1. Introduction

The goal of this paper is to address CED effects, building on the mechanics of Chomsky’s (2000; 2001) Agree mechanism. In so doing, we will critically review Chomsky’s (2005) proposal that phase edges create locality difficulties, restricting ourselves to the predictions this idea makes with elements merged in SPEC-\(v^*\) (arguably, subjects and shifted objects; see Chomsky 2001). We will eventually argue that the relevant blocking effect has nothing to do with phase edges per se, but rather with details pertaining to Chomsky’s (2000; 2001) Activity Condition:

(1) Activity Condition
   Active elements (those with unvalued structural Case) that agree with a \(\varphi\)-Probe are ‘frozen in place’, being unable to move or allow movement from within them.

The paper is divided as follows. In section 2 we briefly review what kinds of locality devices minimalism deploys in order to capture island effects; section 3 concentrates on the Subject Condition (a subcase of Huang’s 1982 CED effects), comparing those accounts whereby SPEC-T is an opaque domain with Chomsky’s (2005) phase-based analysis; capitalizing on data from Spanish and Dutch, we conclude that an analysis that relies on agreement conditions is superior on both theoretical and empirical grounds to Chomsky’s in (2005); in section 4 we turn our attention to objects, noting that only non-agreeing ones block sub-extraction. Section 5 summarizes the main conclusions (and consequences) of this proposal.

2. Islands and Minimalism

The Minimalist Program lacks a unified theory of islands.\(^1\) This arguably relates to the minimalist desideratum that syntax be geared by both internal and external requirements. Lasnik (2001b), for instance, observes that sluicing can rescue island violations by destroying the offending PF structure:

(2) The want to hire someone who speaks a Balkan language, but I don’t know which (Balkan language), they want to hire someone who speaks t-.[from Lasnik 2001b:313]

Comparably, Hornstein & Uriagereka (2002) argue that operations taking place in the LF component can modify the c-command path between a negative element like \(nobody\) and a c-commanded NPI, thereby inducing late islands for relevant quantifiers.

(3) *Nobody gave most children a red cent.[from Hornstein & Uriagereka 2002:110]

The suggested analysis of facts like (3) and (4) opens the door for the existence of phonetic and semantic factors affecting the dynamics of extraction domains. In turn purely internal constrains presently reduce to the Minimal Link Condition (MLC) and the Phase Impenetrability Condition (PIC). The former was proposed by Chomsky (1995) in the context of operations of the type Rizzi (1990) explored.

(4) **Minimal Link Condition**

K attracts α only if there is no β, β closer to K than α, such that K attracts β.

[from Chomsky 1995:311]

(5) α > δ > γ (where “>” indicates c-command)

The PIC was introduced within the realm of Phase Theory (see Chomsky 2000 through the present), in order to yield “a strong form of Subjacency”.

(6) **Phase Impenetrability Condition**

The domain H [of a strong phase] is not accessible to operations at ZP [the next strong phase]; only H and its edge are accessible to such operations.

[from Chomsky 2001:14]

(7) \[[ZP \ Z \ [H \ P \ [P \ YP]]]\]

(4)-(5) and (6)-(7) do not have the same empirical coverage. The MLC is restricted to what is dubbed **defective intervention effects**:

(8)

a. *Pedro le me envía. (Spanish)
   
   Pedro CL-to-him-3SG.DAT CL-me-1SG.ACC send-3SG
   ‘Pedro sends me to him’

b. Pedro me lo envía. (Spanish)
   
   Pedro CL-to-him-1SG.DAT CL-him/it-3SG.ACC send-3SG
   ‘Pedro sends him to me’

[from Ormazabal 2000:241-242]

The pair in (8) instantiates the **Person Case Constraint** (Bonet’s (1994)), which forces accusative marked DPs to appear in default [3 person] in the presence of dative DPs. Configurationally, this falls into place only if the indirect object in (9) intervenes between v* and direct object:

(9) \[[*P \ \ v^* \ [VP \ IO \ [VP \ V \ DO]]]\]

---


3 Although the MCL was intended as a derivational version of Rizzi’s (1990) Relativized Minimality, it was designed in such a way that it did allow ‘syntactic communication’ between α and γ, bypassing δ – under conditions of ‘equidistance’ (Chomsky 1993; 1995; 2000). This makes elements within the same residual domain (SPECs of the same head H) count as equally close from each other and/or a relevant target. Chomsky (2001; 2005) and Hiraiwa (2005) present arguments against ‘equidistance’.

4 See Rizzi (2004a) for a refinement of Relativized Minimality effects. Since nothing we have to say here crucially hinges on these modifications, we will ignore them.

5 See Torrego (1998), for an analysis of datives compatible with (9).
At first glance, both PIC and MLC seem to reduce to a configuration in which an ‘intervener’ is sandwiched between two XPs, triggering syntactic interference. There is, however, an important difference between these constraints: only the MLC is phase bounded. The relevance of this can be seen in (10), a *Superiority* effect:

(10)
\[ \text{a. } *\text{What}_i \text{ did who say } t_i ? \]
\[ \text{b. } \text{Who}_o t_i \text{ said what?} \]

Under standard accounts, (10a) yields its ungrammaticality because *what* moves to C, bypassing a closer candidate: *who*.\(^6\) (10b) in turn shows that, if the order of *wh*-phrases is changed (destroying the unwanted configuration of 5), no violation arises. So in MLC configurations ‘things can be fixed’—within a phase. The domain of the PIC, however, involves a phase collapsing that couples the *complement domain* of a higher phase (say, CP) and the *edge domain* of the previous phase (*v*-P). The relevant structure is depicted in (11),\(^7\) with the box signaling the collapse zone.

\[ (11) \begin{array}{c}
\text{[CP C [TP T [v*-p XP v* [VP V YP ]]]]}
\end{array} \]

In (11), regardless of whatever ordering changes we make, it will be impossible for YP to move across XP, simply because it has already been cashed out to the interpretive components. (12), a *Wh-Island Constraint* case taken from Boeckx & Lasnik (2006:150-151), illustrates this point:

(12)
\[ \text{a. } ?*[\text{CP What}_i \text{ did Sue wonder } \text{CP where}_2 \text{ Bill bought } t_i t_2 ]? \]
\[ \text{b. } *[\text{CP Where}_i \text{ did Sue wonder } \text{CP } t_i \text{ bought what } t_i ]? \]

In (12) it does not matter whether we chose to move *where* or *what*: both choices result in an illicit structure. In this sense, the PIC imposes more severe restrictions, leaving very small margins to manoeuvre.

MLC and PIC cannot account for the same island phenomena. More importantly for our purposes here, neither the MLC nor the PIC seem useful when it comes to Huang’s (1982) CED effects.

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\(^6\) As noted in the literature, Spanish seems to lack generalized Superiority, which explains why both (i) and (ii) are fine. See Gallego (2006) for more discussion:

(i) \[ ?\text{Quién hizo } \text{ qué?} \quad \text{(Spanish)} \]
\[ \text{Who did-3SG what} \]
\[ \text{‘Who did what?’} \]

(ii) \[ ?\text{Qué hizo quién?} \quad \text{(Spanish)} \]
\[ \text{What did-3SG who} \]
\[ \text{‘What did who do?’} \]

\(^7\) In (11) we put aside the possibility that a phase edge can contain multiple SPECs. If such a configuration is created, both XP and YP might in principle be attracted, depending on whether or not we take these to be 'equidistant', in the sense of fn. 3.
3. CED effects

The CED is taken to subsume subject and adjunct sub-extractions. Because of its unstable status cross-linguistically we will mainly focus on the former, summarizing the analyses under which it is related to the canonical surface position of subjects: SPEC-T. We compare these accounts to Chomsky’s (2005), concluding that an Activity-Condition-based analysis is preferable on empirical and theoretical grounds. In the last subsection we consider sub-extraction from different kinds of objects; Spanish case-marked objects will prove useful in reinforcing the main thesis of this paper.

3.1. On ‘freezing effects’ on SPEC-T

As is well-known, while objects can normally be targeted for sub-extraction operations, subjects and adjuncts cannot:

(13)

a. *Who did [a story about ti] amuse you?     ×Subject
b. Who did you hear [a story about ti]?            ✓Object
c. *Which book did John go to class [after he read ti]?  ×Adjunct

[from Lasnik & Saito 1992]

Two broad types of analyses can be identified to address the asymmetry in (13). The first one offers an explanation that relies on a multiple-Transfer approach, assuming that complex non-complements must be independently sent to the interpretive component for linearization to take place. Such is the logic behind Uriagereka’s (1999a) Multiple Spell-out (MSO) account, whose details can be summarized as in (14):

(14)

Linearization of XP (the subject) and ZP (the adjunct) force us to abandon the v*P derivational workspace in order to create a complex cascade. On the other hand, notice, YP (the object) never imposes that restriction, as only objects give rise to what Uriagereka (1999a) calls “command-unit”, the simplest derivational object resulting from the monotonic application of Merge:

(15) Command-unit  (16) Not a Command-unit
a. Merge (α, β) = {α, β}       a. Merge (α, β) = {α, β}
b. Merge (δ, {α, β}) = {δ, {α, β}}  b. Merge ({δ, γ}, {α, β}) = {{δ, γ}, {α, β}}

---

8 In this paper we put aside the Specificity Condition. See section 4.
The crucial distinction in (15) is in terms of whether complex phrasal elements entering Merge have already been constructed in a separate derivational workspace (as in 16b). This is generally the case for complex specifiers, for instance. Said elements must be transferred to the component(s) where linearization is possible, or they would not be linearizable as such. It is precisely this abandonment of, concretely, \( \nu^{*}P \)'s workspace that forces the system to go into early Spell-out of the relevant cascades, which renders them out-of-sight for computational processes.

A second line of inquiry has approached Huang’s findings from the perspective that chains are uniform representational objects (Ormazabal et al. 1994, Stepanov 2001, and Takahashi 1994). The Subject Condition is thus related to the surface position of subjects.\(^9\) Consider, in this regard, Ormazabal et al.’s (1994) *Specifier Condition*:

(17) **Specifier Condition**
No movement can take place from inside a phrase that has moved to a specifier position (i.e. to the left).

[from Ormazábal et al. 1994:10]

The intuition here is based on Chomsky & Lasnik’s (1995) *Uniformity Condition*:

(18) **Uniformity Condition**
a. The Chain C: \([\alpha_1...\alpha_n]\) is a legitimate LF object only if C is uniform [or it is an operator variable construction].
b. The Chain C is uniform with respect to a property P if each \( \alpha_i \) has property P or each \( \alpha_i \) has non-P.

[from Chomsky & Lasnik 1995:91]

With (17)/(18) in mind, consider a subject island violation, where the \( wh \)-phrase *which character* is sub-extracted after the subject has reached its surface position:

(19) \([CP \text{ Which character \text{ did } [TP [\text{pictures of t}]]_2 [\nu^{*}P \text{ t scare you }]]]]\)?

As the arrows indicate, an implicit (and crucial) assumption about (19) is this: the subject first moves to SPEC-T, and then \( wh \)-movement takes place. The factor that rules (19) out strongly relies on the hypothesis that a chain is a representational object whose occurrences must be regarded as identical. Thus if an operation wants to affect a chain, it must apply to all its occurrences, or none. In (19) we have an A-uniform chain formed by two occurrences of the DP *pictures of which character*; as indicated, this DP is first-Merged in SPEC-\( \nu^{*} \), and it then undergoes movement to SPEC-T. If, after that last step, some element is sub-extracted from the DP, the Uniformity Condition –as interpreted here– would be violated, for only one of the occurrences is affected:

\(^9\) Stepanov (2001) capitalizes on linearization restrictions on chains (much in the sense of Nunes 2004 and Uriagereka 1999a). Ormazabal et al.’s (1994) solution is virtually indistinguishable from Takahashi’s (1994), and based on Chain Uniformity proper (see below). Since what matters for us is that both accounts blame SPEC-T as the position where problems arise, we put these distinctions to the side. See Rizzi (2004b) for a similar account of the Subject Condition.
The second line of reasoning in principle treats adjuncts quite differently from non-complement arguments, unlike the first. This is because arguments have good, systematic, reasons to A-move (creating a chain), whereas this is not the case for adjuncts. In this approach, again, what matters is whether a (non-trivial) chain has been created, and all its occurrences remain identical for the purposes of the Uniformity Condition. In contrast, the first line of reasoning could in principle have a unified treatment of both sorts of islands (for better and for worse). This is because the unitary approach is based on a systemic property of all non-complements: that they are not part of the main derivational workspace, and thus they must linearize on their own.

Within the second (broadly non-unitary) line of approaches (see fn. 9), there is yet a different technical analysis that merits attention, particularly so because we will attempt to build on it in the present paper. It has been recently claimed that the Subject Condition is insensitive to representational restriction of the uniformity sort (Boeckx’s (2003a)). Under this approach, the Subject Condition reduces to the fact that A-movement triggers a freezing effect, as already pointed out at the outset.

The analysis relies on Chomsky’s (2000; 2001) Probe-Goal agreement system. Roughly put, Chomsky (2000; 2001) assumes that functional heads enter the derivation with unvalued \( \phi \)-features that act as Probes seeking for matching Goals (i.e., DPs that share the same feature endowment with the Probes). Importantly, for the matching to apply, both Probe and Goal must be ‘active’. How do syntactic objects become ‘active’? Chomsky (2000; 2001) argues that uninterpretable morphology does the job: \( \phi \)-features on \( C \) and \( v^* \) and structural case on DPs. (21) illustrates the idea:

\[
(21) \begin{array}{l}
[\[v^*P \text{ pictures of which character } v^*[u\phi] \ [v_P \text{ scared } [DP[2pers.PL] you]] \ ] \\
\end{array}
\]

The lack of values within \( v^* \)’s \( \phi \)-features actually activates this functional head, which acts as a Probe. The seeking procedure is assumed to work under closest c-command; so in (21) the closest target, the DP you, is matched by \( v^* \), as depicted in (22):

\[
(22) \begin{array}{l}
[\[v^*P \text{ pictures of which character } v^*[u\phi] \ [v_P \text{ scored } [DP[2pers.PL] you]] \ ] \\
\end{array}
\]

Note that Match is an asymmetric process, caring about feature types (the attributes, not the values). A subsequent operation, parasitic on Match, is thus necessary: Agree.
copies the value of the Goal’s feature into the Probe’s, which in exchange determines structural case.\footnote{Chomsky (2000; 2001) argues that Case itself is not matched, but is literally assigned under Agree. Thus, Case is a reflex of \( \phi \)-feature agreement. For a different perspective see Pesetsky & Torrego (2001).} As (23) shows, the value of the Goal somehow percolates up to \( \nu^* \).

(23) \([v^*_P \text{pictures of which character } \nu^*[2\text{pers.PL}] \ [v_P \text{scared } [DP[2\text{pers.PL}] \text{you} ] ]] \]

A consequence of the process just detailed is quite interesting to us here: once Agree has taken place and the DP has been assigned Case, it is left inactive, or as Chomsky puts it, “frozen in place”. This is the most widely assumed explanation for facts like (24), where an already case-marked DP, \( \text{John} \), is attracted to another case position (‘hyperrasing’):

(24) \(*\text{John}, \text{seems that } \text{t}_i \text{likes Mary.}\)

The same logic is extended to examples like (19) above by Boeckx (2003a). Although the technical implementation is different from one based on chain uniformity, “the ban on extraction out of displaced constituents results from what one might call a ‘chain conflict’, [thus predicting] extraction out of subjects to be possible is the subject remains within VP.” (Boeckx 2003a:104)

There is one aspect of Boeckx’s (2003a) analysis that we must re-examine: that full agreement between T and the subject takes place only in \text{SPEC-T}, triggering movement. There actually is no logical necessity in this respect: if long-distance Agree is a possibility, the Probe need not require overt movement of the Goal in order for full-agreement to be established. Boeckx (2003b) suggests this has to do with the (ill understood) fact that person features are checked in a very local (SPEC-head) relation. Existential constructions seem to support this observation, if in these cases expletive \( \text{there} \) checks T’s [person], [number] being checked by the distant ‘associate’:

(25) a. There is a man in the room.
   b. There are many men in the room.

When long distance Agree is partial, sub-extraction is possible, as one would expect:

(26) a. \([CP \text{Which candidate}_i \text{were } [TP \text{there } [v_P \text{[posters of } t_i ] \text{all over the town]}]]?\]
 b. \(*[CP \text{Which cadidate}_i \text{were } [TP \text{[posters of } t_i ] [v_P t_j \text{all over the town}]]]?\)

[apud Lasnik & Park 2003:651]

While, as noted, there is no simple way of relating adjuncts’ opaqueness to Chomsky & Lasnik’s (1995) Uniformity Condition, Chomsky’s (2000; 2001) Activity Condition offers a more promising approach, as Boeckx (2003a) argues. Just like subjects, adjuncts are islands due to agreement (or its lack thereof). To be precise, while subjects become islands \text{once they have agreed with } T, \text{adjuncts are islands from the very beginning of the derivation} –as they have no \( \phi \)-features to be matched. We agree, in this sense, with Boeckx (2003a), when he observes that:

\text{Agree cannot target adjuncts, as adjuncts have inert } \phi \text{-features. Nor can it target anything inside adjuncts, as no material contained inside adjuncts ever triggers agreement outside.}
them [...] Language after language, we see that adjuncts never participate in \( \varphi \)-feature sharing, unlike arguments. Also, the Case of adjuncts always appears to be inherent, with the use of a preposition, of the default use of some Case form (accusative, e.g.), or of a peripheral Case (allative, e.g.). [from Boeckx 2003a:100]

We differ from Boeckx (2003a), nonetheless, in taking this fact to disfavor a uniform account of CED effects. Conditions on Agree alone may suffice to pursue a unitary treatment to CED phenomena, the only difference being that arguments can (temporarily) agree, while adjuncts never do so, something consistent with the variable status of the Subject Condition across languages, as Stepanov (2001) has shown.\(^{12}\)

Although the proposals just reviewed all operate under different mechanisms (uniformity, multiple spell-out, freezing effects, etc.), the important point to keep in mind is that \emph{subject opaqueness basically arises in SPEC-T}. In the next section we will present Chomsky’s (2005) recent analysis of the Subject Condition, which challenges all the accounts reviewed up to this point.

### 3.2. Phase theory and phase edges

In section 2 we spelled-out the basic traits of the locality hallmark within minimalism: the PIC. Recall that, by the PIC, operations within a phase are restricted to the complement domain: the projection that occupies the complement position of phase heads. The rest (what Chomsky 1993; 1995; 2000 called ‘residue’) is the edge (basically, ‘the escape hatch(es)’ in former terminology):

\[
\begin{align*}
\text{(27)} \\
a. & \quad [\text{CP} \ \text{EDGE} \ [\text{TP} \ \text{... T ...} \ ]] \\
b. & \quad [\text{\(\varphi\text{P}\)} \ \text{EDGE} \ [\text{VP} \ \text{... V ...} \ ]] \\
\end{align*}
\]

Also by the PIC, only phase edges are accessible from the outside (higher phases), which accounts for successive cyclicity and head movement. Consequently, if C wants to attract some XP base-generated within \( \varphi\text{P} \), that XP must occupy the relevant edge. Interestingly, the base position of subjects (but not objects, or adjuncts) is precisely \( \varphi\text{P} \)’s edge. Assuming the PIC, one might take this to entail that subjects can always be targeted by C-T Probes (objects too, but only if they previously manage to rise to \( \varphi\text{P} \)).

That scenario is consistent with any of the analyses previously seen of the Subject Condition: in their base position, subjects never invoke Chain Uniformity, or

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\(^{12}\) There are, however, interesting counterexamples. Cases like (i) are studied by Browning (1987):

(i) \[\text{Who, did you go there [to visit \text{t}]?}\]

Perhaps a ‘reanalysis’ between the matrix verb and the infinitival purpose clause is at stake. This is suggested by the Spanish pair below, as reanalysis is known to be possible across weak prepositions like \( a \) ‘to’, but not strong prepositions like \( \text{para} \) ‘for’:

(ii) \[\text{¿A quién, vienes [a ver \text{t}]?} \quad \text{to whom come-2SG to see-INF} \]

\[\text{‘Who do you come to see?’}\]

(iii) \[*\text{¿A quién vienes [para ver \text{t}]?} \quad \text{to whom come-2SG for see-INF} \]

\[\text{‘Who do you come to see?’}\]
establish full Agree with T, so they are transparent. Chomsky (2005), however, adduces the examples in (28) (his judgements), which challenge the prediction: \(^{13}\)

(28)
a. \(\text{CP Of which car, did [TP [the driver t\text{\_i} [v\text{\_P} t\text{\_j} cause a scandal]]]?)}
b. \(\text{CP Of which car, was [TP [the driver t\text{\_i} [v\text{\_P} awarded t\text{\_j} a prize]]]?)}

\[\text{from Chomsky 2005:14}\]

As Chomsky correctly observes, the minimal pair in (28) is incompatible with the Subject Condition being related to SPEC-T. If this were so, one should expect both examples to be out, for the subject ends up occupying SPEC-T in both instances. Surprisingly, (28a) is worse than (28b), which requires an explanation.

Chomsky (2005) suggests that locality factors render edges opaque:

It remains to explain why the probe for \(\text{wh-}\)movement cannot readily access the \(\text{wh-}\)-phrase within the external argument of \(\alpha\). That could reduce to a locality condition: \(\text{which in } \alpha\text{ is embedded in the lower phase, which has already been passed in the derivation. We know that the external argument itself can be accessed in the next higher phase, but there is a cost to extracting something embedded in it.}\]

\[\text{from Chomsky 2005:14}\]

The idea can be captured by what we may call the \textit{Edge Condition}:

(29) \textbf{Edge Condition}  
Syntactic Objects in phase edges become internally opaque.

(29)  
(a) \(\text{[C/}_\text{v}* \text{P [B ... } \alpha \text{ ... ] C/}_\text{v}* \text{[TVP ... t}_\text{B} \text{ ... ] } \text{EXTRACTION OF } \beta\]
(b) \(\text{[C/}_\text{v}* \text{P [B ... } \alpha \text{ ... ] C/}_\text{v}* \text{[TVP ... t}_\text{B} \text{ ... ] } \text{SUB-EXTRACTION FROM } \beta\]

Chomsky’s (2005) reasoning can be seen as a strategy to strengthen the leading role of phase edges, for these alone are the positions that give rise to interpretive (reconstruction and surface-semantics) and computational effects of the cyclic sort. In this system both SPEC-T and SPEC-v* render DPs opaque. SPEC-v* does so by pure locality; in the case of SPEC-T, opaqueness follows from the Activity Condition, predicting the paradigm in (30) (Chomsky’s judgements):

(30)
(a) \(\text{*[CP Of which car, did [TP [the driver t\text{\_i} [v\text{\_P} t\text{\_j} cause a scandal]]]?)}\)

\(^{13}\) Data along these lines were actually judged degraded by Kuno (1973). Sabel (2002) concurs, judging them directly ungrammatical at least those extractions that involve extraction from the subject of a small-clause, like (i), with (ii), an ECM, being worse.

(i) \(\text{[CP Which artists, did you find [ [works by t\text{\_i} [offensive]] ]]?)}\)
(ii) \(\text{[CP Which artists, did you find [ [works by t\text{\_i} to be offensive ] ]]?)}\)

In contrast, Kayne (1984:189) finds some such examples acceptable, as long as no stranding is at stake (see discussion below):

(i) \(\?\text{[CP Of which words, is learning [ [the spellings t\text{\_i} [difficult]] ]])}\)
(ii) \(\text{*[CP Which words, is learning [ [the spellings of t\text{\_i} difficult]] ]])}\)
b. [CP Of which car is [TP [the driver t_j] likely [TP t_j to [v*P t_j cause a scandal]]]?

c. [CP Of which car did they believe [the driver t_j] [TP t_j to [v*P t_j have caused a scandal]]?

The examples in (30) basically show that sub-extraction from subjects is actually possible along the movement path of subjects, but only when they hit the SPEC of a ϕ-defective T (where we place a boldfaced trace: t). Relevant contexts include raising (30b) and ECM (30c) configurations, where full agreement does not obtain.

Chomsky (2005) argues that the same locality issues are expected in the upper phase edge: SPEC-C. Consider in this regard (31), from Lasnik & Saito (1992):

(31)

a. ??[CP Who do you wonder [CP [which picture of t_i] Mary bought t_j]]?
b. ??[CP Who do you wonder [CP [which picture of t_i] t_j is on sale]]

Rizzi (2004b) has recently explored many cases of sub-extraction from left peripheral positions, concluding that there is a freezing effect that renders opaque all criterial positions (those determining an interpretive effect: SPEC-Focus, SPEC-Top, and so on). Rizzi (2004b:11) dubs this freezing mechanism Criterial Freezing:

(32) Criterial Freezing

A phrase meeting a criterion is frozen in place

In sum, we have seen how Chomsky (2005) attributes the Subject Condition to SPEC-ν* (although he also predicts SPEC-T to yield opaqueness qua the Activity Condition). We will dedicate the next section to explore some sub-extraction facts in Spanish. As we will see, this language provides direct evidence in favour of an account of subject opaqueness based on the Activity Condition.

3.3. More asymmetries on sub-extraction

The previous section was devoted to present Chomsky’s (2005) claim about phase edges imposing locality restrictions. This, as we saw, does not only give us a rationale to approach the pair in (28), repeated here as (33), but also fits with (34).

(33)

14 Intriguingly, as Lasnik & Saito (1992:111) observe, sub-extraction from SPEC-C improves if the wh-phrases are D-linked, for unclear reasons:

   (i) ??Which athletes, do you wonder [CP [which picture of t_i] Mary bought t_j]?
   (ii) ??Which athletes, do you wonder [CP [which picture of t_i] t_j are on sale]

Also intriguing is (iii), judged by Kayne (1984:192) as ‘marginal’ (sic):

   (iii) ??[CP Who can’t you decide [CP [how many pictures of t_i] to buy t_j for your kids]]?

Facts like these were first noticed by Esther Torrego in the mid 80s. For recent discussion, see Rizzi (2004) and Uriagereka (2004). The latter also considers Lasnik & Saito’s (1992:101) observation that topicalization seems to have a similar ameliorating effect on sub-extraction:

   (iv) ??Who, do you think that [pictures of t_i] John wanted.

For discussion of these paradigms, see Gallego & Uriagereka (2006).

15 Rizzi (2006) refines this definition by making a distinction between the whole XP moving to a criterial position and the relevant chunk actually meeting the criterion. In his system only the latter gets frozen, so the rest of material can still undergo further movement.
(34) \[\text{[CP Which candidate were [TP there [\text{[P} posters of which candidate all over the town]]]?}}\]

The odd thing about (34) is that the Subject Condition does not hold for it. The logic of Boeckx’s (2003a) account is not threatened by this fact, though, as the subject does not undergo raising, avoiding full agreement, and freezing thereof. The result in (34) is also predicted by Chomsky’s (2005) phase-based account: in this example, the subject DP \textit{posters of which candidate} remains in the internal position of an unaccusative vP structure, which does not qualify as a phase for Chomsky (2001). \footnote{Chomsky (2001) calls these defective vPs ‘weak’ phases –as opposed to the standard, or ‘strong’ (transitive), ones. This is at odds with the findings in Legate (2003). If weak phase edges leave reconstruction sites, why should they behave differently as far as sub-extraction is concerned? An alternative possibility is that the relevant DP does not occupy SPEC-v when sub-extraction takes place, being instead within the small clause \[\text{[\text{[P} posters of which candidate all over the town]]}\].}

Let us now consider a language like Spanish. As the data in (35) show, a phase-based system like Chomsky’s correctly predicts sub-extraction from unaccusative (35a) and passive (35b) structures: since no phases boundary is involved, C can directly target the relevant DPs in their first-Merge position, the PIC then being irrelevant:

(35) a. ¿\text{De qué lingüista han llegado ya \text{[VP muchos libros t_i ]}?} \hspace{1cm} \text{(Spanish)}
  \text{‘Which linguist have many books by already arrived?’}

b. ¿\text{De qué escritor han sido \text{[PRTP vendidas muchas novelas t_i ]}?} \hspace{1cm} \text{(Spanish)}
  \text{‘Which writer have many novels by been sold?’}

The crucial empirical test, however, involves sub-extraction from the subject of transitive v*Ps, the true phases. As noted by Uriagereka (1988), post-verbal subjects, allow sub-extraction in Spanish:

(36) \[\text{[CP De qué conferenciantes te parece que ...} \hspace{1cm} \text{(Spanish)}}\]
  \text{Of what speakers CL-to-you seem-3SG that...}

a. ... \text{(?)}me\_z van a impresionar, \text{[VP \text{[DP las propuestas t_i ]] t\_z t\_v ]}?} \hspace{1cm} \text{(Spanish)}
  \text{CL-to-me go-3PL to impress-INF the proposals}

b. ... \text*{[DP las propuestas t_i]} me\_z van a impresionar, \text{[VP t\_z t\_v ]}? \hspace{1cm} \text{(Spanish)}
  \text{the proposals CL-to-me go-3PL to impress-INF}
  \text{‘Which speakers does it seem to you that the proposals by will impress me?’}

\footnote{It is perhaps worth emphasizing that the verb in (12) might be a psychological predicate favoring a post-verbal position for subjects, as M. Lluïsa Hernanz and Luisa Martí observe through personal}
edge. The prediction, under Chomsky’s (2005) phase system, is then clear: (36a) should be out—unfortunately, contrary to fact.¹⁹

Similar facts are noted by Broekhuis (2006), who provides Dutch data of the *wat-voor*-split sort. Just as seen in the Spanish examples in (36), the contrast between (37) and (38) below shows that sub-extraction from subjects is possible only if these stay in their first-Merge position: SPEC-v*. In order to test Chomsky’s (2005) paradigm in complete detail, consider first sub-extraction from a derived subject (i.e., an object);²⁰ according to Chomsky (2005), this operation should yield a grammatical result, independently of the final (landing) site of the object. Facts, however, prove otherwise.

(37)

a. [CP Wat zijn (er) [vP jouw vader [DP tij voor rare verhalen] verteld]]? (Dutch)
   ‘What kind of strange stories have been told your father?’

b. *[CP Wat zijn [TP DP tij voor rare verhalen] [vP jouw vader tij verteld]]? (Dutch)
   ‘What kind of strange stories have been told your father?’

Consider now sub-extraction from a non-derived subject:

(38)

a. [CP Wat hebben [TP er [vP DP tij voor mensen] je moeder bezocht]]? (Dutch)
   ‘What sort of people has visited your mother?’

b. *[CP Wat hebben [TP DP tij voor mensen] [vP DP tij je moeder bezocht]]? (Dutch)
   ‘What sort of people has visited your mother?’

The facts in (37)-(38) leave relatively little room for doubt: it does not matter whether sub-extraction targets a base object or a base subject, what is important is whether the relevant argument DP as been de-activated by a ϕ-Probe launched by T. This conclusion is confirmed, once again, by Spanish, where sub-extraction degrades from base objects when these move to SPEC-T:

(39)

a. ¿[CP De qué países quieres [CP que vengan [muchos delegados tij]]]? (Spanish)
   Of what countries want-2SG that come-3PL many representatives
   ‘Which country do you want many representatives of to come?’

b. ??[CP De qué países quieres [CP que [muchos delegados tij] vengan tij]]? (Spanish)
   Of what countries want-2SG that many representatives come-3PL
   ‘Which country do you want many representatives of to come?’

communication; this might somehow ameliorate sub-extraction. Note however that (i), which is a true non-psychological transitive verb, still allows the type of sub-extraction we are interested in:

(i) ¿[CP De qué equipo, dices que han bailado [DP dos participantes tij]]? (Spanish)
   Of what team say-2SG that have-3PL danced two participants
   ‘Which team do you say that two members of have danced?’

¹⁹ The same facts do not hold in Catalan or Italian, where sub-extraction from post-verbal subjects, though not totally impossible, is worse—for unclear reasons. See Belletti (2004) for discussion.

²⁰ In (37) and (38) we ignore whether OV order in Dutch is derived through movement.
The fact that sub-extraction from the subject DP in (39) is out, even when C’s Probe can target the transparent base position, is hard to explain under Chomsky’s (2005) proposal. Things are different for Boeckx’s (2003a) approach: sub-extraction targets the subject in its derived position, where a \( \phi \)-triggered freezing has already occurred.

To be sure, other explanations come to mind. For instance: a) postverbal subjects have passed through a position analogous to \( \phi \)-defective T that renders them transparent; or b) sub-extraction is possible due to the special interpretive (focal) properties of post-verbal subjects. The first possibility is tempting, but unfortunately unavailable within our restricted framework, where we assume two subject positions: SPEC-\( v^* \) and SPEC-T, for post-verbal and pre-verbal subjects respectively.\(^{21}\) In turn the possibility of focal interpretation of post-verbal subjects will face difficulties under a proposal along the lines of Belletti’s in (2004), where post-verbal subjects are said to move to a left-peripheral functional projection above the \( v^*P \). If Belletti’s analysis is on track, the satisfaction of a Focus Criterion should trigger a freezing –blocking sub-extraction, again contrary to fact.\(^{22,23}\)

We are basically forced, then, into the conclusion that only SPEC-T blocks sub-extraction. This still raises the question of how come (28b), repeated below as (40), is grammatical: Assuming strict cyclicity, sub-extraction here occurs from SPEC-T.

\[
(40) \quad \text{[CP Of which car\(_i\) was [TP [the driver t\(_j\) [\( vP \) awarded t\(_j\) a prize]]]?}
\]

To make things even more perplexing, (41), from Chomsky (1995: 328) –which is almost identical to (40)– yields an illicit structure.

\[
(41) \quad *\text{[CP Who\(_i\) was [TP [DP a picture of t\(_j\) \( _z \) [\( vP \) taken t\(_z\) by Bill ]]]]}
\]

Attributing the original observation to Susumu Kuno (see Kuno 1973), Chomsky (1986a) notes that facts like (40) and (41) indicate that sub-extraction and pied-piping are somehow connected (see also Chomsky 2005:fn.38).

Let us consider different pieces of evidence adduced in that regard, starting with (42). In these examples both pied-piping and stranding yield a correct result.

\[
(42) \quad \text{a. \quad [CP Who\(_i\) did Peter take [DP a picture of t\(_j\) ]]?} \\
\quad \text{b. \quad [CP Of whom\(_i\) did Peter take [DP a picture t\(_j\) ]]?}
\]

In turn compare (43) and (44) (the latter taken from Kuno 1973), which suggest that, somehow, sub-extraction of a displaced constituent is licit if it involves pied-piping:

\[
(43) \quad \text{a. \quad *\text{[CP Who\(_i\) was [TP [DP a picture of t\(_j\) \( _z \) taken t\(_z\) by Peter]]]?} } \\
\quad \text{b. \quad [CP Of whom\(_i\) was [TP [DP a picture t\(_j\) \( _z \) taken t\(_z\) by Peter]]]}
\]

\(^{21}\) See Cardinaletti (2004) for a different view.

\(^{22}\) For different implementations also involving a FocusP, see Irurtzun (in progress) and Uriagereka (2004). These analyses, though, would arguably run into the same problem: it is not obvious how subjects can be transparent for sub-extraction after movement to a derived, left-peripheral, position –though see fn. 17 for a possible approach, raised by Luigi Rizzi (p.c.), refining the details of Criterial Freezing.

\(^{23}\) Yet a third route is pursued by Gallego (2006). Assuming Chomsky’s (2005) phase based analysis, this author argues that \( v^* \)-to-\( T \) movement yields a process of \textit{Phase Sliding} that redefines phase boundaries, rendering SPEC-\( v^* \) within the complement domain of \( v^* \), and thus transparent to sub-extraction.
(44)
a. *[CP Which words is [TP learning the spellings of t₁, t₂ difficult]]?
b. *[CP Of which words is [TP learning the spellings t₁, t₂ difficult]]?

Note that (43) and (44) raise a very intriguing point: the position we identified as triggering freezing effects (namely, SPEC-T) actually seems to allow sub-extraction when mediated via pied-piping\(^{24}\). The issue is of course how.

In his paper, Kuno (1973) argued for a solution that capitalized on the incomplete status of the sub-extraction domain; that is, assuming DPs of the form [D [NP of t ]] are “incomplete”, Kuno (1973) put forward the condition in (45):

(45) The Incomplete Subject Constraint (ICC)

It is not possible to move any element of a subject noun phrase/clause if what is left over constitutes an incomplete noun phrase/clause.

One could attempt to characterize NP-incompleteness as follows:

(46) NP Incompleteness

A noun phrase/clause is incomplete if an obligatory element is missing. Thus, the [NP Prep] pattern is incomplete because the object of the preposition is missing.

Unfortunately, it is hard to see how Kuno’s proposal could be formulated in current terms; to start with it would be puzzling if “incompleteness”, as defined in (46), imposed a constraint on sub-extraction.

Being deliberately naïve about it, it seems that displacement is the key when comparing (43) and (44) vis-à-vis (42): if a DP has moved to a freezing position, only pied-piping allows sub-extraction. But this is at odds with the very idea of freezing: frozen DPs are islands, no matter what. Furthermore, pied-piping does not work if sub-extraction from adjuncts is involved:

(47)
a. *[CP Of which author, did John call Mary [after he read the book t₁ ] ]?
b. *[CP Which author, did John call Mary [after he read the book of t₁ ] ]?

To proceed rationally about the puzzle, consider first why –in the specific case of (28b), for instance– of which car can be sub-extracted from a DP that has been displaced. We know two things: first, sub-extraction cannot have occurred from the final landing site, because of freezing; second, sub-extraction cannot have occurred from the base position either, since it would predict grammatical the stranding version (e.g., *Which car was the driver of awarded a prize?), and this is contrary to fact. The conclusion, therefore, is much in the spirit of Chomsky’s (2005) analysis of sub-extraction from subjects in ECM and raising constructions: sub-extraction occurs from an intermediate step (signalled below as t) along the movement path of the phrase under

---

\(^{24}\) These judgments are admittedly subtle. As Kuno (1973:378) puts it: “[j]udgment of the degree of acceptability of [sub-extraction qua pied-piping] may differ from speaker to speaker, but it seems clear to all that [sub-extraction qua pied-piping] is considerably better than [sub-extraction without pied-piping]]."
investigation, as roughly indicated in (49). Happily, this explains also why (28a) is out: since in this case there is no intermediate position available between the base and the final sites, sub-extraction is barred.

\[(49) \text{[CP Of which car, was [TP the driver of } t_i ]} \text{ [IP } t_z \text{ [VP } v \text{ awarded } t_z \text{ a prize }]]]\]

In (49) we are assuming that sub-extraction of of which car takes place from SPEC-v, an intermediate landing side (i.e., neither the base nor the final one, which as we saw are problematic). An appealing advantage of this solution is that it appears to fit with the observation by Postal (1974) that stranding is disallowed in intermediate positions:

\[(50)\]

a. \([\text{CP Who do you think [CP (that) John talked [PP to } t_i ]}?\]

b. *[\text{CP Who, do you think [CP [PP to } t_i ] (that) John talked } t_z ]]?\]

The main goal of this section was to reinforce the hypothesis we advanced at the outset of this paper, providing additional evidence that the Subject Condition is parasitic on agreement, and not structural factors concerning phase edges. We have drawn data from Dutch and Spanish showing that what matters for viable sub-extraction from subjects is the possibility for these DPs to remain in situ, circumventing freezing. This possibility is normally barred in English (due to the ubiquitous EPP), which is why the Subject Condition is not normally violated—it is, however, in there-type sentences, which, besides blocking subject raising, display partial agreement.

If this proposal is on track, what calls for an explanation is Chomsky’s (2005) minimal pair in (28). Here we have related the relevant contrast to a paradigm noted by Kuno (1973), who presented the relevant data in terms of “incomplete” subject DPs. As we have seen, there are grounds to doubt that “(in)completeness” as such has anything to do with sub-extraction from subjects: what would appear to matter, instead, is freezing. This analysis accounts for why (28a) is out while (28b) is not: (28b) is grammatical because sub-extraction of the wh-phrase of which car has taken place from an intermediate (non-freezing) position, SPEC-v, precisely where Legate (2003) locates reconstruction effects for so-called weak phases.

4. Sub-extraction from objects

In this section we want to explore the consequences of our Activity-Condition-based approach to sub-extraction from objects. The basic facts are as in (51): objects allow sub-extraction, unless displaced to a freezing position:\(^{25}\)

\[(51)\]

a. \([\text{CP Who, did Mary call up [DP friends of } t_i ]]?\]

b. *[\text{CP Who, did Mary call [DP friends of } t_i ] up } t_z ]?\]

\(^{25}\) As is well-known since Chomsky (1973), specific objects block sub-extraction:

\[(i) \quad *\text{What, do you want to see [DP the picture of } t_i ]?\]

Due to space limitations, we cannot investigate here the process responsible for this interpretation of objects, nor its implications for sub-extraction. See Boeckx (2003a), Mahajan (1992), Ormazabal (1992), Stepanov (2001), Uriagereka (1993), and references therein.
The first question that arises is where the object DP *friends of who* raise in examples like (51b)? Such a position ought to be the one identified in Lasnik’s (1999a; 1999b; 2001a) analysis of pseudogapping: SPEC-Agr, a Case checking (freezing) one.

(52) John will select me, and Bill will [AgrO you [select]]

Chomsky (2005) reinterprets Lasnik’s (1999a; 1999b; 2001a) analysis by arguing that objects raise to SPEC-V, a step masked by V-to-v* raising. Chomsky (2005) further argues that raising to SPEC-V operates under the same conditions raising to SPEC-T does, also being triggered by φ-features. Freezing effects on (in these terms, optional) Object Shift thus fall into place.

For comparative purposes, consider yet again Spanish. As noted in the previous section, object DPs allow sub-extraction.

(53) ¿[CP [De qué lingüista] vais a leer [v*P [muchos artículos] ]]? (Spanish)
‘Which linguist are you going to read many papers by?’

Interestingly (and surprisingly from the perspective adopted here), prima facie object movement does not seem to block sub-extraction in the case of Spanish:

(54) a. [CP De qué escritor ha comprado [v*P [dos libros] ] María]? (Spanish)
‘Which writer has María bought two books by?’

b. [CP De qué escritor ha comprado [v*P María [dos libros]]]? (Spanish)
‘Which writer has María bought two books by?’

The unexpected case is (54b). Here we assume, with Ordóñez (1998; 2005), that OS sequences in Spanish are created by Object Shift across the subject, and not, say, v*-topicalization. That this analysis is the correct one in Spanish (but perhaps not in Italian; see Belletti 2004 and Cardinaletti 2004 for discussion) can be shown by the binding effect in (55), taken from Ordóñez (2005):

(55) Ayer visitó a cada chico su mentor. (Spanish)
‘Yesterday his mentor visited each boy’

26 Stepanov (2001) restricts raising to specific objects, proposing that these move to SPEC-v* (not SPEC-V). However, there is evidence against such an account. First, Lasnik’s (1999b; 2001a) examples show that specificity is not a requirement for object raising to take place; second, it cannot be the case that shifted objects raise to SPEC-v* in non ellipsis contexts: that would predict OV order in English (assuming English verbs do not move beyond T).

27 This is not to say that all VOS sequences are generated by Object Shift. We say this because, to our ear, binding in relevant instances is harder when the quantifier involved is *todo* (Eng. *all*):

(i) Recogió cada coche, su propietario. (Spanish)
‘Its owner picked up each car’

(ii) ?? Recogió todo coche, su propietario. (Spanish)
‘Its owner picked up all car’
So why doesn’t object-raising block sub-extraction in Spanish? The datum is especially puzzling because subject-raising does have the expected freezing effect.

One possibility that comes to mind is that the lack of opaqueness in shifted objects is due to the lack of overt object agreement in Spanish. A non-trivial problem for such an approach, however, comes from English: it obviously does not have overt object agreement either, but it nonetheless does block sub-extraction. Then again, Spanish may actually have some form of object agreement: object clitics, particularly because in this language they can be more or less systematically doubled by full associate DPs (see Solà 2002 and references therein). In this regard, it is interesting that the double of the clitic must be introduced by what looks like a case-marker –which is known as Kayne’s Generalization. Thus (56a) and (56b) are ungrammatical if the doubled element is not introduced by the dative preposition *a:*

\[
\begin{align*}
(56) \\
& a. \text{Lo vimos *(a) él.} \quad \text{(Spanish)} \\
& \quad \text{CL-him saw-1PL to him} \\
& \quad \text{‘We saw him’} \\
& b. \text{Le dimos el libro *(a) María.} \quad \text{(Spanish)} \\
& \quad \text{CL-to-him gave-1PL the book to María} \\
& \quad \text{‘We gave the book to María’}
\end{align*}
\]

If clitics ‘count’ as object agreement marks on the verb (whether they are actually pronounced or not), we have a rationale for why indirect objects and case-marked direct objects are opaque, as shown in (57)\(^{28}\) –with more severe deviance in the former case, for reasons we return to shortly:

\[
\begin{align*}
(57) \\
& a. \quad \text{*[CP De quién, has visitado a muchos amigos t[1]]?} \quad \text{(Spanish)} \\
& \quad \text{Of whom have-2SG visited to many friends} \\
& \quad \text{‘Who have you visited many friends of?’} \\
& b. \quad \text{*[CP De quién le diste los libros a los padres t[1]]?} \quad \text{(Spanish)} \\
& \quad \text{Of whom CL-to-him gave-2SG the books to the parents} \\
& \quad \text{‘Who did you give the books to the parents of?’}
\end{align*}
\]

On one hand, it could be claimed that case-marked DPs are opaque because they occupy the edge of the *v*-P phase. Torrego (1998) in fact analyzes *a*-marked objects as involving movement to SPEC-*v*.*\(^{29}\) This possibility is consistent with the following data, where only the case-marked direct object has scope over the indirect object:

\[
\begin{align*}
& (i) \quad \text{Las cinco muchachas habían conocido a un actor famoso.} \quad \text{(Spanish)} \\
& \quad \text{The five girls had-3PL met to a famous actor} \\
& \quad \text{‘The five girls had met a [specific/non-specific] famous actor’} \\
& (ii) \quad \text{Las cinco muchachas habían conocido a un famoso actor.} \quad \text{(Spanish)} \\
& \quad \text{The five girls had-3PL met to a famous actor} \\
& \quad \text{‘The five girls had met a [specific] famous actor’}
\end{align*}
\]

Bosque notes that only in (ii) is *un famoso actor* ‘a famous actor’ obligatorily specific, the corresponding phrase in (i) being ambiguous. Crucially, the phrase is obviously case-marked in both instances.

---

\(^{28}\) See Demonte (1991) for more discussion about sub-extraction from case-marked DPs in Spanish.

\(^{29}\) Another plausible source is specificity (see fn. 25), but we doubt that, since case-marked objects can, but certainly need not, be interpreted as specific. As Bosque (2001) shows, specificity in Spanish can be signalled, for instance, by the prenominal position of adjectives. Compare:

\[
\begin{align*}
& (i) \quad \text{Las cinco muchachas habían conocido a un actor famoso.} \quad \text{(Spanish)} \\
& \quad \text{The five girls had-3PL met to a actor famous} \\
& \quad \text{‘The five girls had met a [specific/non-specific] famous actor’} \\
& (ii) \quad \text{Las cinco muchachas habían conocido a un famoso actor.} \quad \text{(Spanish)} \\
& \quad \text{The five girls had-3PL met to a famous actor} \\
& \quad \text{‘The five girls had met a [specific] famous actor’}
\end{align*}
\]
At the same time, although facts like (58) argue that case-marked objects occupy a high position in the \( v^*P \) (an edge, as claimed by Torrego 1998), the same cannot be easily extended to dative, assuming these occupy an independent VP-shell (see section 2). On the other hand, a more plausible way to go about (57) takes agreement itself (more precisely, its lack thereof) to be responsible for the impossibility of sub-extracting from case-marked DPs, as suggested by Boeckx (2003a:51). The so-called impersonal/passive alternation involving the clitic \( se \) in Spanish (see Raposo & Uriagereka 1996) supports this analysis. Consider first (59a), a \( se \)-passive, where the verb actually overtly agrees with the logical object, as if it were a subject. Importantly, when a case-marked object is involved as in (59b), verb-object agreement is blocked, and a default 3SG value ensues on the verb (traditionally called \( se \)-impersonal):

(59)

a. Se limpiaron los chicos.  (Spanish)
   CL-SE cleaned-3PL the children
   ‘Children were cleaned up (by someone)’

b. Se limpió a los chicos.  (Spanish)
   CL-SE cleaned-3SG to the children
   ‘The children were cleaned up (by someone)’

Arguably at least, \( se \)-passive and \( se \)-impersonal share a common origin: in both cases, \( se \) blocks the presence of an external argument, thereby sanctioning verb agreement with the object. However, if the object ends up being case-marked,\(^{30}\) which bars Agree (T, Obj), sub-extraction from the object becomes impossible, crucially for our purposes:

(60)

a. ??De qué padres se limpiaron ya [los hijos t]?  (Spanish)
   of which parents CL-SE cleaned-3PL already the children
   ‘Of which parents were children already cleaned up (by someone).’

b. *De qué padres se limpió ya [a los hijos t]?  (Spanish)
   of which parents CL-SE cleaned-3SG already to the children
   ‘Of which parents were the children already cleaned up (by someone).’

Consider, finally, the following paradigm, noted by Torrego (1998:37-38):

\(^{30}\)Although in (59)/(60) we chose a verb where the object case-marking appears to be a mere possibility, this particular structure actually depends, in many instances, on the lexical choice of the verb. It is beyond the scope of this paper to account for this, or for that matter how exactly agreement proceeds in each case.
The contrast between (61b) and (61c) is subtle (and, as it turns out, bad for our purposes), but we agree with it. Torrego (1998:38) accounts for the asymmetry in (61) by arguing that the ‘affected’ object in (61b) receives inherent accusative case (standard datives would always involve this variety of case, as shown by the semantics of the preposition). Torrego’s (1998) idea can possibly be recast by positing a more complex structure to verbs assigning inherent accusative, such as *acusar ‘accuse’, as in (62b):

(62)

a. \[\text{VP see [several sisters of whom]} \]

b. \[\text{VP PROVIDE [several sisters of whom [ WITH ACCUSATION ]]} \]

(62b) tries to encode the fact that inherent accusative depends on a more complex structure, where the object starts being the complex SPEC of a small clause selected by the light verb *provide* (see Hale & Keyser 2002). On the other hand, structural accusative is assigned to objects which are base generated as direct dependents of the verb. An analysis along these lines would provide an explanation for why sub-extraction from objects with inherent accusative case, as well as DPs that receive oblique Case (e.g. datives and some adjuncts), is entirely impossible.

This section has focused on the nature on sub-extraction from (non-specific) objects. Evidence has accumulated in favour of an approach under which sub-extraction from a given domain is ruled out if agreement cannot be established with the domain in question. This has been tested with shifted objects in English and case-marked objects in Spanish —assuming that only those agree with $v^*$. 

5. Concluding remarks

With Boeckx (2003a), we have outlined an approach to CED effects in terms of agreement, therefore adopting the hypothesis that opaqueness is parasitic on Chomsky’s (2000; 2001) Activity Condition: an agreeing DP can be targeted for sub-extraction, but once it has been assigned case (and thus the agreement process has finished), it is rendered opaque. This idea has been tested in the case of subjects and objects, and seems to make the relevant distinctions: if no Probe can establish Agree with a DP (be it a subject or an object), no sub-extraction can occur. This explains, we claim, why sub-extraction is barred from indirect objects, (displaced) subjects, direct objects receiving inherent Accusative —and, of course, adjuncts. In so doing, we have reviewed 

31 This raises many questions, starting with how the structural vs. inherent distinction is to be understood within minimalism, particularly if S-Structure and D-Structure representations are not assumed.
Chomsky’s (2005) proposal that phase edges pose a locality problem that freezes the internal part of DPs occupying those dedicated ‘escape hatches’. As we have seen, cross-linguistic evidence goes against this idea, for bona fide subjects behave as transparent domains if they remain in situ, a position that does not feed full agreement (and the same holds for shifted objects in languages of the Spanish type, which are also transparent unless introduced by a preposition).

The main conclusion that can be drawn from the preceding pages appears to be, therefore, empirically supported – but, most importantly for us, conceptually promising: the sketched analysis of sub-extraction reinforces the leading role of Agreement/Case systems, for these not only signal designated computational domains (Chomsky’s phases), but also provide us with the necessary tools to boost syntax by means of the ‘displacement property’.
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