, or it can move first, still carrying its unvalued ϕ-features, and agree next. Either way, condition (67b) is met and the bottom of the chain of the D-bound is spelled out as reflexive:

[35] A similar idea of movement and copy pronunciation is applied to binding in German in Safir 2004 and in Lee-Schoenfeld 2008 (esp. p. 291). In the latter source, the licensing of *sich* 'self', co-indexed with 'mother', requires covert movement:

(i) Die Mutter$_i$ lässt [$_{vP}$ die Kleine$_j$ sich$_{?i/j}$ /ihr$_{i/*j}$ die Schokolade in
the mother lets the little.one self her the chocolate in
den Mund stecken].
the mouth stick
'The mother lets the little girl stick the chocolate in her mouth.'

[36] I keep the distinction between co-argument and non-co-argument reflexivization, i.e., Nikolaeva's proposal in (43c) vs. (43d).

(68) a. [$NP_{[3SG.F]}$ [$_D$ ^3SG.F]-v/T … [$_{VP}$ V [[$_{DP}$ [$_{[*\phi]}$ D] [$_{NP}$ …]]]]

b. Maria lubi swoją nową koleżankę.
Maria$_{3SG.F.NOM}$ likes self's new friend$_{3SG.F}$
'Maria likes her new friend.'

The situation is different in the case of an object antecedent. In the ditransitive construction in (69), [$_{[\phi]}$ D] has its ϕ-features valued by a local c-commanding NP object (3SG.M) via upward Agree. Subsequently, the D-bound moves to v/T, in line with (67a).[37] The spell-out rule clause in (67d) applies, because the NP in [Spec, v/T] is not the antecedent for the D-bound. The D-bound spells out as pronominal:

(69) a. [$NP_{[3SG.F]}$ [$_D$ ^3SG.M]-v/T … [$_{VP}$ $NP_{[3SG.M]}$ [V [[$_{DP}$ [$_{[^{\wedge}3SG.M]}$ D] [$_{NP}$ …]]]]

b. Maria przedstawiła Piotrowi jego nową
Maria$_{3SG.F.NOM}$ introduced Piotr$_{3SG.M.DAT}$ his new
koleżankę.
colleague$_{3SG.F.ACC}$
'Maria introduced to Piotr his new colleague.'

A simple lexicalization rule applying right after the ϕ-feature valuation or a rule concerned exclusively with the ϕ-feature valuation of the reflexive element, as proposed in Reuland 2011 or Rooryck and Vanden Wyngaerd 2011, cannot distinguish between binding by the subject and binding by the object, whereas a rule sensitive to the ϕ-feature valuation itself, as well as the structural relation of c-command between the antecedent and the D-bound in a local domain, as proposed in Safir 2014, can capture this distinction. The spell-out rule in (67) applies in the domain of the phase, so it does not require non-local licensing. What it requires is its application at the point in the derivation where the NPs in the specifier positions in (68–69) are accessible. The form of D-bound (reflexive or pronominal) depends on the matching or non-matching of its ϕ-features with the specifier of v/T. The key instruction for the form of the D-bound to be spelled out stems from this local Spec-head relation. The detailed application of the domain-sensitive spell-out procedure in (67) is exemplified in the examples discussed in §5.[38]

[37] As my proposal allows for both upward and downward Agree, and I need to allow free ordering between operations Agree and Move resulting in anaphoric binding, in (69) the D-bound could first move to adjoin to v and only then probe downward for the features of the NP object, with no consequences for the spell-out procedure of the D-bound. I am grateful to a *JSL* reviewer for pointing out this possibility.

[38] I assume that the entire phrase [[$_{DP}$ [$_{[^{\wedge}\phi]}$ D] [$_{NP}$ …]]] in (67) is lexicalized as *siebie* 'self' or *swój* 'self's'. The notion that a phrasal structure larger than a head can be

4.4. A-Binding as "Agree and Move" or "Move and Agree"

Key properties of the derivation stem from the probing procedures in which two properties of [$_{[\phi]}$ D] are involved: the *ϕ-features probing for a c-commanding NP goal and the unvalued [person] feature. The latter is attracted by the [–val, person] feature on v/T. This Agree and feature-sharing relation forces movement of [$_{[\phi]}$ D] to v/T. While the valuation of the ϕ-feature set is relevant for the LF-interpretation of the D-bound, the feature sharing of the [person] feature with v/T, movement of [$_{[\phi]}$ D] to v/T, and its further clitic climbing are relevant for its lexicalization at Spell-Out. In principle, either feature can be accessed first in the derivation, with distinct consequences. But this is nothing new in the landscape of binding phenomena. Similar English cases come from Hicks (2009: 158), for whom the reflexive also seeks its antecedent via upward Agree:

(70) a. John$_1$ wondered [which pictures of himself$_{1/2/3}$] Bill$_2$ claimed Paul$_3$ had bought.

b. John$_1$ wondered [$_{CP}$ [$_{DP}$ which pictures of himself$_{1/*2/*3}$] Bill$_2$ claimed [$_{CP}$ <[$_{DP}$ which pictures of himself$_{*1/2/*3}$]> Paul$_3$ had bought <[$_{DP}$ which pictures of himself$_{*1/*2/3}$]>

Hicks assumes that the ambiguity of binding in (70) stems from the interplay between the copy theory of movement and probing for the features on the part of the reflexive in (70b). He allows for a derivational lag in the valuation of this feature: so either the reflexive probes from its original position, receiving the interpretation marked as 3, or it probes later, after the constituent containing *himself* has been moved to satisfy the needs of the wh-feature. The latter valuation tactic bears fruit as interpretations marked 2 or 3. Thus the wh-feature drives movement, while the unvalued features on the reflexive drive the setting up of an indexical dependency and either feature can be satisfied first. Binding Condition A is liberal and can be satisfied at any point in the derivation, as proposed in Belletti and Rizzi 1988 and Lebeaux 2009. Once anaphoric binding is translated into some feature-checking mechanism, irrespective of its exact form, the valuation of the feature providing for the A-bound interpretation needs to be liberal with respect to the point of its application in the derivation. As (70) shows, the valuation of the features relevant for binding

lexicalized as a word is advocated in Vicente 2007, Starke 2009, and Caha 2009. When a sub-constituent of this larger structure is (copied and) moved away, it is still the larger structure including the copy of the moved sub-constituent that is spelled out. The sub-extracted part only receives, at its landing site, an instruction as to whether its source constituent in (68) and (69) is lexicalized as reflexive or not, in line with (67).

takes place either early in the derivation, before wh-movement, or after the movement.[39]

5. A Composite Account

In this section, I present a number of examples where reflexive binding applies, focusing on the binding of reflexive possessives, with the aim of showing that the account outlined above is descriptively adequate.

5.1. Reflexive Possessives in the Simple Clause

Let me start with constructions involving a ditransitive verb in a simple clause:[40]

(71) Maria$_1$ pokazała Piotrowi$_2$ [[swoje$_{1,*2}$/jego$_2$/jej$_{*1}$] zdjęcie]
Maria$_{NOM}$ showed Piotr$_{DAT}$ self's his her picture$_{ACC}$
'Maria showed Piotr her/his picture.'

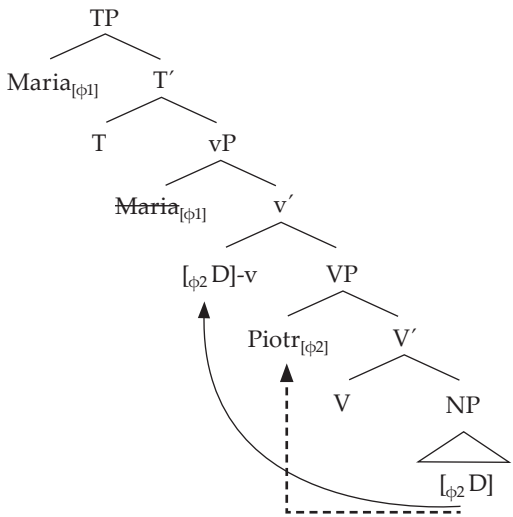
Two interpretations of (71) depend on the order between the upward probing by the ϕ-features and movement driven by the [–val, person] feature shared between v and the ϕ-feature complex of [$_{[*\phi]}$ D]. When the order of operations is such that the ϕ-features search for their values from the base position of [$_{[*\phi]}$ D] via upward Agree, they encounter the c-commanding object *Piotr* as

[39] Both reviewers for *JSL* raise the issue of the relative timing of Agree relevant for binding, which appears to be quite arbitrary within the derivation. I admit that this is the legacy of A-binding seen as Move α (Pica 1987, 1991; Chomsky 1986, etc.) and contrasts with the valuation of case, taking place as soon as possible. Ideally, the timing for both types of feature valuation should converge, as in Reuland's (2011) approach. Yet, as shown in §2, the empirical scope of this approach is quite limited. Needless to say, the issue of interrelation between the timing of ϕ-feature valuation relevant for binding and the valuation of case is a topic for a separate contribution.

[40] A reviewer for *JSL* observes that ϕ-feature valuation of the adjective *swoje* 'self's' is further complicated by NP-internal concord, where it needs to agree in number and gender with the head noun of its NP. This fact forces *swoje* 'self's' to contain two sets of ϕ-features, one set valued against N within the NP and the other against the NP-external antecedent. Clearly, this paper deals only with the latter procedure, with the former procedure remaining beyond the scope of its interest. Let me, however, outline two possibilities. First, it is imaginable that from its base position adjoined to NP, the reflexive possessive c-commands the N as the goal and has its features valued against it as a result of downward Agree (Danon 2011). So the NP-internal set of ϕ-features on the reflexive possessive would be valued in narrow syntax early in the derivation. Alternatively, NP-internal concord can be taken to result from post-syntactic NP-internal feature spread on the PF branch of grammar (Norris 2014).

goal and obtain its values (represented collectively as 2). Next, the [person] feature of the ϕ-feature set is involved in Agree and feature sharing with the relevant [−val, person] probe on v, and $[_{[\wedge\phi 2]}$ D] moves to it.[41] The Lexicalization Rule in (67) returns a pronominal form (*jego* 'his') at Spell-Out—[Spec, vP] and [Spec, TP] are not occupied by an NP whose ϕ-features are shared with $[_{[\wedge\phi 2]}$ D]:[42]

(72)



The straight dotted line in (72) indicates upward Agree for ϕ-features between the D-bound and its antecedent (*Piotr*) in the object position. The curved solid arrows indicate the movement of $[_{[\wedge\phi 2]}$ D] to v and T. I believe that $[_{[\wedge\phi 2]}$ D] still remains an active element of the derivation on the assumption of Chomsky (2001) and Pesetsky and Torrego (2001) that valued features remain visible until a given derivational phase (here vP) is completed. Furthermore, the relation between v [−val, person] and $[_{[\wedge\phi 2]}$ D] is also allowed by the Principle of Minimal Compliance (PMC) applied to the combination of operations Agree and Move (Richards 1997, 1998; Landau 2000): the more local relation of the

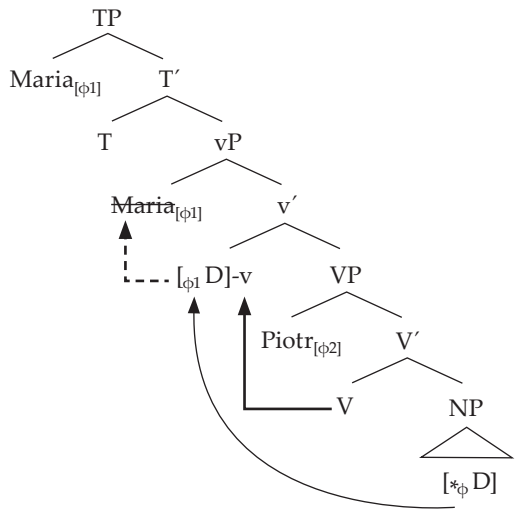
[41] Following the discussion on the nature of CL/WP in the previous section, $[_{[\phi]}$ D] can move as X/XP to form the inner [Spec, vP] and only then merge with v. Such a scenario is provided in Nikolaeva 2014. Also, see fn. 34.

[42] Incidentally, as pointed out by a reviewer, the definition of Agree in (45) allows $[_{[*\phi 2]}$ D] to move to v first and next probe downward for the features of the object, with the resulting interpretation of the object serving as the antecedent. The spell-out rule in (67) still produces the pronominal possessive form.

ϕ-feature valuation opens up the way for the less local relation of movement involving v and [$_{[\phi 2]}$ D].[43]

The outcome of this derivation is different when the movement of [$_{[*\phi]}$ D] to v precedes its participation in upward Agree. When [$_{[*\phi]}$ D] is moved out of VP and adjoined to v first, the probing for the ϕ-features from this position finds the subject *Maria* as the goal, the ϕ-features receive its values (collectively marked in the diagram as 1), and the Lexicalization Rule in (67) returns a reflexive form (*swój* 'self's'), as now the NP in [Spec, vP]/[Spec, TP] bears the same ϕ-feature values as [$_{[\hat{}\phi 1]}$ D]. Solid arrows represent the movement of the verb:

(73)



I assume that this order of operations respects minimality conditions. The movement across NP *Piotr*$_2$ is possible due to the PMC, bearing in mind the upward probing nature of the ϕ-features on [$_{[*\phi]}$ D]. The PMC requires that an initial legitimate local relation involving a particular head (probe) in domain

[43] Richards (1997, 1998) shows that grammatical principles are observed once in a particular domain and then ignored by further operations applying to the same domain. For instance, in Bulgarian, multiple wh-movement observes superiority, but once the most superior wh-phrase has moved, the others move in random order. Landau (2000: 70–71) discusses cases of subject control (across the object, as in *John promised Mary to do the dishes*) in the following configuration:

(i) [T_1 … DP_1 … v_1 … DP_2 [$_{CP}$ T-Agr_1 [$_{TP}$ PRO_1 ….]]]

For subject control to hold here, T_1 must access the complex T-Agr_1 across another potential probe, v_1. The PMC allows for it, as T_1 is first involved in a legitimate local Agree with DP_1. Once this relation is executed, T_1 becomes involved in a less local, minimality-violating relation with T-Agr_1, across v_1.

D should "pay the derivational tax" and open the way to a less local relation. In (73) the more local V-to-v movement licenses the less local movement of $[_{[*\phi]}$ D] to v. Both movements apply in the domain of vP. The delay in the valuation of the ϕ-features here reflects the generally accepted idea that satisfaction of Binding Principle A need not apply immediately, but at different stages of the derivation (Belletti and Rizzi 1988; Lebeaux 2009).

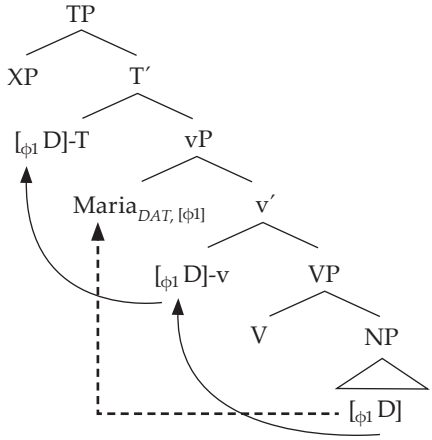
Let me now present a detailed account of the derivation of a non-verbal predicate with a DAT OE, seen in (9) and repeated below:

(74) a. Marii$_1$ było żal siebie$_1$ /*?jej$_1$ (samej).
Maria$_{DAT}$ was$_{3SG.N}$ sorrow self$_{GEN}$ *?her$_{GEN}$ alone
'Maria felt sorry for herself.'

b. Marii$_1$ było żal swojej$_1$ /jej$_1$ koleżanki.
Maria$_{DAT}$ was$_{3SG.N}$ sorrow self's$_{GEN}$ her$_{GEN}$ friend$_{GEN}$
'Maria felt sorry for her female friend.'

Either order of relevant operations (Agree for ϕ-features or Move $[_{[\hat{}\phi]}$ D] to v/T) leads to the configuration in which the $[_{[\hat{}\phi]}$ D] is placed in a position adjoined to v. When it stays there, the Lexicalization Rule (67) predicts the spell-out of the reflexive possessive, but when it (optionally) raises to T, the possessive is spelled out as pronominal. XP marks the overt position of the DAT OE:

(75)



The position of XP can be defined in two ways. One is to say that it is a topic, either adjoined to TP or occupying a designated position in the left periphery, per Rizzi 1997, 2014.[44] The other is to say that it occupies a hybrid A/A′ posi-

[44] Ionin (2001) observes that preverbal arguments in SVO/OVS sentences with neutral intonation are topics (topic being 'what the sentence is about'). Either order can an-

tion, which is, crucially, not a case position for it, as proposed in Germain 2015 and Citko et al. 2018.[45]

5.2. The Reflexive Possessive in the Infinitive Complement

The full menu of interactions between both valuation procedures shows in long-distance binding. In the context of an infinitive clause (exemplifying object control), the antecedent for the D-bound/Index is either the more local PRO or the more remote subject of the main clause. Significantly, the D-bound/Index can be lexicalized as either a reflexive possessive or a pronominal possessive for both indexical dependencies.

(76) Maria$_1$ kazała Piotrowi$_2$ pozdrowić swoich$_{1,2}$/jego$_2$ /jej$_1$
Maria$_{NOM}$ told Piotr$_{DAT}$ greet$_{INF}$ self's his her
przyjaciół.
friends$_{ACC}$
'Maria told Piotr to greet his/her friends.'

The set of procedures used to account for the four interpretive possibilities of (76) involves only independently attested operations such as Agree, Move, in either order, and the PMC. So Reuland's (2011) postulate of treating anaphoric binding as "an accidental outcome of independent derivational procedures" is met. The diagrams on the following pages serve as illustrations for four relevant derivations. In all of them, the relation of object control holds, spanning

swer general questions of the 'what happened' type.

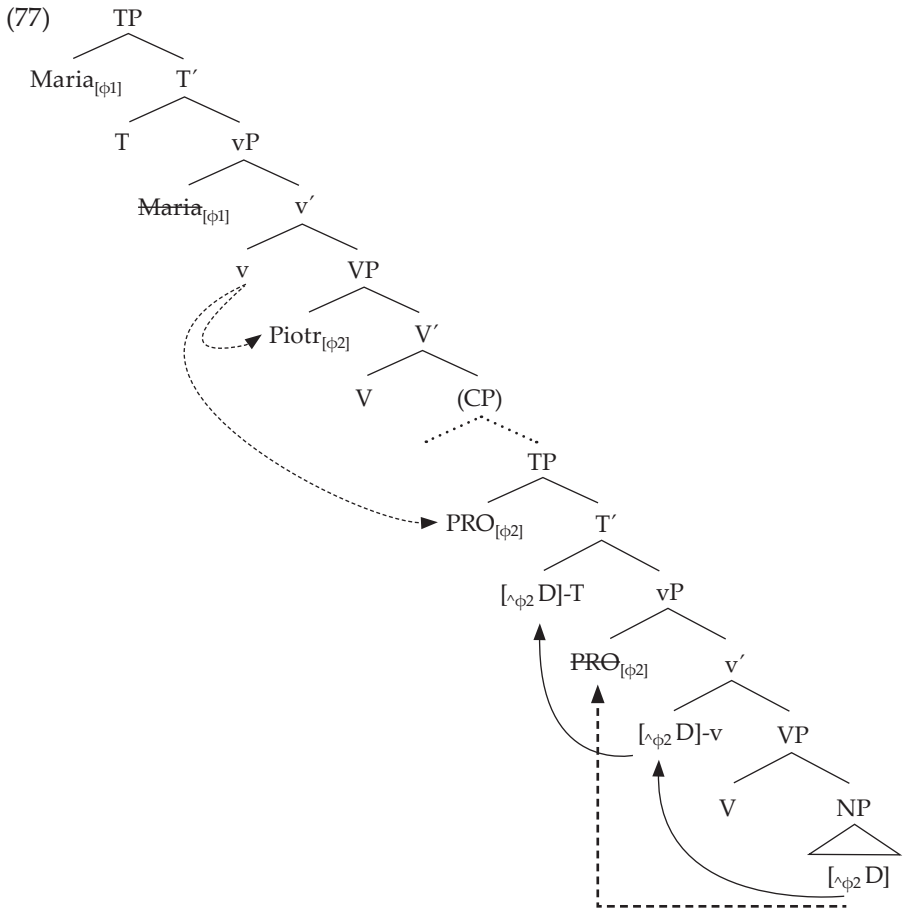
[45] Germain (2015) and Citko et. al. (2018) argue that feature transfer from the phase head to its complement head can be split (Split Feature Inheritance), and either both ϕ-features and the [+EPP] property are inherited by the complement head or only the ϕ-features are inherited and the transfer of the [+EPP] property is withheld. They analyze Russian constructions in which [+EPP] is not satisfied by nominative-marked DPs and conclude that three conflicting properties evidence the hybrid nature of this position: (a) the fronted constituent does not reconstruct (see Bailyn 2004), (b) the OVS word order facilitates a neutral wide-scope reading, and (c) the non-nominative DP cannot bind reflexives from its landing site (no A-position status). Germain proposes that feature inheritance is split, and C (Fin in her account, after Rizzi 1997) passes only ϕ-features to T but retains the [+EPP] property. Hence, nominative is valued under Agree on the postverbal DP, while the non-nominative DP can move up to [Spec, FinP] to satisfy the [+EPP] property:

(i) Russian Left Periphery (Germain 2015: 428)
[$_{\text{ForceP}}$ Force [$_{\text{TopP}}$ Top [$_{\text{FocP}}$ Foc [$_{\text{FinP}}$ Fin]]]]

the infinitive boundary and facilitating relations between elements placed in both clauses.

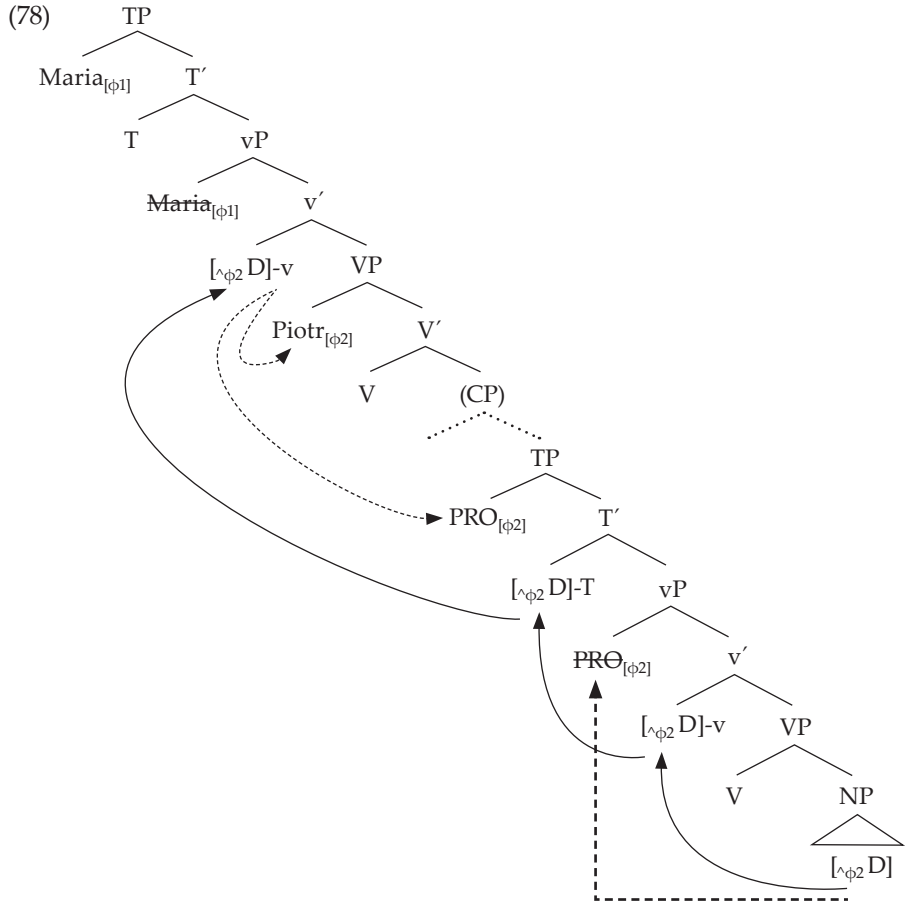
First, let me present the structure in which *Piotr*$_2$ antecedes the reflexive, (77) below. The curved dotted arrows indicate the relation of control, seen as a type of Agree (Landau 2000). The straight dotted arrow indicates (upward) Agree, while solid curved arrows indicate the covert movement of the D-bound. Agree between PRO$_2$ and the ϕ-features of the D-bound holds first, and next the [−val, person] feature on v forces the movement of the D-bound to v/T in the embedded clause. As a result, the D-bound is lexicalized as reflexive, in line with (67):

(77)



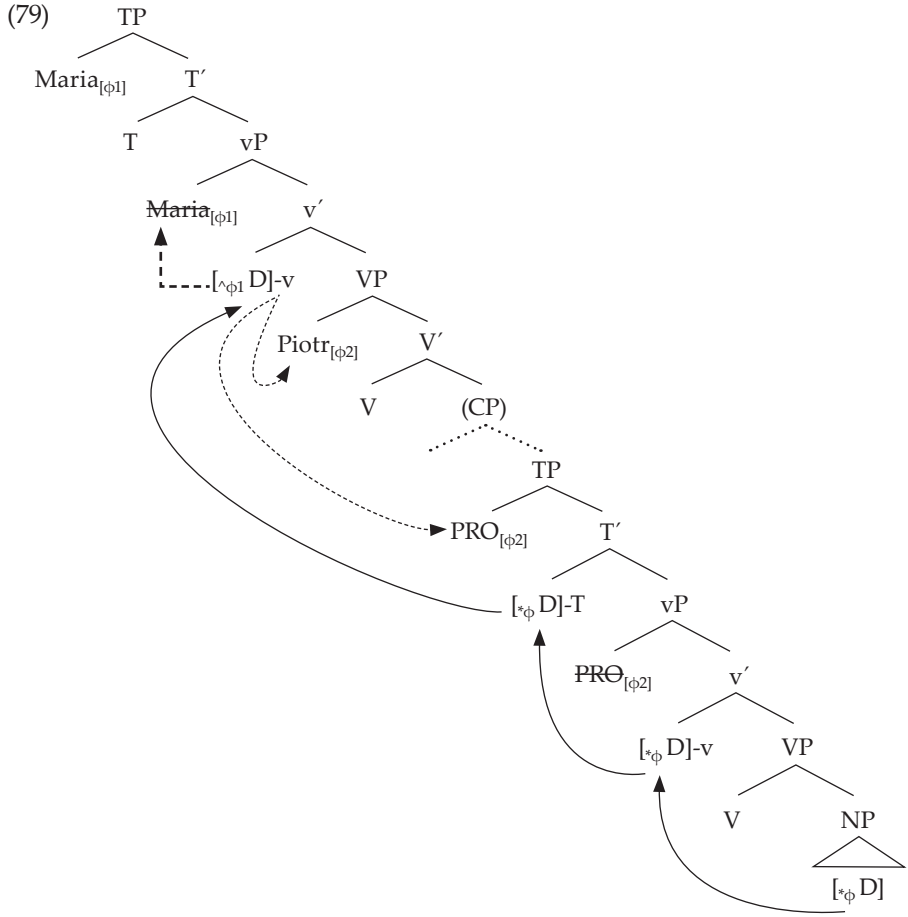
In a second scenario, illustrated in (78), the order of operations is the same; so first the ϕ-features are valued against PRO$_2$, and next the [−val, person] feature of v/T forces movement of [$_{[\hat{}\phi 2]}$ D], but here [$_{[\hat{}\phi 2]}$ D] clitic-climbs to the

main clause. This operation is compatible with minimality requirements due to PMC: both object control and a local V-to-v movement in the main-clause vP phase open the way for the less local climbing of $[_{[\wedge\phi 2]}$ D] to v of the main clause. As a result, the LF-interpretation of the anaphoric relation is identical to the previous scenario (*Piotr*$_2$ = D-bound$_2$), but the lexicalization is different, as $[_{[\wedge\phi 2]}$ D] is locally c-commanded at its landing site by *Maria*$_1$, which does not share its ϕ-features (collectively marked as 2):

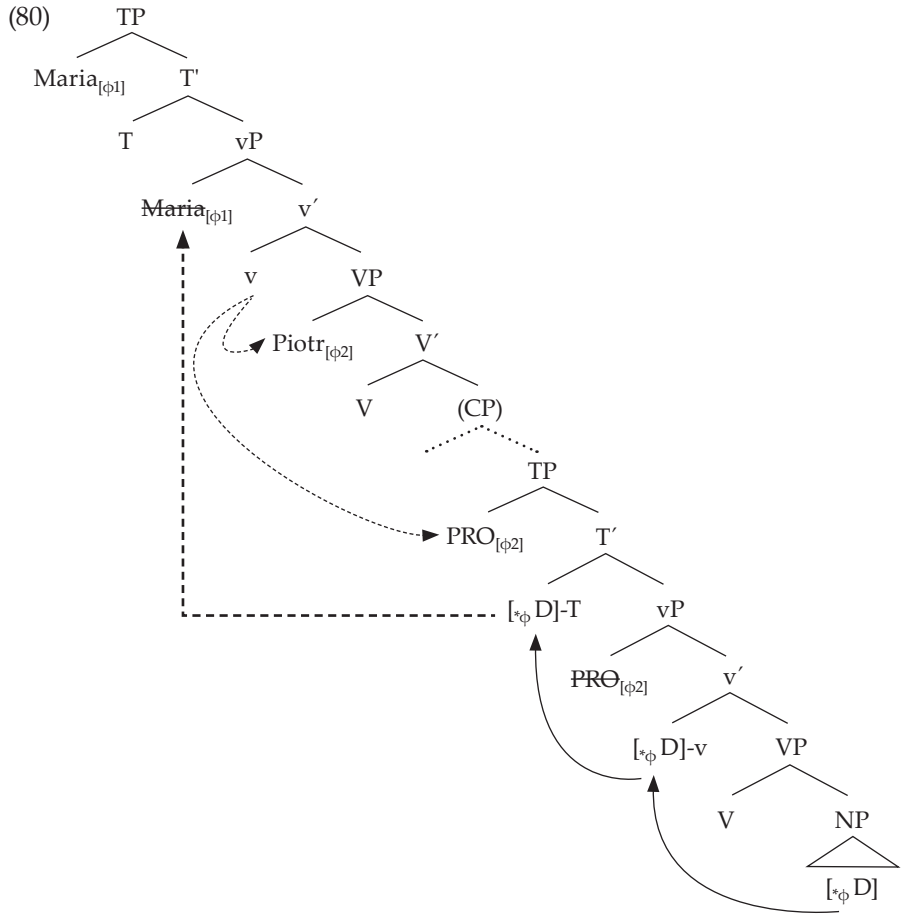


Another scenario, presented in (79) on the following page, represents the interpretation in which *Maria*$_1$ is the antecedent for $[_{[*\phi]}$ D]. In this case, the movement to v/T in the main clause, driven by the [−val, person] feature of $[_{[*\phi]}$ D], takes place first, its way paved by the object-control relation and V-to-v movement in the main clause, crucial for the PMC. Once $[_{[*\phi]}$ D] has moved, its ϕ-features probe upwards to reach the nearest c-commanding goal and ob-

tain its values (collectively represented as 1). Thus, the LF-relevant relation is set up between the main-clause subject and the D-bound. The Lexicalization Rule (67) forces the appearance of the reflexive form at Spell-Out, as $[_{[\hat{}\phi 1]}$ D] adjoined to matrix v/T is locally c-commanded by the antecedent NP, sharing ϕ-features with it:



I am now left with the last of the four interpretive options available for (76): the subject of the main clause functions as antecedent for the pronominal possessive. This interpretation requires a seemingly impossible combination of conditions within the system under discussion; on the one hand, the very local Agree relation valuing the ϕ-features on $[_{[*\phi]}$ D] requires that the upward Agree be delayed until after the movement of $[_{[*\phi]}$ D] to matrix v/T, but on the other hand, such movement predicts that the only available lexicalized form of the D-bound/Index should be reflexive:



The contradictory requirements of the LF- and PF-licensing of the referentially dependent form in (80) can be solved when the PMC is considered again from the perspective of $[_{[*\phi]}$ D] adjoined to embedded T. There is one local operation that legitimizes the non-local upward Agree between its ϕ-features and *Maria*$_1$: a local relation of control, based on Agree (Landau 2000), which spans the boundary of the infinitive and reaches T across the chain of (*Piotr*$_2$ > PRO$_2$). It opens up the possibility that a longer relation can proceed unobstructed in its wake within the same domain. Thus, upward Agree for the ϕ-features of $[_{[\wedge\phi 1]}$ D] reaches across PRO$_2$ and *Piotr*$_2$ and accesses *Maria*$_1$ in [Spec, vP] in the main clause. For this option to be feasible, the ϕ-features of $[_{[*\phi]}$ D] need to be allowed to postpone their valuation as much as possible within a given derivational cycle. This seems to be independently confirmed; the domain including the main-clause verb and the infinitive in Polish can be transferred and spelled out jointly, due to some phase-extension strategy; for

instance, negation on the main-clause verb causes Genitive of Negation (GoN) on the object of the infinitive (see, e.g., Błaszczak 2001 and Ruda 2018).[46]

The four derivations detailed in (77–80) account for the four-way set of indexical dependencies seen in (76):[47]

Table 1. Indexical dependencies in (76)

Antecedent	Reflexive possessive	Pronominal possessive
Piotr	ex. 77	ex. 78
Maria	ex. 79	ex. 80

The derivations presented in (77–80) seem to meet the rigors of phase-based syntax, outlined in Chomsky 2000, 2001. Despite the movement of $[_{[*\phi]}$ D] from

[46] Consider this example of (extra) Long-Distance GoN from Ruda 2018, after Przepiórkowski 2000, in which the nominal object is multiply embedded in infinitival structures; clausal negation in the main clause forces genitive on the object at the bottom of a cascade of infinitives:

(i) Nie musisz zamierzać przestać studiować algebry.
not $must_{2SG}$ $intend_{INF}$ $stop_{INF}$ $study_{INF}$ $algebra_{GEN}$
'You don't have to intend to stop studying algebra.'

[47] Limits of this contribution do not allow me to extend this system to binding within nominal phrases. Yet, Witkoś (2021b) shows how a combination of Agree, covert movement (both phrasal, similar to the Left Branch Extraction, and CL/WP-like), and PMC, similar to the analysis of all the interpretations in Table 1, derive the four options in (i):

(i) Jan_1 czytał [książkę $Marii_2$ o $swoim_{1,2}$ ojcu /o jej_2 ojcu/
Jan read $book_{ACC}$ $Maria_{GEN}$ about self's father about her father
o $jego_1$ ojcu].
about his father
'Jan read Maria's book about her father/his father.'

Jan can be coindexed with both a reflexive and a pronominal possessor, and Maria can also be coindexed with the reflexive and the pronominal possessor:

(ii) a. Jan_1 → $swoim_1$/$jego_1$
b. $Marii_2$ → $swoim_2$/jej_2

The analysis is based on the following structure of the nominal phrase, where FP is the maximal nominal projection, serving as a derivational phase, in line with Bošković 2012, and the NP overtly moves to [Spec, FP], following an escape movement of the PP (not indicated here for clarity of presentation):

(iii) $[_{FP}$ książka F $[_{PossP}$ [Marii] Poss $[_{NP}$ książka $[_{PP}$ o swoim ojcu]]]]
book $Maria_{GEN}$ book about self's father
'Maria's book about her father'

the T-adjoined position in the infinitive to the v head in the main clause or upward Agree from this position across CP_{INF}, this maximal projection is frequently taken to be more transparent than finite CP. For instance, Landau (2000) takes CP_{INF} not to be a phase in the context of his Agree-based control theory, and Zubkov (2018) does not take either CP_{INF} or vP to be phases in the context of his Agree-based theory of binding. A recent proposal in the spirit of restructuring/reanalysis of infinitive complements resulting in the removal of the CP projection is formulated by Müller (2017, 2018), who submits that syntax needs to be enriched with operation Remove, a mirror reflection of Merge.[48] Last but not least, Bošković (2007) submits that Agree is not limited by the Phase Impenetrability Condition (PIC) to search for potential goals and can transgress phase boundaries.[49] Reflexive possessives in the examples above are accessible to NP-external antecedents, because they are placed at the edge of the nominal phase.[50]

[48] Müller's Remove alters already-constructed phrase markers in a regular manner. It is cyclic, feature-driven (in the case that a CP projection is removed, relevant features rest on the V-head that selects it), and affects either maximal projections or heads. In the former case, both the head and all its projections disappear; in the latter, dependents of C re-associate with the selecting V (as specifiers), and TP becomes V's complement. The consequence of C (and CP) removal from (77–80) is reanalysis of a biclausal structure as a monoclausal context in which upward probing by ϕ-features of $[_{[*\phi]}$ D] can proceed freely.

[49] Bošković (2007: 613–64) assumes that the PIC constrains Move but does not constrain Agree. He points to Chukchee, where agreement reaches into finite CP, violating the PIC:

(i) ənən qəlγilu ləŋərkə-nin-et iŋqun Ø-rətəmŋəv-nen-at qora-t.
he regrets-3-PL that 3SG-lost-3-PL reindeer-PL
'He regrets that he lost the reindeer.'

[50] Having said that, reflexive possessives can be embedded quite deep in Polish. Marciniak (1999: 131) brings up the following example:

(i) Jan_i pokazał $Piotrowi_j$ [dom [córki [brata [$swojego_{i/*j}$/$jego_{*i/j}$
John showed Peter house of.daughter of.brother self's his
kolegi]]]]]
colleague
'John showed Peter the house of a daughter of a brother of his colleague.'

Example (i) is challenging to any theory involving movement, because the launch site is embedded deep in a number of NP projections. Here, a mitigating element concerns performance factors; native speakers I have consulted tend to disagree with Marciniak's original judgments given for example (i) in the sense that they also accept the pronominal possessor coindexed with the subject *Jan*. This indicates that the depth of embedding nullifies the effects of both Binding Condition A and Binding Condition B. I leave this issue for further research.

6. Conclusions

The key feature of this technical account of both subject orientation of reflexives and the spell-out pattern of indexically dependent reflexive and pronominal possessives consists in (i) positing late lexicalization of the D-bound/Index in the derivation (Nikolaeva 2014; Safir 2014), according to the Lexicalization Rule in (67), and (ii) positing features that drive its derivation: the interpretable but unvalued ϕ-features that probe upwards seeking an antecedent (Hicks 2009) and a [−val, person] feature shared with and attracted by the nearest relevant head v/T (Béjar and Rezac 2009; Franks 2017).

The account presented here draws from two minimalist, index-free approaches, one based on Agree (Reuland 2011) and the other based on Move (Boeckx et al. 2008). These two original sources of inspiration require modification. Reuland's Agree-based account straightforwardly covers only constructions in which both the binder and the bindee bear structural cases, as it relies on an extended notion of ϕ-feature sharing between T, v, the subject, and the object (a residue of the General Condition on A-chains in Reinhart and Reuland 1993). Therefore, it requires non-trivial modifications when either the binder or the bindee bears inherent/quirky case. By following the idea expressed in Hicks 2009 that binding is upward Agree, I avoid problematic aspects of the correlation between structural case and binding. Yet, there is a price to pay: I rely on Agree that is specifically tuned to cater to A-binding only (just like proposals developed in Rooryck and Vanden Wyngaerd 2011, Zubkov 2018, and Antonenko 2012, partly inspired by Reuland's theory). Otherwise, the proposal developed here converges with Reuland's on a number of points. I admit that local binding between co-arguments does not allow for any free variation—e.g., (9a) vs. (9b)—which confirms a special role played by the notion of the reflexive predicate. Both Reuland's account and the one here postulate covert raising of the object reflexive out of VP to the domain of v; see (20) and (72). I also rely on the correlation between phase-edge phenomena and reflexive possessives observed by Reuland and explored in Despić 2015.

There are at least two conclusions common to the Movement Theory of Reflexivization (MTR) and this approach: one concerns the role of syntactic movement, and the other Late Spell-Out. The MTR takes the movement of the antecedent (binder) as the core of the binding relation, fully respecting the Inclusiveness Condition (Chomsky 1995) and replacing the Agree relation. The antecedent and the bindee do not exist as two separate objects in the numeration; applications of Copy and Merge form the A-chain and result in a specific lexicalization pattern of copies. The account presented here also provides for movement, but it is assumed that the antecedent (binder) and the bindee (the D-bound) exist as independent syntactic objects, as in Franks 2021, and they must be involved in the Agree operation for ϕ-features. They both move inde-

pendently, with the D-bound raised as CL/WP out of VP and adjoined to v/T. This movement determines lexicalization options of the D-bound; see (67). As both approaches envisage movement as a crucial factor, they rely on constraints on movement to provide for expected binding domains (CL/WP cannot leave CP_{FIN}, so Polish anaphors must observe the TSC). Both approaches take reflexives to constitute spell-out forms of the most optimal relation of A-binding. For MTR, the reflexive marks a copy of the binder left behind by movement. In my account, it overtly reflects a "fully baked" reflexive relation, holding both at LF (where the D-bound's ϕ-features upward-Agree with its antecedent) and at PF (where the D-bound is adjoined to a head whose specifier position is occupied by its LF-antecedent). In MTR the pronoun is seen as a Last Resort resumptive placeholder for a relation of coindexation. According to Hornstein (2001), it marks a failed attempt at movement. Within the approach advocated here, a proximate pronoun (a pronominal possessive) is in fact a "half-baked" reflexive. It is involved in the LF-relevant aspect of the binding relation (its ϕ-features are valued against the antecedent), but it is adjoined to a head whose specifier position is not occupied by its antecedent, so the other half of a successful lexical reflection of the binding relation is missing. Yet, there are also profound differences between the two accounts, as I believe that MTR faces a number of challenges in Polish. One is subject orientation and the way this phenomenon can be encoded in the movement procedure. It must be different for control and reflexivization, as Willim (1982) and Chomsky and Lasnik (1993) point out: Polish allows for object control, but it does not allow for A-binding by objects. At the same time, a Move-based theory of both relations is welcome for English, where the object participates as antecedent in both dependencies. Another challenge for MTR concerns DAT OEs: how do we explain that a DAT OE can have its copy spelled out as either a reflexive possessive or a pronominal possessive, with identical interpretations? The same question applies in the case of long-distance reflexivization.

My account predicts that the difference between languages in which the object can function as antecedent for reflexives and those showing subject orientation depends on the VP-internal vs. VP-external position of the reflexive. I assume that the D-bound in English remains in VP, without moving (wholly or partially) to v/T. Generally, the position where the LF-relevant antecedent/bindee relation is established matches the position where this relation is lexicalized on the bindee in PF.

This account relies on the notion of competition between forms, but sometimes they remain in free variation; see (9b) with DAT OEs. Safir (2004: 360) proposes three alternatives to deal with non-complementary distribution:

(81) Strategies for apparent non-complementarity of distribution:
   a. Interpretations are distinct.
   b. Forms tie on the most dependent scale.
   c. There are distinct numerations (apart from the target).

It appears that the interpretations in (9b) are non-distinct, as they both support bound variable readings and sloppy identity. Still, the reflexive form is preferred whenever possible, with the pronouns coming in as the second-best selection when the reflexive form is unavailable (see the model use of reflexives with subject binders). The only option left is the difference in the numerations as the source of the non-complementarity. Such a difference in the numerations can be credited to the distinct feature composition of v and T. Technically, if T bears the [–val, person] feature relevant for the Index/D-bound raising, it forces its movement to T (and lexicalization as pronominal, in line with (67)). If it does not bear this feature, the Index does not rise to T but remains at v (and is lexicalized as reflexive, according to (67)). The same factor can account for related cases in infinitives showing object control, discussed in connection with (77–80) above. In sum, A-binding appears to result from a conspiracy of principles and processes in which Agree, Move, and Late Spell-Out play significant roles.

References

Antonenko, Andrei. (2012) *Feature-based binding and phase theory*. Ph.D. dissertation, Stony Brook University.

Avrutin, Sergey. (1994) "The structural position of bound variables in Russian". *Linguistic inquiry* 25(4): 709–27.

Bailyn, John F. (2004) "Generalized inversion". *Natural language and linguistic theory* 22(1): 1–50.

Barker, Chris. (2012) "Quantificational binding does not require c-command". *Linguistic inquiry* 43(4): 614–33.

Béjar, Susana and Milan Rezac. (2003) "Person licensing and the derivation of PCC effects". Ana Teresa Perez-Leroux and Yves Roberge, eds. *Romance linguistics: Theory and acquisition*. Amsterdam: John Benjamins, 49–62.

————. (2009) "Cyclic Agree". *Linguistic inquiry* 40(1): 35–73.

Belletti, Adriana and Luigi Rizzi. (1988) "Psych-verbs and theta theory". *Natural language and linguistic theory* 6(3): 291–352.

Biskup, Petr. (2020) "Slavic obviative subjunctives". Tania Ionin and Jonathan E. MacDonald, eds. *Proceedings of the 26th Meeting of Formal Approaches to Slavic Linguistics: The Urbana-Champaign Meeting 2017*. Ann Arbor: Michigan Slavic Publications, 20–38.

Bjorkman, Bronwyn and Hedde Zeijlstra. (2014) "Upward Agree is superior". Unpublished ms., University of Toronto.

Błaszczak, Joanna. (2001) *Covert movement and the genitive of negation in Polish*. Potsdam: Universitätsbibliothek. [Linguistics in Potsdam, 15.]

Boeckx, Cedric, Norbert Hornstein, and Jairo Nunes. (2008) "Copy-reflexive and copy-control constructions. A movement analysis". *Linguistic variation yearbook* 8: 61–100.

Bošković, Željko. (2002) "Clitics as nonbranching elements and the Linear Correspondence Axiom". *Linguistic inquiry* 33: 351–83.

————. (2005) "On the locality of left branch extraction and the structure of NP". *Studia linguistica* 59(1): 1–45.

————.(2007) "On the locality and motivation of Move and Agree: An even more minimal theory". *Linguistic inquiry* 38(4): 589–644.

————. (2012) "Phases in NPs and DPs". Ángel J. Gallego, ed. *Phases: Developing the framework*. Berlin: Mouton de Gruyer, 343–83.

Bruening, Benjamin. (2014) "Precede-and-command revisited". *Language* 90(2): 342–88.

Burzio, Luigi. (1996) "The role of the antecedent in anaphoric relations". Robert Freidin, ed. *Current issues in comparative grammar*. Dordrecht: Kluwer, 1–45.

Caha, Pavel. (2009) *The nanosyntax of case*. Ph.D. dissertation, University of Tromsø.

Cardinaletti, Anna and Michal Starke. (1994) "The typology of structural deficiency: On the three grammatical classes". *University of Venice working papers in linguistics* 4: 41–109.

Cetnarowska, Bożena. (2003) "On pronominal clusters in Polish". Peter Kosta, Joanna Błaszczak, Jens Frasek, Ljudmila Geist, and Marzena Żygis, eds. *Investigations into formal Slavic linguistics: Contributions of the Fourth European Conference on Formal Description of Slavic Lamguages*. Part 1. Frankfurt am Main: Peter Lang, 13-30.

Chomsky, Noam. (1981) *Lectures on government and binding*. Dordrech: Foris.

————. (1986). *Knowledge of language: Its nature, origin and use*. New York: Praeger.

————. (1995) *The minimalist program*. Cambridge, MA: MIT Press.

————. (2000) "Minimalist inquiries". Roger Martin, David Michaels, Juan Uriagereka and Samuel J. Keyser, eds. *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*. Cambridge, MA: MIT Press, 89–156.

————. (2001) "Derivation by phase". Michael Kenstowicz, ed. *Ken Hale: A life in language*. Cambridge, MA: MIT Press, 1–52.

Chomsky, Noam and Howard Lasnik. (1993) "The theory of principles and parameters". Joachim Jacobs, Arnim von Stechow, Wolfgang Sternefeld, and Theo Vennemann, eds. *Syntax: An international handbook of contemporary research*. Berlin: Mouton de Gruyter, 506–69.

Citko, Barbara. (2011) *Symmetry in syntax: Merge, Move and labels*. Cambridge: Cambridge University Press.

Citko, Barbara, Allison Germain, and Jacek Witkoś. (2018) "If you cannot agree, move on! On labels and non-nominative subjects". *Glossa* 3(1): 28–76.

Cuervo, Maria Cristina. (2003) *Datives at large*. Ph.D. dissertation, MIT.

Danon, Gabi. (2011) "Agreement and DP-internal feature distribution". *Syntax* 14(4): 297–317.

Delsing, Lars-Olof. (1993) "On attributive adjectives in Scandinavian and other languages". *Studia linguistica* 47(2): 105–25.

den Dikken, Marcel. (2006) *Relators and linkers*. Cambridge, MA: MIT Press.

Despić, Miloje. (2013) "Binding and the structure of NP in Serbo-Croatian". *Linguistic inquiry* 44(2): 239–70.

————. (2015) "Phases, reflexives and definiteness". *Syntax* 18(3): 201–34.

Dornisch, Ewa. (1998) *Multiple wh-questions in Polish: The interaction between wh-phrases and clitics*. Ph.D. dissertation, Cornell University.

Fox, Danny. (1999) "Reconstruction, binding theory and the interpretation of chains". *Linguistic inquiry* 30(2): 157–96.

————. (2002) "Antecedent contained deletion and the copy theory of movement". *Linguistic inquiry* 33(1): 63–96.

Franks, Steven. (2017) *Syntax and spell-out in Slavic*. Bloomington, IN: Slavica Publishers.

————. (2021) "Reflexive typology, movement and the structure of NP". Steven L. Franks, Alan H. Timberlake, and Anna W. Wietecka, eds. *Selected proceedings of the 14th meeting of the Slavic Linguistics Society: In honor of Peter Kosta*. Frankfurt/Main: Peter Lang, 55–77.

Franks, Steven and Tracy Holloway King. (2000) *A handbook of Slavic clitics*. Oxford: Oxford University Press.

Germain, Allison. (2015) "Nullifying null expletives: Accounting for EPP in Russian impersonal and nominative in situ constructions". *Proceedings of Formal Approaches to Slavic Linguistics* 23: 418–38.

Halle, Morris. (1997) "Distributed morphology: Impoverishment and fission". Benjamin Bruening, Yoonjung Kang, and Martha McGinnis, eds. *PF: Papers at the interface*. Cambridge, MA: MIT Working Papers in Linguistics, 425–49. [MIT Working Papers in Linguistics, 30.]

Hellan, Lars. (1988) *Anaphora in Norwegian and the theory of grammar*. Dordrecht: Foris.

Hestvik, Arild. (1992) "LF movement of pronouns and anti-subject orientation". *Linguistic inquiry* 23(4): 557–94.

Hicks, Glyn. (2009). *The derivation of anaphoric relations*. Amsterdam: John Benjamins.

Hiraiwa, Ken. (2001) "Multiple Agree and the defective intervention constraint in Japanese". Ora Matushansky et al., eds. *Proceedings of the 1st HUMIT Student Conference in Language Research (HUMIT 2000)*. Cambridge,

MA: MIT Working Papers in Linguistics, 67–80. [MIT Working Papers in Linguistics, 40.]

Hornstein, Norbert. (2001). *Move! A minimalist theory of construal*. Oxford: Blackwell.

————.(2003) "On control". Randall Hendrick, ed. *Minimalist syntax*. Oxford: Blackwell, 6–81.

Hornstein, Norbert and Maria Polinsky. (2010) "Control as movement: Across languages and constructions". Norbert Hornstein and Maria Polinsky, eds. *Movement theory of control*. Amsterdam: John Benjamins, 1–41.

Huang, C. T. James. (1983) "On the distribution and reference of empty pronouns". *Linguistic inquiry* 15: 531–74.

Ionin, Tania. (2001). "Scope in Russian: Quantifier movement and discourse functions". Unpublished ms., MIT.

Kayne, Richard. (1994) *The antisymmetry of syntax*. Cambridge, MA: MIT Press.

————. (2002) "Pronouns and their antecedents". Samuel Epstein and Daniel Seely, eds. *Derivation and explanation in the minimalist program*. Oxford: Blackwell, 133–66.

Kupść, Anna. (2000) "Lexical analysis of Polish multifunctional reflexive marker". Tracy King and Irina Sekerina, eds. F*ormal Approaches to Slavic Linguistics 8: The Philadelphia Meeting 1999.* Ann Arbor: Michigan Slavic Publications, 214–37.

Landau, Idan. (2000) *Elements of control: Structure and meaning in infinitival constructions*. Dordrecht: Kluwer Academic Publishers.

————. (2006) "Chain resolution in Hebrew (V)P-fronting". *Syntax* 9(1): 32–66.

Lebeaux, David. (2009) *Where does binding apply?* Cambridge, MA: MIT Press.

Lee-Schoenfeld, Vera. (2008) "Binding, phases and locality". *Syntax* 11(3): 281–98.

Longobardi, Giuseppe. (2001) "The structure of DPs: Some principles, parameters, and problems". Mark Baltin and Chris Collins, eds. *The handbook of contemporary syntactic theory*. Oxford: Blackwell, 562–603.

Łęska, Paulina. (2020) *Quantifier scope as a diagnostic for the position of arguments of ditransitive verbs*. Frankfurt/Main: Peter Lang.

Manzini, Rita and Kenneth Wexler. (1987) "Parameters, binding theory and learnability". *Linguistic inquiry* 18(3): 413–44.

Marciniak, Małgorzata. (1999) "Towards a binding theory for Polish". Robert Borsley and Adam Przepiórkowski, eds. *Slavic in Head-Driven Phrase Structure Grammar*. Stanford, CA: Center for the Study of Language and Information, Leland Stanford Junior University, 125–48.

Matushansky, Ora. (2006) "Head movement in linguistic theory". *Linguistic inquiry* 37(1): 69–109.

McDaniel, Dana. (1986) *Conditions on wh-chains*. Ph.D. dissertation, City University of New York.

Migdalski, Krzysztof. (2016) *Second position effects in the syntax of Germanic and Slavic languages*. Wrocław: Wydawnictwo Uniwersytetu Wrocławskiego.
Müller, Gereon. (2017) "Structure removal: An argument for feature-driven Merge". *Glossa: A journal for generative linguistics* 2(1): 28.
————. (2018) "Structure removal in complex pre-fields". *Natural language and linguistic theory* 36(3): 219–64.
Nikolaeva, Liudmila. (2014) *The secret life of pronouns*. Ph.D. dissertation, MIT.
Norris, Mark. (2014) *A theory of nominal concord*. Ph.D. dissertation, University of California Santa Cruz.
Nunes, Jairo. (1995) *The copy theory of movement and linearization of chains in the Minimalist Program*. PhD dissertation, University of Maryland.
Pesetsky, David and Esther Torrego. (2001) "T-to-C movement: Causes and consequences". Michael Kenstowicz, ed. *Ken Hale: A life in language*. Cambridge, MA: MIT Press, 355–426.
————. (2007) "The syntax of valuation and the interpretability of features". Simin Karimi, Vida Samiian, and Wendy K. Wilkins, eds. *Phrasal and clausal architecture: Syntactic derivation and interpretation*. Amsterdam: John Benjamins, 262–94. [Linguistik Aktuell/Linguitics Today, 101.]
Pica, Pierre. (1987) "On the nature of the reflexivization cycle". *Proceedings of the North East Linguistic Society* 17(2): 483–500.
————. (1991). "On the interaction between antecedent-government and binding: The case of long-distance reflexivization". Jan Koster and Eric Reuland, eds. *Long-distance anaphora*. Cambridge: Cambridge University Press, 119–35.
Preminger, Omer. (2013) "That's not how you agree: A reply to Zeijlstra". *The linguistic review* 30(3): 491–500.
Preminger, Omer and Maria Polinsky. (2015). "Agreement and semantic concord: A spurious unification". Unpublished ms., Harvard University.
Progovac, Ljiljana. (1992) "Long-distance reflexives without movement". *Linguistic inquiry* 23(4): 671–80.
————. (1993) "Long-distance reflexives: Movement to Infl versus relativized SUBJECT". *Linguistic inquiry* 24(4): 755–72.
Przepiórkowski, Adam. (2000) "Long distance genitive of negation in Polish". *Journal of Slavic linguistics* 8(1–2): 151–89.
Rappaport, Gilbert. (1986) "On anaphor binding in Russian". *Natural language and linguistic theory* 4(1): 97–120.
Reinders-Machowska, Ewa. (1991) "Binding in Polish". Jan Koster and Eric Reuland, eds. *Long-distance anaphora*. Cambridge: Cambridge University Press, 137–50.
Reinhart, Tanya. (1983) *Anaphora and semantic interpretation*. London: Croom Helm.
Reinhart, Tanya and Eric Reuland. (1993) "Reflexivity". *Linguistic inquiry* 24(4): 657–720.

Reuland, Eric. (2011) *Anaphora and language design*. Cambridge, MA: MIT Press.
Rezac, Milan. (2004) *Elements of cyclic syntax: Agree and Merge*. Ph.D. dissertation, University of Toronto.
Richards, Norvin. (1997) *What moves where when in which language?* Ph.D. dissertation, MIT.
————. (1998) "Principle of Minimal Compliance". *Linguistic inquiry* 29(4): 599–629.
Rizzi, Luigi. (1990) "On the anaphor-agreement effect". *Rivista di linguistica* 2(1): 27–42.
————. (1997) "The fine structure of the left periphery". Liliane Haegeman, ed. *Elements of grammar: Handbook of generative syntax*. Dordrecht: Kluwer, 281–337.
————. (2014) "On the elements of syntactic variation". Carme Picallo, ed. *Linguistic variation in the minimalist framework*. Oxford: Oxford University Press, 13–35.
Roberts, Ian. (2009) *Agreement and head movement*. Cambridge, MA: MIT Press.
Rooryck, Johan and Guido Vanden Wyngaerd. (2011) *Dissolving binding theory*. Oxford: Oxford University Press.
Ruda, Marta. (2018) "Local operations deriving long-distance relations: Object agreement in Hungarian and the genitive of negation in Polish". Huba Bartos, Marcel den Dikken, Zoltán Bánréti, and Tamás Váradi, eds. *Boundaries crossed, at the interfaces of morphosyntax, phonology, pragmatics and semantics*. Dordrecht: Springer, 133–46.
Safir, Ken. (2004) *The syntax of anaphora*. Oxford: Oxford University Press.
————. (2014) "One true anaphor". *Linguistic inquiry* 45(1): 91–124.
Srdanović, Sandra and Esther Rinke. (2020) "Possessive pronouns do not c-command out of the noun phrase in Serbian". Presentation at the 15th meeting of the Slavic Linguistics Society, 3–6 September, Indiana University.
Starke, Michal. (2009) "Nanosyntax: A short primer to a new approach to language". *Nordlyd* 36: 1–6.
Tajsner, Przemysław. (1990) *Case marking in English and Polish: A government and binding study*. PhD dissertation, Adam Mickiewicz University, Poznań.
Tajsner, Przemysław. (2008) *Aspects of the grammar of focus: A minimalist view*. Frankfurt/Main: Peter Lang.
Vicente, Luis. (2007) *The syntax of heads and phrases: A study of verb (phrase) fronting*. PhD dissertation, Netherlands Graduate School of Linguistics.
Vikner, Sten. (1985) "Parameters of binder and of binding category in Danish". *Working papers in Scandinavian syntax* 23: 1–61.
Wiland, Bartosz. (2016) "Le charme discret of remnant movement: Crossing and nesting in Polish OVS sentences". *Studies in Polish linguistics* 11(3): 133–65.

Willim, Ewa. (1982) "Anaphor binding and pronominal disjoint reference in English and Polish". M.A thesis, University of Connecticut.
————. (1989) *On word order: A government-binding study of English and Polish*. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.
Witkoś, Jacek. (2008) "On the correlation between A-type scrambling and lack of weak crossover effects". *Studia Anglica Posnaniensia* 44: 297–328.
————. (2021a) "Possessive pronouns, Condition C and Anti-Cataphora Effects". *Lingua* 259. DOI 10.1016/j.lingua.2021.103109.
————. (2021b) "On some aspects of Agree, Move and Bind in the nominal domain". Steven L. Franks, Alan H. Timberlake, and Anna W. Wietecka, eds. *Selected proceedings of the 14th meeting of the Slavic Linguistics Society: In honor of Peter Kosta*. Frankfurt/Main: Peter Lang, 323–46.
Witkoś, Jacek, Paulina Łęska, Aleksandra Gogłoza, and Dominika Dziubała Szrejbrowska. (2020) *Bind me tender bind me do! Dative and accusative arguments as antecedents for reflexives in Polish*. Frankfurt/Main: Peter Lang.
Witkoś, Jacek and Paulina Łęska. (2020) "Dative antecedents for reflexives and pronouns". *Acta linguistica academica* 67(3): 261–318.
Woolford, Ellen. (2006) "Lexical case, inherent case, and argument structure". *Linguistic inquiry* 37(1): 111–30.
Yadroff, Michael and Steven Franks. (2001) "The origin of prepositions". Gerhild Zybatow, Uwe Junghanns, Grit Mehlhorn, and Luka Szucsich, eds. *Current issues in formal Slavic linguistics*. Frankfurt/Main: Peter Lang, 67–79.
Zeijlstra, Hedde. (2012) "There is only one way to agree". *The linguistic review* 29(3): 491–539.
Zubkov, Petr. (2018) *The grammar of binding: A study with reference to Russian*. Ph.D. dissertation, University of Utrecht.
Zwart, Jan-Wouter. (2002) "Issues relating to a derivational theory of binding". Samuel Epstein and Daniel Seely, eds. *Derivation and explanation in the minimalist program*. Oxford: Blackwell, 269–304.

Jacek Witkoś
Faculty of English
Adam Mickiewicz University
Poznań, Poland
wjacek@amu.edu.pl