PERSON LICENSING AND THE DERIVATION OF PCC EFFECTS*

SUSANA BÉJAR & MILAN REZAC University of Toronto

1. The Person Case Constraint

The Person-Case Constraint (PCC) is a universal condition on the distribution of marked person features in certain configurations. First thoroughly investigated by Bonet (1991), she concluded that in combinations of a direct and indirect object, both of which are phonologically weak, the direct object may not be 1st or 2nd person (Bonet 1991:177). The following French example has analogues in all the Romance languages, as well as Greek, Czech, Swiss German, Basque, Georgian etc.:¹

(1) Je le /*te lui ai présenté I 3.SG.A/*2.SG.A 3.SG.D have introduced "I introduced him/*you to her."

We present a theory of cyclic agreement for ϕ -features in the framework of Chomsky (2000), and show how the PCC follows, and how it can be "repaired". The gist of it is that in PCC configurations, two elements are entering into a syntactic relation with a single AGR head, the first one for person and the second for number, a proposal similar to Chomsky (2000) and Anagnostopoulou (2003).² We further propose a universal condition requiring that interpretable person features on pronouns be licensed via an Agree relation, which cannot happen in precisely this context. We show that exactly the same mechanism creates PCC effects in dative-nominative (absolutive)

^{*} We would like to thank the audience at LSRL 32 and two anonymous reviewers for their comments. We would also like to thank Javier Ormazabal for a discussion of this topic. This work has been partially funded by SSHRC grants #752-99-2138, #752-2000-1545, #410-01-1415 and the Ontario Graduate Scholarship.

¹ We use the following abbreviations in the glosses: SG for singular, PL plural, M masculine, F feminine, N nominative, A accusative, D dative, REFL reflexive; we glosses the Romance a/\dot{a} dative/accusative marker by a free-standing A.

² References in this paper are to an early manuscript version of Anagnostopoulou (2003). The published form had just become available at the time of preparation of this article.

constructions (Boeckx 2000), but only where the derivation results in the dative occupying the highest agreement-related position in the clause. In languages where a subsequent stage of the derivation raises the nominative to a higher position, its person feature is licensed and PCC does not occur. Dative-nominative constructions (DNCs) thus crucially split into two classes which we argue correlate with the subjecthood of the dative.

Three arguments point to the conclusion that the PCC holds precisely of those sequences of X^0 ("phonologically weak") categories that are licensed by a single category F, where F has ϕ -features and assigns Case. First, PCC holds of combinations of arguments, the lower having structural Case: double object ditransitives (DOCs), but also between other combinations of a dative (benefactive, possessor, causee) and a lower NP in the same clause. Non-argumental X^0 adjuncts, such as datives of address (ethical datives), do not trigger it. Second, the two X^0 s must belong precisely to the same Caselicensing domain (rather than e.g. the same clause). On the one hand, then, in transitive clauses it holds between two internal arguments, but not of an external - internal argument combination. On the other, PCC crosses ECM clause boundaries: thus it holds under restructuring, and in causative constructions between the causee and the theme:

(2) Je le_2 / *vous₂ lui₁ ai fait [t₁ aider t₂] 1.SG.N 3.SG.A/ *1.PL.A 3.SG.D have made help "I made her help him."

Third, PCC effects are suspended when structural Case licensing is not through ϕ -agreement, e.g. in nominalizations (Georgian), or when one argument is embedded in a PP as in the prepositional construction of a ditransitive (cp. 1):

(3) Je te ai presenté à lui I 2.SG.A have introduced to her "I introduced you to her."

The argument from the identity of PCC domains and Case domains seems particularly strong. For example, morphological accounts of the PCC (e.g. Bonet 1991) will have trouble expressing the fact that the indirect object, but not the subject, of a (di)transitive, counts for the PCC in that it blocks $1^{st}/2^{nd}$ person on the theme, even if all are X^0 elements, e.g. agreement (Basque) or clitics (French), attached to the same morphosyntactic category (T^0). However,

the syntactic approach taken here predicts exactly this result. Further, we will show that this syntactic approach correctly predicts the domain of PCC in DNCs: the PCC applies in DNCs if and only if the dative qualifies as a true subject, as in Icelandic. This observation is the lynch-pin of our unification of PCC effects in ditransitives and DNCs, which we argue for in this paper.

2. Agreement and Case

Chomsky (2000) takes structural Case assignment to be a reflex of a relationship between a head with uninterpretable ϕ -features, or AGR, and an NP: specifically, nominative is a reflex of agreement of an NP with T^0 , and accusative with v^0 . In this framework, syntactic objects are built up cyclically: an item introduced from the Numeration must discharge all its properties, including selectional and uninterpretable ones, before a new item can be introduced (Chomsky 2000:132). The relationship between the ϕ -features of a head and an NP is mediated via two processes: Probe, which attempts to find the closest (in terms of c-command) matching interpretable ϕ -features, and Agree, which values and erases the uninterpretable ϕ -features of the head. Chomsky (2000:122) formulates the constraints on matching as follows:

Matching is a relation that holds of a Probe P and a goal G. Not every matching pair induces Agree. To do so, G must (at least) be in the domain D(P) of P and satisfy locality conditions. The simplest assumptions for the probe-goal system are:

- (i) Matching is feature identity
- (ii) D(P) is the sister of P
- (iii) Locality reduces to 'closest c-command'

Thus D(P) is the c-command domain of P, and a matching feature G is *closest to* P if there is no G' in D(P) matching P s.t. G is in D(G').

Overt movement takes place if there is a matching goal and the category with the Probe also has an EPP feature. Agree for ϕ -features is a consequence of a matching Probe, subject to the restriction that the NP must not have been previously assigned Case. Absence of Case is a property which renders an NP 'active' for Agree, the *Active Goal Hypothesis*. This seems a robust empirical generalization, based on examples where there is an intervening NP which has been assigned a θ -related Case:

(4) $Nelson_1$ semble (*à Mari-Jo) [t_1 être intelligent.] Nelson seems (*A Mari-Jo) to be intelligent "Nelson seems (*to Mari-Jo) to be clever."

Here the ϕ -features of à Mari-Jo are visible to Probe, but the NP with thetarelated Case cannot enter Agree. There is, however, a loop-hole, as shown by Chomsky (2000:131) and Anagnostopoulou (2003): if the intervener displaces to a position locally related to the Probe, its trace is rendered invisible, and a second Probe + Agree may be established with a lower target. Here, the dative intervener may not enter into Agree; but if it cliticizes to T^0 , its ϕ -features no longer intervene between the ϕ -Probe of T^0 and the lower theme, which may thus Agree with T^0 and get nominative (and satisfy EPP).

The derivation in (5) also illustrates the structure we assume for constructions where a dative intervenes between a ϕ /Case category F and a structural Case NP that Agrees with and receives its Case from F:

- (5) $Nelson_2$ $\underline{lui_1}$ $semble\ t_1$ [$t_2\ \hat{e}tre$ intelligent.] Nelson 3.SG.D seems to be intelligent "Nelson seems to her to be clever."
- (6) F_{ϕ} DAT NP_{Case}

In DNCs and passive DOCs, F is T^0 which assigns nominative to the NP (Chomsky 2000:126-8, Anagnostopoulou 2003); in active DOCs, F is v^0 which assigns accusative to NP (Rezac 2001). We will call configurations of the form (6) Defective Intervention Constructions (DICs). Both unaccusatives and ditransitives have a non-DIC alternant with a low prepositional dative which does not intervene between F and NP. It is only in the DIC alternant that displacement of the dative is required for the F-NP relation. This displacement is realized as obligatory cliticization in these constructions (DNCs and active/passive DOCs) in Romance (Kayne 1975 for French, Demonte 1995, Cuervo 2000 for Spanish) and Greek (Anagnostopoulou 2003).

3. Split ϕ -Probe and PCC

The story so far is pretty much a spelling-out of the Case-Agreement system of Chomsky (2000) and related work. We now add a twist: ϕ -features are not a homogeneous block, but separate person $[\pi]$ and number [#] entities, both when interpretable and uninterpretable; in particular, they Probe separately (but in that order), and Agree separately.

The necessity of the split is familiar in the work on interpretable ϕ -features (e.g. Ritter 1995). The idea that PCC effects relate to a split checking of uninterpretable ϕ -features has been argued by Taraldsen (1995), Chomsky (2000), and Anagnostopoulou (2003), who all capitalize on the observation that

a checking relation between the dative and the $[\pi]$ of F in DICs is what produces PCC if the lower NP also has a $[\pi]$ feature. For Chomsky and Anagnostopoulou the split checking is a consequence of incomplete valuing of ϕ on F by the dative. Instead of partial checking, we propose actual separation of Probes, so $[\pi]$ and [#] features probe independently of one another (in that order).³ We rely on work on eccentric agreement phenomena (see Bejar 2000 for Georgian, Rezac 2002 for Basque), which clearly show that a ϕ /Case category may agree for person and number independently with different NPs.

The system as it stands will automatically derive PCC effects with the addition of the following *Person Licensing Condition* (PLC) axiom: An interpretable 1st/2nd person feature must be licensed by entering into an Agree relation with a functional category. The PLC is a familiar intuition; cf. Nichols (2001) for a recent extensive discussion of person hierarchies based on the idea that a 1st/2nd person feature must be licensed by an Agree relation with T⁰, and Ormazabal and Romero (2001) for evidence that the proper distinction that we draw here between 1st/2nd vs. 3rd person really rests in inherent animacy.⁴

We now have all the pieces to derive the PCC. Consider a DOC configuration where PCC arises, as opposed to one in which it does not:

At the v^0 level of the derivation, there is a $3^{\rm rd}$.sg. indirect object with inherent dative, and a $3^{\rm rd}/2^{\rm nd}$ person direct object with no Case assigned, along with the relevant verbal structure. v^0 with its $[\pi]$ and [#] Probes merges into the derivation to give (precedence is c-command):

(8)
$$v^0$$
 DAT ACC
 π $\pi=3$ $\pi=2/3$
#=SG #=PL

³ This accounts for why the $\langle F, \text{ dative} \rangle$ relation affects only the $[\pi]$ feature of F and not the [#] feature, a fact that is confounding in the alternative approach.

⁴ Ormazabal & Romero (2001) show that if a third person clitic doubles a necessarily animate strong pronoun in Spanish, PCC applies to it. If animacy of 3rd person clitics is not thus extrinsically forced, they are underspecified for it and PCC does not apply (regardless of whether the actual referent is animate). We believe that Oehrle's effects demonstrate that 3rd person datives in DOC configurations are always necessarily animate. Note that 'animate' is a formal feature whose extension is not quite clear to us (e.g. it may actually be 'human').

The $[\pi]$ Probe on v^0 goes first, and matches the $[\pi]$ value on the dative as seen in (9). Agree is not able to take place because the dative NP lacks structural Case and is not active (see below), but being an X^0 category, the dative may displace under cliticization, leaving an inactive trace. Next, in (10), the [#] Probe may look past this trace to match the theme, Agree with it, assign it accusative, and cliticize it if it is an X^0 :

(9) DAT
$$v^0 = t_{DAT}$$
 ACC $T_{DAT} = T_{DAT} = T_{DAT$

The $[\pi]$ Probe of v^0 never enters into an Agree relationship with the accusative; remaining unvalued, it gets a default value. This is fine if the accusative is 3^{rd} person. If it is a 1^{st} or 2^{nd} person, the PLC will take effect; because of the intervention of the dative which makes Agree for $[\pi]$ impossible, the $[\pi]$ value of the accusative will never enter into a chain with a functional category, and the PLC is violated, giving the PCC.

4. Obviating the PCC: The distribution of π Probes

We have noted that there are several ways to avoid the PCC. First, the interpretable 1st/2nd person on the theme may be embedded in a PP (Georgian) or given inherent Case (in nominalizations), and then it does not agree with the verb. Second, it may be a strong focused pronouns which does not trigger agreement on the verb (Icelandic, Greek). Finally, 1st/2nd person on datives, which are also exempt from verbal agreement, is not subject to the PLC.

In all these cases, we observe the generalization that (a) 1st/2nd person on an NP is exempt from the PLC, (b) the NP is embedded under a functional category F (P, focus, dative marker) in an [_{FP} F NP] structure, (c) the NP is not available for verbal agreement. We posit that F is a category with φ-features that assigns structural Case to the NP (for Ps, cp. prepositions with φ-agreement in Celtic). This hypothesis has two important consequences. First, it eliminates the distinction between structural and inherent Case: inherent Case reduces to regular structural Case assigned under φ-Agreement. Second, it accounts for the absence of agreement with just these NPs (including all those with inherent Case). Chomsky's Active Goal Hypothesis predicts that such NPs should be defective interveners, unable to enter into agreement because their uninterpretable Case feature has already been valued. It is this F-NP relationship, responsible for Case assignment and deactivation, that licenses the 1st/2nd person feature on these NPs for PLC.

This approach entails that datives in DOCs are FPs for some F. We take F

to be an applicative preposition. We assume that in both structures, there is a P with ϕ -features which assigns dative and agrees with its complement, licensing its $[\pi]$ feature and giving it a theta-role (e.g. goal). The difference lies solely in the hierarchical relationship of the P and its complement with the rest of the structure: in the DOCs it is the complement of V and the theme is base-generated in its specifier, while in the prepositional construction the theme is the complement of the verb and the complex [PP] P NP] is the specifier. Commonly, both PP constructions are realized using one morphology, e.g. a in Romance and a dative suffix Greek.

(11) a) [
$$_{VP}$$
 NP $_{theme}$ [$_{V'}$ V [$_{PP}$ P NP $_{goal}$]]] Prepositional construction b) [$_{VP}$ [$_{PP}$ P NP] [$_{V'}$ V NP $_{theme}$]] DOC

Finally, we take F to be also present in strong focused pronouns, satisfying the PLC and allowing them to stand without agreement with the verb (as in Icelandic). Possibly, F here also should be taken literally as a P. Evidence for this comes from languages like French and Breton, where focused pronouns and pronouns in PPs have identical realizations ('strong' pronouns, the moiclass in French), contrasting with their realization elsewhere ('weak' or 'clitic', the me-class). We have argued that PCC effect arises because of the PLC, which requires a 1st/2nd person feature to be licensed by entering into an Agree chain with a functional category. The mechanics of the derivation dictate that in DICs, $[\pi]$ on the lower NP does not enter into an Agree relation with a functional category, violating the PLC. Strategies to rescue PCC violations all involve satisfying the PLC by making sure each 1st/2nd person NP has a corresponding $[\pi]$ -Probe to Agree with. So far we have been concerned with PCC in DOCs as an illustrative subcase of DICs. In the next section we show that PCC arises in DNCs as expected, but that the derivation is also capable of creating a reversed nominative-dative configuration in certain languages which allows the PLC to be satisfied.

5. Subjecthood and PCC in DNCs

PCC arises in DIC configurations where the $[\pi]$ -Probe of a functional category is absorbed by an intervener and cannot Agree with its corresponding

⁵ We have called this P an applicative preposition because we posit that applicative constructions exploit a further option for the placement of P and its goal argument within the phrase structure: P is selected by v and selects V, locating it on the 'spine' of the tree, where it selects the goal NP as its specifier. This option yields *applicative* constructions, such as those of Georgian and the Bantu languages: (i) $[v v [P NP_{Goal}] P [v V NP_{Theme}]]$

NP. This predicts that it should hold of DNCs and DOCs passives, which have the DIC configuration. The classical case is Icelandic. As Zaenen et al. (1985) demonstrate, there is a dative subject in [Spec, TP], and a lower nominative NP which agrees with T^0 . The DIC configuration here involves T, which first displaces the dative to [Spec, TP] via its [π]-Probe, and then Agrees for its [#] Probe with the now accessible lower NP to which it assigns nominative. As shown in (12), PCC effects correspondingly arise if the nominative is an agreeing $1^{st}/2^{nd}$ person; they are suspended if the verb takes default 3^{rd} .sg.masculine agreement (Taraldsen 1995, Sigurdhsson 1996).

(12) Henni voru syndir their/*thidh 3.SG.F.D be.3.PL shown.M.PL.N 3.PL.M.N/2.PL.N "They were shown to her."

The Icelandic situation is not unique: it occurs in most dialects of Basque, and in Mohawk (Ormazabal and Romero 2001 for the last). However, in many other cases of DNCs, PCC effects do not obtain. This is true of Romance, Slavic, Greek, and Standardized Basque, for example:

(13) Je_1 lui_2 fus t_2 presenté t_1 1.SG.N 3.SG.D be.1.SG introduced.F "I was introduced to her."

This split does not seem to correlate with other obvious properties, such as the realization of dative Case, the possibility of clitic doubling, etc. However, we will argue that it correlates with the subjecthood of the dative, beginning with the most transparent case, the Icelandic-French contrast.

It is uncontroversial that the datives in Icelandic DNCs is in [Spec, TP] (Zaenen et al 1985); and uncontroversial also that in French it is the nominative that is the subject. In our system this difference reflects a parametric split which rests in whether a dative PP can satisfy the EPP or not; it can in Icelandic, and cannot in French. This contrast is exemplified in the word order contrast between Icelandic and French in double object passive constructions:

- (14) <u>Konunginum</u> voru gefnir hestarnir king.D were.PL given.PL horse.N.PL "The king was given horses."
- (15) a. Rudi fut présenté <u>a Fabienne</u>

Rudi.N was introduced to Marie b. Rudi <u>lui</u> fut présenté
Rudi.N he.D was introduced
c. *<u>Lui/??A Fabienne</u> fut présenté Rudi

In French the dative cannot satisfy the EPP, although it may cliticize to T if it is pronominal (if not, only the prepositional variant with a low PP dative is possible). It is the nominative argument that moves out of the verbal complex to [Spec, TP], and therefore tests positive for all subjecthood diagnostics. This difference lies at the root of PCC obviation in French. In a way, the Icelandic and French DNC derivations are identical: the $[\pi]$ -Probe dislocates the dative and the [#] Probe Agrees with the nominative past its trace. However, French datives cliticize to T^0 , and the nominative moves past it to [Spec, TP].

(16) a.
$$\frac{}{DAT-T^0} \underbrace{\begin{array}{ccc} [\pi] & & \textit{Match} \ [\pi] \\ DAT-T^0 & t_{DAT} & NOM \\ \textit{lui} & & \textit{je} \\ \text{b.} & & \underbrace{\phantom{\begin{array}{cccc} [\pi] \\ -----[\pi] \\ \textit{je} & \textit{lui} \end{array}}}_{NOM} \underbrace{\begin{array}{cccc} [\pi] & \textit{Match}, \textit{Agree} \ [\#] \\ \textit{Match}, \textit{Agree} \ [\#] \\ \textit{NOM} \ DAT-T^0 & t_{DAT} & t_{NOM} \\ \textit{je} & \textit{lui} \\ \end{array}$$

It is this movement of the nominative past the dative which obviates the PCC in French. The c-command relation between the dative and the nominative has now been reversed, and the nominative c-commands the dative. Thus the dative can no longer be an intervener for any future relation that might be established between the nominative and a higher category F. We propose that the next such relation is a new cycle of Agree between $[\pi]$ on the projection of T and the moved nominative, and this is what obviates PCC. Recall that in (16) the [#] Probe of T^0 has been valued and deleted by je, but the $[\pi]$ Probe has encountered an obstacle, the dative *lui*, and remains unvalued. Rezac (2002) argues that if we take seriously the proposal that the label of a projection is nothing but an occurrence of its head, then when T⁰ projects (following movement of the nominative to its specifier), the new label will have an unvalued $[\pi]$ capable of initiating a new Probe. In effect, projection introduces an extra $[\pi]$ Probe into the derivation, thereby allowing a second cycle of Agree. In this new cycle, it is the nominative in [Spec, TP] which is the closest Match and Agrees for $[\pi]$, thus satisfying PLC.

(17)
$$[\pi]$$
 T^0 T^0

Thus, whereas in Icelandic $[\pi]$ on the nominative fails to be licensed by Agree, it is so licensed in French. The difference follows from locality: the French nominative reaches the highest position within TP because it moves over the dative to satisfy the EPP. In Icelandic the dative > nominative order is never reversed, and the dative always remains an intervener for $[\pi]$ Agree with the nominative. Next we show that the strategy French uses to avoid the PCC is generalizable to *pro*-drop languages that do not show PCC in DNCs.

6. Spanish and subjecthood in pro-drop languages

Spanish, like French, does not manifest PCC effects in DNCs. We argue that here too this is because the nominative internal argument moves over the dative external argument, although this configuration is obscured by *pro*-drop.

(18) (Yo) le fui presentado 1.N.SG 3.D.SG was.1.SG introduced "I was introduced to him."

This is not an uncontroversial claim. The status of such datives in Spanish has been contentious because they test positive for certain subjecthood diagnostics, but negative for others (see Masullo 1993, among others). We will show that these diagnostics group into two categories. One class (Group B/C below) diagnoses XP-movement to a non-A' (A) position, and the dative qualifies as occupying the highest such position in Spanish DNCs. The second class (Group A) diagnoses rather the highest position accessible to the φsystem, ϕ -related position, irrespective of its X^0/XP status. Since it is the nominative in Spanish which qualifies as being in this position, although staying in-situ as an XP, we will follow Alexiadou and Anagnostpoulou (1998) in assuming that nominative agreement in Spanish is a "heavy" X⁰ category which occupies the highest non-A'-position in the TP. The first group of tests (Group A) diagnoses subjects according to their ability to be PRO and to bind subject-oriented anaphora. We take this ability to show of an argument that it is in the highest available ϕ -related position. In Spanish DNCs like (19) it is the nominative, not the dative, that tests positive for these diagnostics. This contrast with Icelandic (20) where the dative is PRO (Sigurdhsson 1991). Similarly, the Spanish se-type reflexive cannot be bound by a DNC dative, but can be bound by the nominative object (21), in opposition to Icelandic.

- (19) $Aritz_1$ quiere $PRO_{1/*2}$ gustar $le_{2/*1}$ Aritz.N want.3.SG to appeal 3.SG.D "Aritz₁ wants for himself₁ to appeal to him/her₂." *"Aritz₁ wants for him/her₂ to appeal to him₁."
- (20) Adh PRO batna veikin er venjulegt to PRO.D recover.from disease.N is usual "It is usual to recover from disease."
- (21) a. Aritz₁ se₁ gusta₁
 Aritz REFL like.3.SG

 "Aritz likes himself."

 b. A Kepa₁ le₁/*se₁ gusta (Irati₂)

 A Kepa 3.SG.D/*REFL appeal.3.SG (Irati)

 "Kepa likes Irati/himself."
- (22) Hverjum thykir sinn fugl fagur everyone.D thinks his.REFL bird.N beautiful.N "Everyone thinks his bird beautiful."

Group B tests include the distribution of downward-entailing quantifiers and bare plurals. These tests have been used to show that the Spanish DNC dative cannot be in an A'-position, the implication being that they must then be in an A-position. Consider (23).

- (23) a. *A alguien ₁ le₁ gritó Valeria t₁
 A somebody 3.SG.D shouted Valeria
 "Valeria shouted at somebody."
 - b. $A \ alguien_1$ le_1 $gusto' t_1$ $la \ película$ A somebody 3.SG.D appealed the movie "Somebody liked the movie."
 - c. Alguien₁ llegó t₁ tarde Somebody arrived late "Somebody arrived late."

Indefinite and downward-entailing quantifiers cannot be A'-moved to [Spec, TP], as shown by the impossibility of such an internal argument in (a). Because such quantifiers are fine in [Spec, TP] if they are A-moved nominative external arguments like (c), it has been concluded that analogous dative external

arguments in DNCs (b) also are not in an A'-position. (Belletti and Rizzi 1988, Masullo 1993, Cuervo 2000). Similarly, bare plurals in Spanish are ungrammatical in A'-positions. But preverbal dative and nominative external arguments can be bare plurals, so it has been concluded that these cannot be in an A'-position. Crucially, while the Group B tests show that a preverbal dative external argument cannot be in an A'-position, they say nothing about what kind of position it actually is in. They do not show that the dative is in a φ-related position. We take these tests to mean only that the preverbal dative is not in an A'-position. Finally, Group C tests diagnose how high up in the clause an NP has moved by A-movement as an XP. Group C consists of quantifier-variable binding (weak cross-over). In Spanish (24), a quantifier in the nominative cannot bind a pronoun in the dative, creating weak cross-over (Cuervo 2000). Since quantifier-variable binding diagnoses mutual A-positions of the quantifier XP and the XP containing the variable, the A-position of the quantifier in the dative must c-command that of the variable in the nominative.

```
(24) a. *¿[Spec,TP Qué<sub>i</sub> [T' le gustó [VPmax a su<sub>i</sub> dueño t]]]?
what 3.SG.D appealed A its owner
"What appealed to its owner?"
b. ¿[Spec,TP A quién<sub>i</sub> [T' le gustó [VPmax t<sub>DAT</sub> su<sub>i</sub> auto]]]?
A whom 3.SG.D appealed his car
"Who did his car appeal to?"
```

Assuming dative > nominative base-generated θ -positions, Group B and C tests show that the A-position of the dative XP c-commands the A-position of the nominative XP. Nevertheless, we have seen that the nominative is in the highest ϕ -related position for Group A tests. There is no contradiction here if Group B/C tests refer to XP positions and Group A tests refer to X⁰ positions. The ability of a quantifier to bind the variable, for example, relies on c-command between quantifier XPs like *at most three* and a variable contained within another XP. On the other hand, anaphora binding and PRO Control seem to refer solely to ϕ -features, which are hosted on X⁰ heads.

We assume therefore that the dative XP c-commands the nominative XP, but that nominative agreement in a *pro*-drop languages moves the X^0 head of the nominative with its ϕ -features to the highest position within the TP. The X^0 movement nature of nominative agreement is the crucial property of *pro*-drop languages (Alexiadou and Anagnostopoulou 1998). However, this X^0 -movement does not trigger pied-piping (covertly or overtly) of the quantifier to [Spec, TP]. Crucially for this picture, certain dependencies (quantifier-variable

binding) are necessarily XP dependencies, while others (antecedent-se anaphor) are ϕ -feature (and thus possibly X^0) dependencies.

Consequently, as far as the ϕ -system is concerned, we propose a derivation for Spanish DNCs which is essentially the same as that given for French with respect to the PCC. In both languages, the ϕ -features of the nominative end up highest in the TP, whether by movement to [Spec, TP] (French) or X^0 movement above the dative (Spanish). Projection of T^0 then introduces a second Agree cycle for $[\pi]$ which rescues the derivation from a PLC violation. Both of these contrast with Icelandic-type languages, where there is no obviation of PCC effects because even after projection, the dative will still intervene and block the licensing of a 1st/2nd $[\pi]$ on the nominative.

6. Conclusion

We have argued that PCC effects arise from the need for interpretable $[\pi]$ to be licensed by a ϕ -relation, the PLC. We derive obviation of PCC effects in full generality from the presence of an extra $[\pi]$ Probe in contrast to PCC derivations: whether the $[\pi]$ Probe is added into the derivation by adding a functional category such as a preposition, or whether it results from the reprojection of T to take scope over a nominative that has crossed over the dative. Thus, the PCC is a consequence of the PLC coupled with independently motivated derivational mechanics.

REFERENCES

Alexiadou, Artemis & Elena Anagnostopoulou. 1998. "Parametrizing Agr: word order, verb- movement and EPP-checking". *Natural Language and Linguistic Theory* 16. 491-539.

Anagnostopoulou, Elena. 2003. *The syntax of ditransitives: Evidence from clitics*. The Hague: Mouton de Gruyter.

Belletti, Adriana & Luigi Rizzi. 1988. "Psych verbs and θ-theory". *Natural Language and Linguistic Theory* 6. 291-352.

- Bejar, Susana. 2000. "Locality, cyclicity and markedness in Georgian verbal morphology". Generals paper, University of Toronto.
- Boeckx, Cedric. 2000. "Quirky Agreement". Studia Linguistica 54. 354-380.
- Bonet, Eulàlia. 1991. *Morphology after syntax: Pronominal clitics in Romance*. Ph.D. dissertation, MIT.
- Chomsky, Noam. 2000. "Minimalist inquiries: The framework". *Step by step: Essays on minimalism in honor of Howard Lasnik*, ed. by Roger Martin, David Michaels, & Juan Uriagereka, 89-155. Cambridge: MIT Press.
- Cuervo, Cristina. 2000. "First things first in *seem*+experiencer constructions". Generals paper, MIT.
- Demonte, Violeta. 1995. "Dative alternation in Spanish". *Probus* 7.5-30.
- Kayne, Richard. 1975. French Syntax: The transformational cycle. Cambridge, Mass.: MIT Press.
- Masullo, Pascual José. 1993. "Two types of quirky subjects: Spanish vs. Icelandic". *Proceedings of NELS 23*, 303-317. Amherst, Mass.: GLSA.
- Nichols, Lynn. 2001. "The syntactic basis of referential hierarchy phenomena: Clues from languages with and without morphological case". *Lingua* 111. 515-537.
- Oehrle, RichardT. 1976. The grammatical status of the English dative alternation. Ph.D. dissertation, MIT.
- Ormazabal, Javier & Juan Romero. 2001. "A brief description of some agreement restrictions". *On Case and Agreement* eds. P. Albizu and B. Fernández, 215-241. Bilbo: Euskal Herriko Unibertsitatea.
- Rezac, Milan. 2001. "Case licensing and agreement in Icelandic ditransitive constructions". *Proceedings of the 2000 annual conference of the Canadian Linguistics Association*, 281-292. Ottawa: Cahiers linguistique.
- ----- 2002/Under revision. "The fine structure of cyclic Agree". Syntax.
- Ritter, Elizabeth. 1995. "On the syntactic category of pronouns and agreement". *Natural Language and Linguistic Theory* 13. 405-443.
- Sigurdhsson, Halldór Á. 1991. "Icelandic Case-marked PRO and the Licensing of Lexical Arguments". *Natural Language and Linguistic Theory* 9. 327-363.
- ----- 1996. "Icelandic finite verb agreement". Working papers in Scandinavian syntax 57.1-46. University of Lund.
- Taraldsen, Knut Tarald. 1995. "On agreement and nominative objects in Icelandic". *Studies in Comparative Germanic Syntax*, ed. by Hubert Haider, Susan Olsen & Stan Vikner, 307-327. Dordrecht: Kluwer.
- Zaenen, Annie, Joan Maling, & Höskuldur Thráinsson. 1985. "Case and grammatical functions: The Icelandic passive". *Natural Language and Linguistic Theory* 3. 441-483.