A-Probes, Case, and (In)Visibility*

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Abstract

This article argues for a dependency between structural Case and phasal domains and against Case values as intrinsic properties of (C)-T and (v*)-V. Rather, Nominative or Accusative values are derived compositionally from properties of the entire Probing domain: (i) NOM occurs whenever the Probing domain is specified as [uD, uϕ], while (ii) ACC is assigned if the Probing domain is specified as [uD]. In the absence of an A-Probe, a DP's [uCase] feature automatically deletes upon Transfer but no Case value is assigned, so DP lexicalization fails. The presence of a [uCase] feature is assumed on all DP arguments, whether null or overt. However, after Case valuation, DPs with inherent intensions and extensions will be lexicalized but variables, such as PRO, will not. The analysis focuses on DP subjects (both lexical and PRO) in non-finite CPs, and relies on availability of null expletive *pro* as a UG primitive. It assumes Chomsky's Feature Inheritance Model (Chomsky 2007, 2008, Richards 2007), default Case as in Schütze (1997, 2001), as well as Distributed Morphology (Halle and Marantz 1993, Embick 2007). It aligns with views where the Case Filter, while syntactically relevant (Legate 2008), is a PF constraint (Lasnik 2008, Sigurðsson 2008).

Keywords: Case, phases, agreement, expletive *pro*, PRO, non-finite CPs, lexical subjects

Introduction:

The paper attempts to refine our understanding of Case licensing and valuation, in view of Minimalist assumptions that correlate all A-features to the presence of a phase head (Chomsky

2007, 2008). Given that Case, agreement and the EPP are no longer seen as intrinsic properties of T (and some version of V), but exclusively of phasal C (and v*), and furthermore, given the absence of a [uCase] Probe, the syntactic relevance of Case requires re-evaluation. Specific questions, such as to what extent is Case still a property of the computational system, what the role of agreement, understood as ϕ-specifications, would now be, or whether NOM and ACC feature-specifications are properties of T and v*, respectively, are now paramount.

In engaging with such questions, a distinction must be made between DP arguments and other types of nominals (e.g. predicates, adverbials, dislocated phrases). DP arguments have special status in that they are visible to A-relationships, a fact of which the computational system is aware, or else it wouldn't engage them. Consequently, I assume that DPs associated with a theta-role have a [uCase] feature which remains active until Spell-Out. I take this Case deficiency to be a direct consequence of the Case Filter (Chomsky 1980), a requirement of the PF interface. If [uCase] is checked at first Merge, thus involving a theta-role relationship, the appropriate inherent Case (Chomsky 1986) value ensues (e.g. DAT, GEN, ACC) upon Transfer. If [uCase] is not checked upon first Merge, I propose that its value will depend on the feature composition of its subsequent A-Probe domain, whose role is to guarantee a certain morphological instantiation of the vocabulary item inserted post-Spell-Out. If [uCase] is never A-Probed for, it is checked upon Transfer without valuation. In the absence of a Case value, lexicalization fails, with the effect of ungrammaticality, unless the DP is silent (e.g. PRO).

The following general conclusions emerge. First, availability of structural Case is divorced from phi-features/agreement properties and is instead incumbent on the phase head transferring A-properties to its proxy head. However, agreement, understood as ϕ-specifications, and more specifically a person ([π]) feature, is nonetheless shown to be an important ingredient

of Case valuation. Second, T and v* do not have intrinsic NOM and ACC features, respectively. Rather, these values reflect properties of the Probing domain, with [π] being the crucial distinguishing ingredient, paramount for NOM. Third, the overt versus null status of arguments has no bearing on Case checking and valuation. Failure of DP arguments, such as PRO, to lexicalize is independent of Case but dependent on the feature-al build up of this syntactic object (à la Sigurðsson 2008). Lastly, I assume that *lexicalized DP arguments* never bear instances of default Case. If that were possible, the Case Filter would be vacuous (see also Schütze 1997, 2001).[1] DPs with syntactically active Case (i.e. arguments bearing a [uCase] feature) must be assigned a Case value in order to lexicalize. Non-argument DPs, on the other hand, lack Case features and their corresponding values. Given that PF has to insert a vocabulary item, the language specific default Case form will be used (à la Schütze 2001). To sum up, Case is still syntactically relevant for DP arguments (see also Legate 2008), with the added comment that "syntactic relevance" is reconfigured as engaging in an A-relationship, rather than specific Case values in T or v*. Non-argument DPs, however, engage with Case exclusively at the PF level. Syntax then "has no case features" (Sigurðsson 2008, 2009), such as NOM or ACC, but A-relations in syntax enable specific Case values.[2]

Let me briefly elaborate on each relevant point and thus give the reader some preliminary insight into the reasoning above.

It has been standard in generative grammar since the seminal work of George and Kornfilt (1981) and Chomsky (1981, et seq.), to correlate structural Case with agreement. This paper argues against this viewpoint as cross-linguistic data makes such a claim empirically difficult to maintain. First, there are languages with NOM and ACC lexical (overt) subjects in domains lacking phi-specifications.[3] Furthermore, there is variation as to whether these subjects

lexicalize as NOM or ACC. Consider the data in (1) showing a NOM subject in a Romanian gerund adjunct, (1a), and an ACC subject in a Latin infinitival subject clause, (1b).[4]

(1) a. [$_{CP}$ Fiind noi gata cu toții], am pornit la drum.
[being.GER we.**NOM** ready with all] 1PL started on way [5]
'Given that we were all ready, we started on our way.' (Romanian)

b. Me interest [$_{CP}$ te studere].
me.ABL it is good [you.**ACC** study]
'It is to my advantage that you study.' (Latin, Wyngaerd 1994: 124)

Further complications arise once we consider languages where Case valuation in non-finite contexts is determined by linearization properties, with post-verbal subjects strictly NOM, as discussed by Mensching (2000:20) for Old Italian and shown in (2).

(2) a. Tu non ti rallegri [$_{CP}$ aver io incontrata una morte]
you not CL delight [to-have **I** found a death]
'You are not glad that I have found death.'
(Old Italian, D'Azeglio, ch. 18, p222, cf. Schwehendener 1923:72)

b. Negar non voglio esser possibile, [$_{CP}$ lui essere beato ..
to-deny not (I) want to-be possible **him** to-be blessed
'I do not want to deny that it is possible that he is blessed.'
(Old Italian, Boccaccio, Dec., I, 1; cf. Schwehendener 1923:82) [6]

Clearly, it is not possible to assume that both values in (2) are instances of some default. Ideally, any instance of systematicity should be assumed accountable. Linguistic patterns invite consistent formalization and principled accounts.

Furthermore, variation is not restricted to lexical subjects and the T domain. For example, West Country varieties of English, show both NOM and ACC values on direct objects. Consider (3) from Newfoundland English (Ruth King, personal communication):

(3) a. She pushed **me / I** down.

b. Pass **him / he** over to me.

According to the descriptive literature, such instances of "pronoun exchange", with NOM replacing ACC, are sensitive to object emphasis. However, it is noteworthy that these dialects of English have null expletives (Ihalainen 1991), a property shared with languages capable of lexicalizing NOM subjects in non-finite domains.

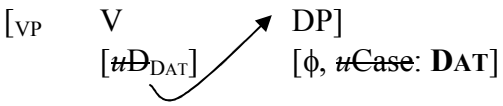
I argue that this relationship is not accidental, the proposal being that the null expletive *pro* acts as a ϕ-Probe triggering NOM Case on its associate. In brief, the empirical claim here is that uninflected phasal domains allow for NOM syntactic values on argumental DPs only in languages with expletive *pro*. The conceptual claim is that expletive *pro* is a parametrized UG primitive with a role in Case valuation. More specifically, this uninterpretable phi-feature bundle, contains a person (π) deficiency which guarantees a NOM value on its associate.

To sum up, "Case values" are equivalent to engaging in an A-relationship, such that a DP argument has the following Case values: (i) a NOM value, if and only if the Probing domain is specified as [uD, uϕ], where [uD] is equivalent to the EPP; (ii) an ACC value, if the Probing

domain is specified as [uD]; (iii) an inherent value assigned at first Merge; (iv) no value, if no Probing domain, hence no A-chain. In this last scenario, the DP fails to lexicalize.

For the sake of clarity, (4) provides schemas of how this works. For ease of exposition, I represent theta-roles as features (Adger 2003, Hornstein 1999, Manzini and Roussou 2000, etc), a possibility hinted at by Chomsky (2000), but nothing crucial hinges on this assumption. Dotted arrows indicate feature-inheritance, while full arrows indicate an A-relationship (either triggering a first Merge or a Probe-Goal environment). Only relevant A-features are shown.

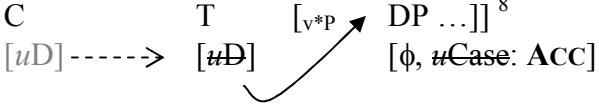
(4) i. Inherent Case (e.g. Dative): theta-role comes equipped with Case value



ii. Structural ACC Case:

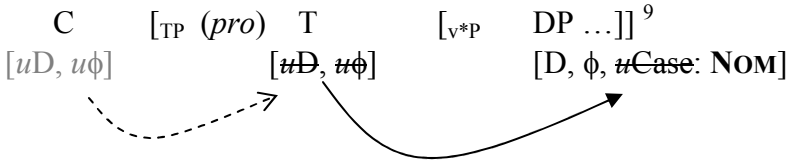
(a) on objects

(b) on subjects in phi-feature-less CPs (e.g. non-finite clauses)

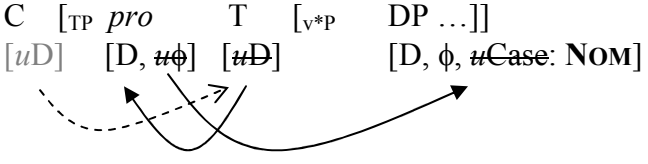


iii. Structural NOM Case:

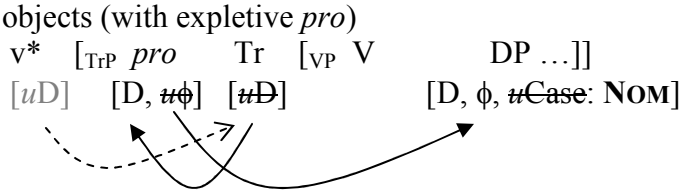
(a) on subjects in finite CPs



(b) on subjects in non-finite CPs (with expletive *pro*)

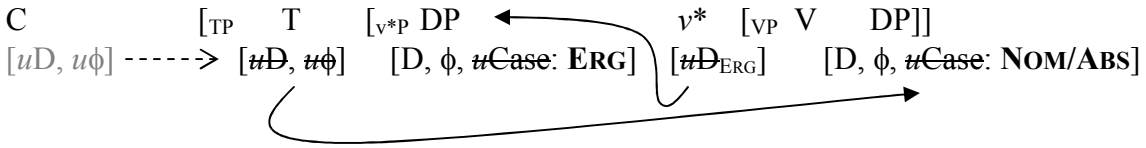


(c) on objects (with expletive *pro*)



For Ergative-Absolutive languages, I follow Legate (2008), who follows Woolford (1997), and assume that Ergative is an instance of inherent Case on the external argument, while Absolutive is equivalent to structural NOM (unless it is the morphological default).[10] (5) is representative of ABS = NOM. Note that I do not show DP dislocation to Spec,TP.

(5)



Where does that leave PRO then? As an argument, it must bear [uCase]. The logic that PRO checks either null Case (Chomsky and Lasnik 1995) or is an instance of default (e.g. Boeckx and Hornstein, 2006, for Icelandic) is difficult to maintain, both conceptually and empirically once we agree that non-finite CP domains can value structural NOM or ACC. In addition, various literature argues for PRO bearing either structural or quirky/inherent Case (e.g. Adger 2007, Bobaljik and Landau 2009, Cecchetto and Oniga 2004, Landau 2008, Schütze 1997, Sigurðsson 1991, 2008). Section 5 details an analysis of how PRO receives such Case.

The paper assumes Chomsky's Feature Inheritance Model (Chomsky 2007, 2008, Richards 2007), as well as Distributed Morphology (Halle and Marantz 1993, Embick and Noyer 2007), and is organized as follows. Taking Chomsky (2007, 2008) as the point of departure, Section 1 focuses on the role of the phase head in linguistic computations, the limitations of equating Case with agreement, and the relevance of a phi-complete Probe in Case valuation.

Section 2 discusses the relationship between Tense, as a property of the CP phase domain, and Case values. Section 3 revisits the logic against default Case on lexical DP arguments and introduces novel proposals for Case valuation. Section 4 focuses on non-finite CP domains which are shown to be phi-incomplete. It proposes that null expletives, as ϕ-Probes, interfere with the encoding of Case. It explains the role of null expletives in syntactic derivations and offers a systematic account of Case values on lexical subjects in non-finite domains by examining Romanian, a null expletive language, and English, which lacks this syntactic primitive. It concludes with languages showing inconsistent Case lexicalization in non-finite CP domains. Section 5 focuses on PRO. I argue that failure to lexicalize is independent of Case and propose an analysis whereby PRO is cross-linguistically valued with structural NOM if A-Probed. Section 6 highlights predictions the analysis makes beyond non-finite CPs and in Section 7 I offer a brief discussion of general implications for Case theory. Section 8 is a conclusion.

1 Phi-features (agreement) and structural Case

Chomsky (2007, 2008) redefines the relationship between C, as a phase head (or Edge), and T, as its complement. Specifically, T inherits all of its features from C so that it only operates as a Probe derivatively, by virtue of its relationship with the phase head. Both Chomsky (2007) and Richards (2007) provide solid conceptual reasons for assuming that any uninterpretable A-features C may possess have to be transferred to T. Furthermore, this model renounces [uCase] as a Probe and assumes that [uϕ] acts as a Case Probe instead.[11]

The question is whether every phase head possesses a complete set of A-related features, specifically, EPP/[uD] and [uϕ], or whether this varies with properties of each phase head. This paper argues for agreement (defined as [uϕ]) as a strict property of finite C heads but for Case

(defined as syntactic licensing of DP arguments) and the EPP (construed as a structural requirement coerced by CI interface conditions – Chomsky 2007) as uniform properties of phasal heads. The proposed dichotomy raises questions with respect to the relationship between Case and agreement, considered indispensable in Case assignment to this day, as discussed below.

As pointed out in the Introduction, the standard view in generative grammar has been that structural Case is incumbent on agreement properties within the functional domain, regardless of whether these ϕ-properties are taken to project independently as Agr phrases or to be couched parasitically as [uϕ] on T (and v*).[12] Crucially, ϕ-complete T Probes are synonymous to lexical subjects with NOM Case and ϕ-complete v* Probes are synonymous to DP objects valued ACC.

There are, however, various conceptual and empirical problems with a strict correlation of Case with ϕ-features. First, the idea that (C)-T ensures NOM Case, while v*-V ensures ACC Case, if correct, is theoretically unwieldy. If all A-related features are *un*interpretable on the various phase heads and, implicitly, their complements, then how can they possibly have values, such as NOM and ACC, *a priori*? What would this follow from in a system of optimal design? Second, it is unclear what properties of T and v* would license this split (Sigurðsson 2009) or why ϕ-completeness matters (Carstens 2001, Pestesky & Torrego, 2004b). Carstens (2001: 148) points out that "Gender is systematically excluded from the features of subject agreement in Indo-European languages with gender systems." When [uϕ] on T lacks gender, it is "defective" with respect to this property, so ϕ-*in*complete. Third, given the lack of agreement between v* and the DP it Case-marks, there is no evidence that v* has [uϕ] (see also Baker et al. 2005).[13]

In order to sharpen the exact relationship between structural Case and ϕ-properties, the first subsection below presents empirical data arguing against ϕ-Probes as a prerequisite for structural Case and in support of a correlation reliant on phases. The discussion focuses on

uninflected/non-finite CP phasal domains, which I argue are ϕ-featureless. The second subsection, on the other hand, fine-grains the relationship between what counts as a relevant ϕ-feature and Case and outlines a preliminary proposal for Case valuation.

1.1 Against [uϕ] as a Case prerequisite: evidence from non-finite CPs

Traditionally, the distinction between finiteness and non-finiteness is correlated to the presence versus absence of *inflectional* morphology associated with T (e.g. Binnick 1991, Ledgeway 1998 and references therein).[14] Intuitively, CPs without inflectional morphology on T, in languages with otherwise inflected T paradigms, are arguably ϕ-featureless (see Alboiu 2006, Bianchi 2008, Landau 2004, Roussou 2006). This claim is supported by the following empirical data.[15]

First, subject clitics are illicit in non-finite CPs, even in contexts where NOM subjects are permitted. Poletto (2000) notes that in Friulian, a Northern Italian dialect, subject clitic doubling is extremely common. Paoli (personal communication) confirms that it occurs in finite clauses with both pre- and post-verbal subjects regardless of predicate type. However, (6) shows that subject clitics are ruled out in gerunds, despite the presence of a postverbal NOM lexical subject.

(6) (*E) Vint Marie / je ciacaraat cun ti, e ha
SCL having Mary / she spoken with you, SCL have
diciduut di cumprà el livri.
decided of buy.INF the book
'Having spoken with you, Mary decided to buy the book.' (Paoli, p.c.)

Following Roberts (2010), subject clitics in Northern Italian/Tuscan dialects are [uϕ] bundles derived from C. Lack of a subject clitic in (6) shows [uϕ] to be absent in non-finite CPs.

Second, linearization of pronominal clitics in Romanian points to a similar conclusion. Săvescu-Ciucivara (2007) argues that Romanian clitic ordering is sensitive to Person ranking ($\pi 1 > \pi 2$) and Case ranking (DAT > ACC), but that π ranking restrictions disappear in non-finite contexts. Consider the data in (7).

(7) a. * Ți m - a prezentat Ion la petrecere.
CL.2.DAT CL.1.ACC- has introduced John at party
'John has introduced you to me to the part.'

b. Dîndu- ți- mă de nevastă,
Giving.GER- CL.2.DAT- CL.1.ACC of wife,
tata a câştigat mulți bani.
father has gained much money
'Giving me to you in marriage, my father has gained a lot of money.'

Having shown that there is no ϕ-feature transmission from C to its proxy head in uninflected domains, the task is to account for the empirical observations discussed below.

1.1.1 Case-valued overt subjects in non-finite CPs

Cross-linguistically, there are various instances of lexical subjects in non-finite (uninflected) CP domains, with variation for NOM or ACC values, at both a macro- and a micro-parametric level. These are strictly NOM in at least infinitives and gerunds in most Ibero-Romance, Greek gerunds (Sitaridou 2002), West Flemish infinitives (Haegeman 1985), absolute participial constructions in Hungarian (Liptak, p.c.), Albanian (Kallulli, p.c.), Italian Aux-to-Comp (Rizzi 1982, Belletti 1990), and Czech conditional infinitives (Tomić, p.c), as the data in (8) show.[16]

(8) a. Îi punea la calculator [CP pentru a avea
CL.3PL.M.ACC put.3SG at computer [CP for INF have
tu / *tine linişte] ' (Romanian)
2.SG.**NOM-*ACC** quiet]
'She would leave them at the computer for you to have peace and quiet.'

b. [CP Fiind noi gata cu toţii], am pornit la drum.
[being.GER we.**NOM** ready with all] 1PL started on way
'Given that we were all ready, we started on our way.' (Romanian)

c. [CP Odată (fata / ea) deşteptată (fata / ea)],
[CP once girl-the.**NOM** / she awoken.SG.F, girl-the.**NOM** / she]
mama puse de mîncare. (Romanian)
mother-the put.PAST.3SG of food
'The girl having awoken, mother started preparing some food.'

d. Lo supimos [CP después de llegar él].
we found out [CP after of arrive.INF he.**NOM**]
'We found out after he had arrived.' (Spanish, Ledgeway 1998: 5)

e. [CP Avendo Gianni / (lei) chiuso il dibattito], la riunione
[CP having Gianni / (3SG.F.**NOM**) closed the debate] the meeting
è finita prima. (Italian, adapted from Belletti 1990: 98)
is finished before
'Gianni (Her) having closed the debate, the meeting ended early.'

f. [CP Udělat to moje sestra], nic by se nestalo,
[do.INF that my sister.**NOM**] nothing would REFL not happen.N.SG.PRTC

(ale protože jsem to udělala já, matka se zlobí).

but because it was done by me, mother is annoyed

'If it was done by my sister, everything would be okay (but because it was done by me, mother is annoyed).' (Czech, Olga Tomić, p.c.)

g.[$_{CP}$ Mee ik da te zeggen], hee-se dat hus gekocht.

[$_{CP}$ with I.**NOM** that to say] has-she that house bought

'Because of my saying that she has bought that house.'

(West Flemish, Haegeman 1985:125)

h. [$_{CP}$ A gyermek felébredvén], az anya ebédet készített.

[$_{CP}$ the child.**NOM** wake.PRTC] the mother lunch.ACC made.3SG

'The child having woken up, the mother prepared lunch.' (Hungarian, Liptak, p.c.)

These non-finite domains are adjuncts, so strong islands (in the sense of Cinque 1990) or phases, which I take to be the crucial ingredient to Case checking (see also Alboiu 2006, Branigan 2005, Chomsky 2007, 2008, Sitaridou 2002). In tensed ("personal", following Ledgeway 1998) infinitive clause adjuncts (8a, d, f, g), gerund adjuncts (8b, e) and absolute participial constructions (8c, h), lexical NOM subjects are licit in the absence of [uϕ] on T.[17]

However, for other languages, the lexical subject in non-finite clausal domains is valued ACC. This is the case for English infinitive and gerund clauses, infinitives in Irish (McCloskey 1985), Latin (Wyngaerd 1994), and Ancient Greek (Sevdali 2005, 2007). See data in (9).

(9) a. [$_{CP}$ For **him** to listen to that talk] was awkward.

b. [$_{CP}$ **Him** baking the pie] pleased everyone.

c. Fe:mi [$_{CP}$ se men egno:kenai peri touto:n]

say-I you-**ACC** to know-PRF about these-GEN]

[$_{CP}$ eme de suneire:kenai tais sais epithumiais]

[me-**ACC** to go along-PRF the your wishes-DAT]

'I say that since you knew about these things, I went along with your wishes.' (Greek, Isokrates, *Ad Philippum III*, 3:3-4. In Sevdali 2005: 134)

d. Cánathaobh í a bheith chomh deacair?

Why it.**ACC** be.INF so difficult

'Why should it be so difficult?' (Irish, McCloskey 1985: 194)

e. Me interest [$_{CP}$ te studere].

me.ABL it is good [you.**ACC** study]

'It is to my advantage that you study.' (Latin, Wyngaerd 1994: 124)

Lastly, there are instances of lexical subjects where Case valuation in non-finite contexts is sensitive to word order, such that postverbal subjects are strictly NOM. See the infinitive data from Old Italian in (2), from Mensching (2000:20), repeated as (10), and the gerund data from Latin in (11). Typically, Latin gerunds appear with ACC subjects (Mensching 2000:202).

(10) a. Tu non ti rallegri [$_{CP}$ aver io incontrata una morte]

you not CL delight [to-have **I** found a death]

'You are not glad that I have found death.'

(Old Italian, D'Azeglio, ch. 18, p222, cf. Schwehendener 1923:72)

b. Negar non voglio esser possible, [$_{CP}$ lui essere beato ..

to-deny not (I) want to-be possible **him** to-be blessed

'I do not want to deny that it is possible that he is blessed.'

(Old Italian, Boccaccio, Dec., I, 1; cf. Schwehendener 1923:82)

(11) [In convertendo Dominus captivitatem Sion] facti sumus
[in undoing Lord.**NOM** captivity.ACC Zion] made (we) are
sicut consolati. (Vulgar Latin, Ps, 125, 1, cf. Kaulen 1904:299)
like dreaming
'When the Lord lets the prisoners of Zion go, we become like dreamers.'

Summing up, there are several crucial observations to be made: (i) these are non-finite clauses, so there is no ϕ-Probe, and, more specifically, no π-Probe; (ii) as adjunct or subject clauses, these are instances of unambiguous phasal domains; (iii) Case valuation is systematic and potentially influenced by linearization; (iv) the (C)-T domain lacks an intrinsic NOM value.

1.1.2 Case-valued covert subjects in non-finite CPs

It is by now well-known that covert subjects, such as PRO, trigger Case concord on various types of elements (e.g. predicates, quantifiers, participles), fact taken as evidence of PRO bearing Case; see (Cecchetto & Oniga 2004, Landau 2008, Schütze 1997, Sigurðsson 1991, 2008). As discussed, I assume that, as an argument DP, PRO is equipped with [uCase] and bears structural or lexical/inherent Case (in line with Landau 2008, Schütze 1997, Sigurðsson 1991, 2008, but contra Chomsky 1982, Chomsky & Lasnik 1995, Uriagereka 2008). In Section 5, I provide an analysis for Case checking and valuation for PRO, but here, the focus is on data where PRO has been assumed to value structural NOM or ACC Case and must do so CP-internally.[18]

In Icelandic, according to Sigurðsson (2008), in the absence of Case transmission from a main clause controller and embedded quirky Case, both obligatory control PRO (see 12a) and

non-obligatory control PRO (see 12b), trigger NOM agreement on (secondary) predicates, a fact taken to indicate NOM Case valuation.

(12) a. Hún bað Ólaf$_i$ [að PRO$_i$ fara bara einn
she.NOM asked Olaf.**ACC** [to go just alone.**NOM**
í veisluna]
to party.the
'She asked Olaf to just go alone to the party.' (Sigurðsson 2008: 414)

b. [að PRO vera ríkur] er ágætt.
to be rich.**NOM** is nice (Sigurðsson 2008: 417)

Other languages where PRO has been claimed to have a NOM value are German and Czech, both by Landau (2008). (13) illustrates with Czech from footnote 27 in Landau (2008:906).[19]

(13) řídit sám/*samého/*samému to nové auto je nebezpečné.
to.drive alone.**NOM/*ACC/*DAT** that new car is dangerous
'To drive alone that new car is dangerous.'

In Ancient Greek, obligatory control shows Case identity with its controller, but non-obligatory control PRO associates with ACC predicates; see (14).

(14) a. [PRO philanthropon] einai dei
friendly.**ACC**.3SG to-be must-3SG
'One needs to love people.'
(Isocrates, II:15. Adapted from Sevdali 2005: 137)

b. [Kalo:sparasxhon] ou ksunebe:san.[20]

Well supply.PRTC.AOR.**ACC**.N not happened-agree.3PL

'Although there was a good opportunity, they didn't agree.'

(Thycidides, Historia V: 14.2, Sevdali, p.c.)

Furthermore, while PRO does not typically lexicalize, there are instances when its silence is obviated. For example, (15) may show a pronominal NOM DP with the relevant emphasis despite the fact that we are dealing with obligatory control.

(15) L_i-am rugat pe Răzvan$_i$ [$_{CP}$ ca mîine să

CL.3SG.M.ACC-AUX.1SG asked PE Razvan$_i$ [$_{CP}$ that.SBJ tomorrow SBJ

plimbe **PRO** $_{i/ *j}$ / (**el** $_{i/ *j}$) cîinele].[21]

walk.3SG 3SG.M.NOM$_{i/ *j}$ dog-the]

'I asked Razvan to walk the dog tomorrow.' (Romanian)

While I revisit the relevance of Case manifestation on (secondary) predicates in Section 5, the data seem to indicate that PRO can receive Case values clause-internally. This is unsurprising given the claim that structural Case is dependent on the presence of a phase head (e.g., CP domain) and not ϕ-features. In conclusion, Case valuation is independent of lexicalization (i.e., morphological instantiation of relevant DP). The next section addresses the question of whether [uϕ] is nonetheless still relevant for structural Case.

1.2 Phi-feature relevance and structural Case valuation

Perhaps unsurprisingly, various cross-linguistic data suggest that ϕ-features (and, crucially π) play a role in NOM but not ACC Case assignment (see also discussion in Szabolcsi 2007). In

Romanian, for example, postverbal NOM DPs, whether subjects (as in 16), or objects (as in 17), trigger agreement (obligatorily in the standard variety, optionally in some regional dialects), but an ACC DP forces the default 3rd singular verbal form (see 17).

(16) a. Vin / vine copiii mîine.
come.3PL / come.3SG child.PL-the.NOM tomorrow
'The children are coming tomorrow.'

b. Copiii vin / *vine mîine.

(17) a. Îți plac fetele / ele (/ *de fete) ?
2SG.DAT like.**3PL** girl.PL-the.**NOM** / they (/of girl PL.**ACC**)

b. Îți place de fete?
2SG.DAT like.**3SG** of girl PL.**ACC**
'Do you like the(se) girls?'

Thus, only NOM DPs can agree and, as shown in (16b), agreement is obligatory when said DP is in Spec,TP, a fact also noted for Arabic (Sitaridou 2002). However, I assume [uϕ] on T is present throughout in (16)-(17).

Consider next the Belfast English data from Henry (1995) discussed in Schütze (1997:132-133).

(18) a. Usuns is happy.

b. *We takes the bus.

c. Them's no good, are they / *are them?

What is immediately noticeable in (18) is that lack of [uϕ] on T forces ACC subjects, while presence of [uϕ] forces NOM subjects.[22] Imbabura Quechua, an SOV language discussed in Cole and Jake (1978), points yet to a similar conclusion; data in (19) from Cole and Jake (1978:74).

(19) a. Ñuca-Ø can-da ricu-ni/*-ngui.
I-NOM you-ACC see-1SG/-2SG
'I see you.'

b. Ñuca-ta can-da ricu-naya-n/*-ni/*-ngui
I-ACC you-ACC see-DES-IMP/-1SG/-2SG
'I would like to see you.'

In (19a), subject-verb agreement denotes phi-features on T and the subject is valued NOM. In (19b), with a desiderative clause and no agreement, both arguments are valued ACC.

To sum up then, cross-linguistic data from unrelated languages show that phi-Probes are crucial for NOM values but irrelevant for ACC values. And, given that past participles and adjectival predicates cannot assign Case, despite instances of gender and number agreement, the crucial phi-feature for NOM valuation has to be person ([π]).[23] I therefore propose that structural Case values are licensed as in (20).

(20) a. NOM, if and only if the Probe is specified for [uD, uϕ] [24]

b. ACC, if and only if the Probe is specified as [uD]

What (20) states is that [uϕ], as a phi-Probe, plays the defining role in NOM Case valuation, such that agreement does turn out to have a special relationship with Case; however, (20) also shows that ϕ-features are not a requirement of syntactic Case licensing.

Nonetheless, (20) does not capture the data discussed in sections 1.1.1 and 1.1.2 in a straightforward manner. While it does in principle allow for both ACC and NOM subjects, as these properties are now derived from the feature-al build up of the Probe, rather than reliant on specific heads, such as T or v*, it says nothing with respect to how these values are acquired, what the basis for this parametrization might be, and why DP linearization plays a role. In addition, (20) assumes the absence of [π] on v*. This follows from the intrinsic deictic nature of π which links this feature to the left periphery (see Bianchi 2008).

Consequently, these issues have to be addressed. But before furthering our analysis, we need to first explore and see whether previous alternate approaches of Case realization can explain the data or need to be ruled out. The next two sections discuss Case as a Tense equivalency and default Case mechanisms, respectively, and argue that neither approach suffices.

2. Tense and Case values

Let us see briefly consider Tense as a phasal property. Stowell (1982) argues that control infinitives in English are tensed, while their raising counterparts are not, and concludes that domains with a [+tense] feature on T are CPs and not just TPs. Various refinements exist in the literature, such as for example Landau's (2004) split into anaphoric and non-anaphoric (whether dependent or independent) T, which takes into account issues such as finiteness. Crucially anaphoric T is never selected by C, while non-anaphoric T has to be saturated by C. Suffice is to say that the C-T (phase-level) relationship seems to be the defining condition for temporal deixis (i.e., a non-anaphoric tense value) on T, formalizable for example as *i*T, following Pesetsky and Torrego (2001, 2004a). [25]

Given that C licenses both Case and temporal deixis, one could capitalize on this correlation and argue that Case is 'Tense', an avenue explored by, at least, Alboiu (2006), Haeberli (2002), Martin (2001), Pesetsky and Torrego (2001, 2004a,b), and Svenonius (2001). The most coherent formalization of this approach can be found in Pesetsky and Torrego's work, where the authors assume NOM and ACC structural Case to be simply a *u*T feature on D which checks against *i*T, a phasal property, as discussed. However, this account runs into problems as there are languages where NOM Case values occur in the absence of Tense. A case in point is the Hungarian possessive construction, discussed by Szabolcsi (1983) and Kenesei (1986).

Kenesei (1986:115) notes that NOM Case occurs in "two constructions in Hungarian: (a) in tensed sentences, and (b) in possessive constructions." The author further argues that Tense cannot be assumed to play a role in the latter situation and concludes that NOM is dependent on Agr ([uϕ] here) given that an agreement suffix must appear on the head noun with possessives. The examples in (21) indicate the relevance of both π and # (number), so NOM valuation in Hungarian possessives is then unsurprising, in view of the presence of a [uϕ] Probe.[26]

(21) a. a te ház-ad
the you.**NOM** house-**2**SG
'your house' (Kenesei 1986: 115)

b. a fiú-k kapu-ja
the boy-PL-**NOM** gate-**3**SG/PL
'the boys' gate' (Kenesei 1986: 112)

In addition, while the non-finite clauses discussed in section 1.1.1 and 1.1.2 are of necessity phasal domains, it is unclear whether they all instantiate Tense. For example, Avram

(2003) argues that semantic and syntactic properties of Romanian gerunds point toward an AspP status of these phrases. Semantically, they denote events (see also Pires 2001, for English), are verbal in nature but cannot combine with either a Neg head (i.e., the negative free morpheme *nu*) or a T head (i.e., auxiliaries) and to the extent that they license temporal adverbs, these adverbs denote time of event in the Reichenbachian (1947) sense, rather than time of reference. This seems compelling evidence for lack of a TP with Romanian gerunds. However, Alboiu (2007: 6), suggests these gerunds project to CP, despite the absent TP domain, given the fact that they, (i) can combine with speaker-oriented adverbs such as *probably*, which according to Cinque (1999) associate with epistemic modality, so are higher than Aspect, (ii) allow for topicalized subjects, which arguably target the left periphery of the clause (i.e., the CP domain, following Rizzi's cartographic approach), and precede clitics, which are part of the Inflectional domain in Romance (Kayne 1991, Uriagereka 1995). See (22), with (22a) containing a topicalized subject and an epistemic adverb and (22b) showing linearization with respect to clitics. [27]

(22) a. Ea fiind probabil încă supărată, am
3SGF.NOM be-GER probably yet upset.3SGF, AUX.1PL
decis să plecăm singuri.
decided SBJ leave.1PL alone.1PL
'What with her probably still being upset, we decided to leave alone.'

b. Supărîndu-se pe mine, a plecat.
upset-GER-CL.REFL.3 PE me.ACC, AUX.3SG left
'Being upset with me, she (or he) left.'

I adopt this analysis and assume that Romanian phasal gerunds are tense deficient CPs (i.e., AspP selected by C with no intervening T). This allows for Asp proxy heads, as well as, in principle, for other inflectional proxy heads. [28]

In conclusion, Case deficiencies cannot be readily construed as satisfiable by Tense any more than they can be construed as satisfiable by agreement. The phasal domain is the necessary condition for Case licensing and temporal deixis, if present, like agreement, is epiphenomenal.

3. Lexical subjects and default Case

Drawing on work by Marantz (2000), Schütze (1997, 2001) poignantly argues that not all morphological Case forms are a reflex of syntactic abstract Case. More specifically, "the default case forms of a language are those that are used to spell out nominal expressions (e.g., DPs) that are not associated with any Case feature assigned or otherwise determined by syntactic mechanisms," Schütze (2001: 206). Such nominal expressions include adverbials, predicates, vocatives, left dislocated constituents, so DPs not involved in an A-relationship.

However, while Schütze argues for default Case to be available cross-linguistically in addition to being language specific (e.g. ACC for English but NOM for Latin), he is careful to point out that wherever Case is determined by a syntactic mechanism, it cannot be default. For instance, Schütze (2001:208) mentions that overt subjects in non-finite clauses in languages such as Irish and Latin cannot be attributed to the availability of default Case (contra Chung and McCloskey 1987), as the Case Filter would be vacuous if default Case were a syntactic feature. I take this to be essentially correct and conclude that that subject lexicalization in non-finite contexts cannot involve default Case in the sense above.

Furthermore, there would be empirical problems with assuming default Case on these lexical subjects. In no particular order, I point out the following.

(i) As previously mentioned, Schütze (2001) argues that NOM is the default in Latin, based on the Case of left-dislocated DPs. However, since overt subjects of non-finite domains are typically ACC, recall (9e), it follows that these are valued syntactically.

(ii) Icelandic distinguishes between a default and a structural NOM, as evidenced by agreement facts (Sigurðsson 1991, 2008, 2009). More specifically, default agreement occurs in the presence of dislocated and vocative DPs, seen in (23a), but not with PRO subjects, shown in (23b). Consequently, I assume together with Sigurðsson (ibid) that non-finite NOM is structural and not default (contra Boeckx and Hornstein 2006).

(23) a. Strákurinn, við hann var ekki dansað/*dansaður
the.boy.**NOM** with him.ACC was not danced.**DFLT/*NOM**.SG.M
'The boy, nobody danced with him.' (Sigurðsson 1991: 338)

b. Þessi saga var skrifuð til [að PRO vera
this story.NOM.F.SG was written for to be
lesin/*lesið].
read.**NOM**.F.SG/***DFT** (Sigurðsson 2008: 409)

(iii) While examples of NOM subjects in Ancient Greek absolute constructions are rare, these do exist (Sevdali, p.c.), as seen in (24).

(24) [Entautha machomenoi kai basileus kai
there fighting.PRTC.PRES.**NOM**.M and king.**NOM** and
Kuros] Kte:sias legei (Xenophon, Anabasis: I, 8.27)

Cyrus.**NOM** Ktesias-NOM says

'While the king and Cyrus were fighting there, Ktesias says …'

Given that with impersonal verbs ACC is an option instead of the more typical GEN, as shown in (14b), both NOM and ACC cannot be default.

(iv) According to Schütze (2001), both Swedish and German have default NOM, but neither language permits NOM subjects in infinitives (Sigurðsson, personal communication). Therefore default Case cannot be at stake in DP lexicalization in non-finite contexts.

(v) Examples (10), in section 1.1.1, show that NOM-ACC micro-parametric variation in Old Italian infinitives is systematic and tied to linearization, as mentioned. Therefore a principled account is in order, as opposed to an ad hoc default insertion.

Summing up, while there is an undeniable place for default morphological Case in UG, there seems to be significant cross-linguistic evidence that DP subject lexicalization even in CP non-finite domains, as well as (at least some) Case values of PRO, are involved in systematic syntactic Case-checking mechanisms and are valued accordingly. Consequently, there are no *syntactically* default Case values. Our take on [uCase] checking is outlined in (25).

(25) *Checking [uCase] on DPs*:

1. [uCase] checked & valued at first Merge → inherent Case value (e.g. DAT, GEN, ERG)

2. DP is A-Probed (with/without dislocation) → structural Case value:[29]

- if Probe is specified for [**uD, uϕ**], then **NOM/ABS** value
- if Probe is specified as [**uD**], then **ACC** value

3. [uCase] does not check at first Merge and DP is not A-Probed → [uCase] checked upon Transfer & no value

To recap, all (and only) DP arguments enter the derivation with [uCase]. This feature opens the DP to A-chains (trivial or non-trivial, in the sense of Chomsky 1995). [uCase] checks and deletes upon Transfer, which occurs at phasal boundaries.[30] Abstract Case (both inherent and structural) presupposes an A-chain (i.e. a syntactic relationship). In this case, the morphological component receives "instructions" from the computational system and a specific DP value obtains as outlined in (25).[31] If the DP fails to establish an A-relationship beyond receiving a theta-role and does not check [uCase] at first Merge, [uCase] deletes upon Transfer but DP lexicalization fails as there is no default value for abstract/syntactic Case. Consequently, attempting to lexicalize yields ungrammaticality, so only syntactic objects such as PRO are legitimate in these contexts. Crucially nothing in (25) associates structural NOM and ACC with T and v*, respectively.[32]

The next task is to offer an implementation that can yield a principled account for morphological Case realizations in the data addressed here and preferably beyond. To this purpose, Section 4 provides an explanation for the NOM-ACC valuation dichotomy for non-finite domains, Section 5 addresses Case values on PRO, while Section 6 briefly tackles NOM objects.

4. Null expletives as Probe correlates

Under the assumption that phi-features are absent from non-finite C and that the unique A-related Probe transferred by C to its proxy head is the [uD] feature (i.e., a nominal deficiency), the question is what would ensure the ϕ-specification (and, more specifically, the π deficiency) assumed to associate with NOM values in languages with NOM lexical subjects in these domains?

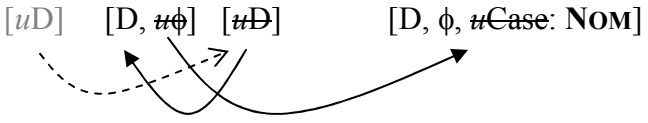
Various authors (e.g. Ledgeway 1998, Sitaridou 2002) have remarked that only null subject languages have this property. Nonetheless, West Flemish is not, technically speaking, a null subject (i.e., *pro*-drop) language, as it only allows for null expletives (Haegeman, personal

communication). Further support against the *pro*-drop connection comes from Western dialects of English (e.g. Newfoundland English, working-class Somerset English), which lack *pro*-drop but have null expletives (Ihalainen 1991), as well as infinitives with NOM subjects shown in (26).

(26) For **he** to listen to that talk was awkward. (Newfoundland English, Ruth King, p.c.)

I argue that this null expletive connection is not accidental. Instead, I claim that expletive *pro* is a parametrized UG primitive with an ancillary role in Case valuation. More specifically, this uninterpretable phi-feature bundle, contains a person (π) deficiency which guarantees a NOM value on its associate.[33] (27) reintroduces the schematic representation in (4iiib) which shows how the null expletive merged in Spec,TP to satisfy the EPP discharged by C, itself acts as a Probe engaging the thematic subject in an A-chain and thereby Case-licensing it. Furthermore, the feature-al specifications of the expletive Probe guarantee the subject a NOM Case value.[34]

(27) C [$_{TP}$ *pro* T [$_{v*P}$ DP …]]



In non-finite CPs, illustrated in (27), merge of *pro* in Spec,TP cancels T's status as a D-related Probe. Since *pro* does not branch (i.e. it lacks an N complement), it c-commands the subject DP, yielding an unproblematic Probe-Goal relationship.[35] At Spell-Out, the subject DP is valued NOM as the probing domain contains a π-feature.

The empirical prediction of our analysis is that uninflected phasal domains can only license NOM syntactic values in languages with expletive *pro*. As Table 1 shows, the prediction seems to be borne out as we see a clear cross-linguistic correlation between null expletive

languages and lexical NOM in non-finite contexts. We also see variation in some languages, which we address in Section 4.2. Table 1 also shows that, NOM PRO, while seemingly dominant, correlates neither with null expletives, nor with overt subjects in non-finite domains, issues I return to in Section 5.[36] All instances of NOM are in bold.

Table 1 *Data summary for subjects in non-finite CPs*

Language	CP-internal Structural NOM and ACC Case on overt subject	CP-internal Structural NOM and ACC Case on PRO	Null Subject Language *pro* [D, iϕ]	Null Expletive Language *pro* [D, uϕ]
Ancient Greek	ACC **, NOM**	ACC	✓	✓
Modern Greek	**NOM**	-	✓	✓
Latin	ACC, **NOM**	-	✓	✓
Old Italian	ACC, **NOM**	-	✓	✓
Mod. Italian	**NOM**	-	✓	✓
Romanian	**NOM**	**NOM**	✓	✓
Spanish	**NOM**	-	✓	✓
West Flemish	**NOM**	-	*	✓
Newfoundland English	ACC, **NOM**	-	*	✓
Hungarian	**NOM**	-	✓	✓
Czech	**NOM**	**NOM**	✓	✓
Albanian	**NOM**	-	✓	✓
Icelandic	*	**NOM**, quirky	*	*
German	*	**NOM**	*	*
English	ACC	ACC	*	*
Irish	ACC	-	*	*

4.1 On expletive *pro*

At this point we need to clarify (i) what triggers the presence of *pro* in the lexical array, and (ii) whether the 'null' status of this expletive has any bearing on the issues at hand.

4.1.1 Expletive *pro* in the lexical array

Expletives are formatives devoid of any semantic content beyond their categorial status, so their presence presupposes a need for checking of purely formal features. Arguably, nominal expletives (whether overt or null) are made available by UG to check of the EPP of phasal heads, itself a structural requirement coerced by CI interface conditions (Chomsky 2006:14/2007).[37]

The factors driving *pro* insertion in the Numeration cannot be Case-related, as syntactic relevance of Case is not a property of Probes, just a computational visibility requirement on DPs. The expletive's role in Case-valuation is epiphenomenal, a welcome outcome of its ϕ-deficiency. Checking EPP via expletive *pro*, ensures that the subject, a contentful DP, is free to occupy structural positions with various semantic and pragmatic relevance with the effect of what is often referred to as a 'free word-order' language. The presence of a [D, uϕ] lexeme in the lexical array would ensure the desired flexibility in positioning of a semantically relevant DP.[38]

For example, I have argued in previous work (Alboiu 1999, 2002, 2007) that Romanian exploits syntactic structure to encode information structure. In Alboiu (2002), I show that Romanian preverbal DPs are subject to a specificity effect, hence discourse configurationally displaced.[39] However, for thetic sentences, VS(O) word order applies, irrespective of predicate type. Consider (28a-c), which are appropriate answers to questions like, *What happened?*

(28) a. A sosit Victor.
AUX.3SG arrived Victor
'Victor arrived.'

b. A sunat Mihai.
AUX.3SG called Mihai
'Mihai called/phoned.'

c. L-a strigat Victor pe Mihai.
CL.3SGM.ACC-AUX.3SG shouted Victor pe Mihai
'Victor called Mihai.'

What is thus crucial for Romanian is that preverbal DP subjects cannot be assumed to dislocate for EPP considerations. In this language, I assume the EPP to be satisfied by expletive *pro*.

Various empirical and conceptual arguments can be made in support of expletive *pro*. Rizzi and Shlonski (2005:1) argue that "criterial freezing", defined as the phenomenon whereby "an element moved to a position dedicated to some scope-discourse interpretive property, a criteria position, is frozen in place," can be obviated in the presence of expletives. (29), from Rizzi and Shlonski (2005:11) shows this for English:

(29) a. *What do you think that t_{what} is in the box?
b. What do you think that there is t_{what} in the box?

Consequently, the well-formedness of (30a), presupposes a null expletive, *pro*, according to Rizzi and Shlonski (2005:11). The Romanian facts in (30b) point to the same conclusion.

(30) a. Chi credi [che [*pro* Subj vincerà t_{chi}]]
'Who do you think that will win.' (Italian, R&S 2005:11)
b. Cine crezi [că [*pro* va cîştiga t_{cine}]?
Who think.2SG [that FUT.3SG win t_{who}]
'Who do you think will win?' (Romanian)

A brief look at generics in Romanian further reinforces availability of the null expletive in this language, especially for non-finite CP domains. Consider (31)-(32).

(31) a. Păsările cîntă. GEN, ∃

bird.PL-the sing.3PL.PRES

'Birds sing/are singing.'

b. Cîntă păsările. *GEN, ∃

sing.3PL.PRES bird.PL-the

'Birds are singing.'

(32) non-finite CPs: *GEN, ∃

a. Punea muzică [pentru a cînta păsările].

put.3SG.PST music [for INF sing.INF bird.PL-the

'S/he'd play music for the birds to sing.'

b. [Cîntînd păsările], ne-am înveselit cu toții.

singing.GER bird.PL-the CL.REFL1PL.-AUX.1PL happified with all

c. [Păsările cîntînd], ne-am înveselit cu toții.

bird.PL-the singing.GER CL.REFL1PL.-AUX.1PL happified with all

'Because the birds were singing, we were all in a better mood.'

and not,

'Because birds sing, we were all in a better mood.'

According to Diesing (1992), while with episodic sentences subjects can be located in either Spec,IP (Spec,TP here) or Spec,VP (Spec,v*P here), with generics, these must raise out of the nuclear scope into the restrictive domain and thus occupy Spec,TP. (31) illustrates this for Romanian. In addition, the fact that (31b) is well-formed but cannot be interpreted as a generic also illustrates that subject DPs do not raise to Spec,TP at LF.[40] The EPP must thus be satisfied

by expletive *pro*. Crucially, in non-finite clauses, a generic interpretation is never possible, regardless of linearization (see (32c) and note that preverbal subjects are impossible in infinitives). We must thus conclude that expletive *pro* uniformly satisfies the EPP in Romanian non-finite CPs and that the preverbal subject is in a Topic position in (32c). These data explain why lexical subjects are exclusively valued with structural NOM and not ACC in this language.

To sum up, null expletive *pro*, is a parametrized UG primitive with an effect of semantico-pragmatic encoding and NOM Case valuation.[41]

4.1.2 The relevance of 'null'

Under a view of late vocabulary insertion (adopted here), phonetic features are not available prior to Spell-Out. Should we then dismiss the 'null' status of the expletive as syntactically irrelevant? I suggest that silence here is the result of the expletive's morphosyntactic deficiencies, so directly relevant. Arguably, ϕ-featureless nominals have insufficient properties to warrant any morpheme insertion. Note that this is also true of PRO, also ϕ-deficient. Under current assumptions, whereby PRO is Case-marked, its silence needs to be reconsidered. I follow Sigurðsson (2008) in assuming that variable reference and phi-features results in the impossibility of lexicalization and propose that the same holds of the null expletive *pro*.[42]

Interestingly, what this entails is that overt expletives must have some degree of ϕ-specification. Agreement facts show that French *il*, English *it* and Icelandic *það*, are all specified as 3rd person singular neuter (for various discussion, see Chomsky 1995, Rezac 2004, and Rizzi and Shlonski 2005). Chomsky (2000) argues that English *there* is specified for 3rd (or default) person but no number, with Kayne (2008) adding deixis as a property of *there*, and Rezac (2004) shows that Czech *von* is specified for person. This gives us (33).

(33) [D, *u*ϕ] [D, π:3, #:SG, g:N] [D, π:3] [D, π:3, *u*#, *u*g] [43]
pro *il, it, það* *there* *von*

Crucially, all of the lexicalized expletives in (33) have a π value so overt expletives lack a role in Case valuation.[44] Visibility of purely grammatical formatives indicates intrinsic properties.

4.2 Structural Case valuation in non-finite domains

The next subsections provide analyses for lexical subjects in an exclusively NOM language in non-finite CPs domains (i.e., Romanian) and an exclusively ACC language (i.e., English), as well as addressing the micro-parametric variation within null expletive languages.

4.2.1 Structural NOM subjects: the view from Romanian

Section 4.1.1 showed that expletive *pro* uniformly satisfies the EPP in Romanian infinitives and gerunds, which explains the NOM nature of lexical subjects in these contexts. For illustration, consider the personal infinitive and gerund adjuncts in (34a) and (34b), respectively.

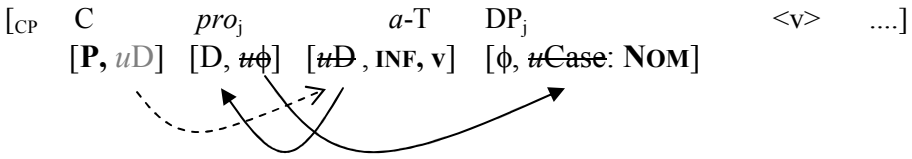
(34) a. [$_{CP}$ *(Pentru) (*tu) a avea tu linişte], plecă.
[$_{CP}$ *(For) (*2.SG.NOM) INF have 2.SG.NOM quiet] leave.PST.3SG
'S/he left so that you can have peace of mind.'

b. [$_{CP}$ (tu) fiind (tu) gata], am şi pornit.
[$_{CP}$ 2.SG.NOM be-GER 2.SG.NOM ready] AUX.1PL also started
'Once you were ready, we started on our way.'

(34a) shows that with infinitive adjuncts, a preposition-type complementizer (indicating the semantic clause type) is obligatory and that NOM lexical subject must occur postverbally. The

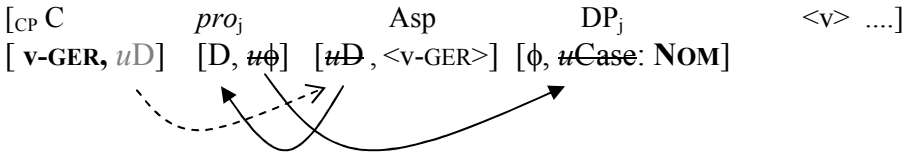
lexical verb raises to T but not beyond as the infinitive particle 'a', blocks subsequent T to C movement (Dobrovie-Sorin 1994). Schematically, these infinitives can be represented as in (35), with *pro* satisfiyng [uD] on T. The unvalued features of the expletive establish a syntactic chain with the thematic subject, which at Spell-Out is valued NOM. Overt items are bolded.

(35) Romanian personal infinitives:

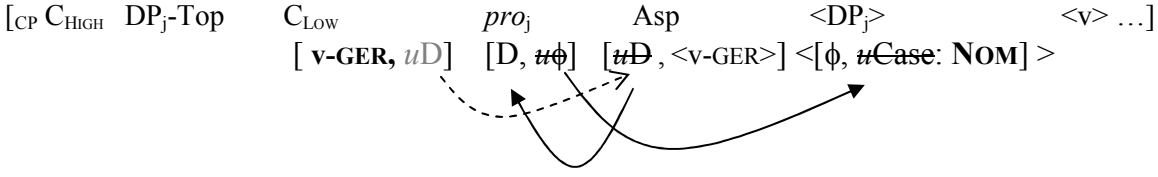


Conversely, with gerunds, the subject may occur preverbally and the verb undergoes movement into the C domain. This movement is possible due to the verbal (aspectual) nature of the gerund affix and plausible given gerund interaction with clitics, as previously discussed in Section 2.[45] The schematic representations in (36) show the EPP feature being transferred to Asp assuming T is absent. Unvalued 𝜙-features and Case check as for infinitives.

(36) a. Romanian gerund adjuncts with VS linearization:



b. Romanian gerund adjuncts with SV linearization:



In addition, (36b) differs from (36a) in that it projects an expanded CP domain, with a Topic position sandwiched in-between a high C head (i.e., "Force") and a low C head (i.e., "Finite") to

accomodate the topicalized preverbal subject (in the spirit of Rizzi 1997, 2004). While in (36b) the gerund only raises to a low C head, a high (phasal) C head must be present or else no [uD].[46]

This section has provided an analysis of subject NOM values in Romanian non-finite phasal CPs.[47] I next address instances of ACC subjects in non-finite CPs by focusing on English.

4.2.2 Structural ACC subjects: the view from English

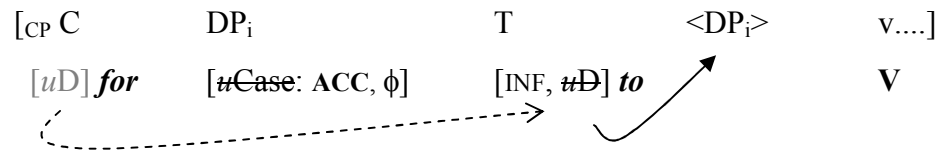
There are two structural configurations where English lexicalizes ACC subjects: in *for-to* infinitives and clausal gerunds. (37) illustrates by resuming (9a, b).

(37) a. [$_{CP}$ *(For) **him** to listen to that talk] was awkward.

b. [$_{CP}$ **Him** baking the pie] pleased everyone.

Focusing first on the infinitive, it is well known that the prepositional complementizer must be present or else PRO is forced. If a language like Romanian allows for a variety of prepositional complementizers with infinitives (e.g., *pentru* 'for/in order to', *pînă* 'until', *de* 'of'), which determine the semantic function of the adjunct clause, and disallows these with subject infinitives, in English the presence of *for* is linked to the presence of a lexical subject, rather than to status or type of clausal infinitive. (38) is a schematic representation for (37a).

(38) *for-to* CP infinitives



Given that there is no [uϕ] associated with the domain that probes but that an A-chain is established, via [uD] from C, the subject DP lexicalizes as ACC.

Consider next clausal gerunds (CG, see Reuland 1983). Reuland (1983) and later Pires (2001) discuss five types of CGs, as in (39). These are illustrated in (40).

(39) a. Acc-ing as complements to verbs (40a).

b. Acc-ing as complements to subcategorized prepositions (40b).

c. Acc-ing in subject position (40c).

d. Acc-ing in constructions in adjunct prepositional phrases (40d).

e. Absolute constructions (40e-f).

(40) a. I_i don't like [them / PRO_i watching that much TV].

b. I_i asked about [them / PRO_i leaving tomorrow].

c. [Us / PRO_i leaving] saddened [our friends]$_i$.

d. Sam_i found a wife [without/ after/ before (us / PRO_i) coming to town].

e. Mike expected to win the game, he / him being the best athlete in the school. (Pires 2006:3)

f. PRO_i being the idiot that he_i was, $John_i$ was unable to keep his_i job.

Cases (40a-d) instantiate a subcategorized CG situated in a canonically Case-marked position, an issue I return to shortly. (40e-f) are clausal adjuncts. Crucially, all of these clauses license a subject, realized as a lexical ACC DP or as PRO. In addition, the absolute construction may license a NOM subject. Structurally speaking, adjunct and subject CGs are phasal domains, so can check off Case. Prepositions in English also select phasal domains (i.e., P or D), so the CGs in (40b,d) are nominal CPs. Lexical verbs may select non-phasal arguments in English (e.g. perception verbs and raising verbs), but given the possibility of obligatory control readings, I take the CG in (40) to also instantiate a C head. In conclusion, CGs have uniform CP status.[48]

The relevant literature on gerunds (Abney 1987, Chomsky 1981, Emonds 1970, Horn 1975, Moulton 2004, Pires 2001, Reuland 1983, among others) typically argues for *-ing* as either a nominal category or a participial category. However, I adopt a monosemic approach (see also Cowper 1995) and assume a single lexical entry for *-ing*, a category neutral affixal functor, unspecified for nominal or verbal status. The distinct properties associated with various *-ing* environments, result from other factors, such as intrinsic properties of insertion site (in the spirit of Marantz 2001). In CGs, the *-ing* GER(UND)/PART(ICIPIAL) feature merges high, as a C head, to denote the relevant clause type (i.e. its status as a gerund rather than, say, an infinitive clause).[49] However, this formative can also merge lower, as an aspectual non-phasal head (e.g., in domains selected by perception verbs or T heads). The affixal nature of this feature, corroborated by the absence of lexical verb raising in English, entails that *-ing* will always be linearized lower than its initial Merge site (i.e., in the v domain or on the highest available verbal root).[50]

Nonetheless, a monosemic approach precludes a Case deficiency on *-ing* and does not explain the nominal nature of argument CGs. That CGs have DP status and can associate with Case-related positions, is shown by the asymmetrical subject-auxiliary inversion data in (41).[51]

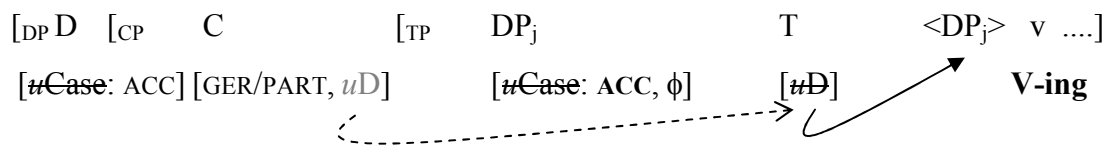
(41) a. * Did [that he baked a cake] please everyone?

b. *Did [for Sam to act like that] look suspicious?

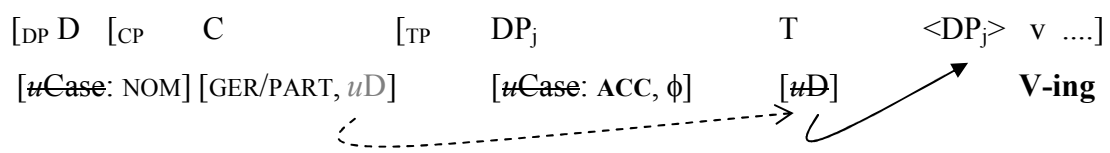
c. Did [him staying up late] upset you?

Subject CGs but not finite or infinitive CPs may occupy Spec,TP. I suggest this reflects a null D head selecting a CP domain. As a category neutral affix, *-ing* C, can merge with a D, but not infinitives and finite CPs which are verbal in nature. Assuming this D head itself has a [uCase] feature, the schematic representation with feature checking is given in (42).[52]

(42) a. English object gerunds:



b. English subject gerunds:



Argumental CGs are nominal CPs.[53] The non-finite C head has a [uD] feature which is transferred to T and probes for a DP. The subject enters an A-chain and gets an ACC value.[54] The Case requirement of the null D, on the other hand, is checked and valued as either ACC or NOM, in compliance with properties of the domain probing for the CG. Case valuation at the clausal level will in no way affect Case valuation of the subject internal to the CG (contra Pires 2007).

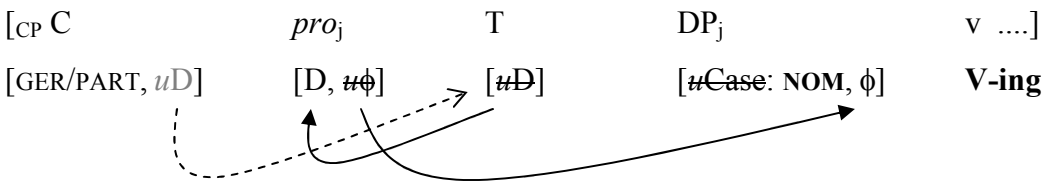
Let us now return to adjunct CGs (i.e., absolute constructions). In line with what I have developed so far, *-ing* has no Case deficiency so cannot be responsible for lexical subjects and NOM in non-finite CPs should only be available to grammars where null expletives are an option. So, why is (40e) acceptable with either a lexical ACC or a lexical NOM?

First, let me point out that there is variation in native speaker acceptance of (40e). To quote Michael Barrie (p. c.), "The 'he' versions sound like you're hyper-correcting for some 19th century grammarian." To quote an anonymous reviewer, "**Roddy tried to avoid Elaine, him being a confirmed bachelor* is dreadful". To cite an example from Schütze (1997:56), "*Him / *he liking beans, they bought some.*" What to make of the data then? Clearly, judgments vary from unacceptable, to prescriptive, to acceptable, to required. I suggest that these structures have dubious current productivity and are a relic of a time when the grammar of English allowed for a null expletive. Earlier stages of English (i.e., Old and Middle English), while not fully *pro*-drop,

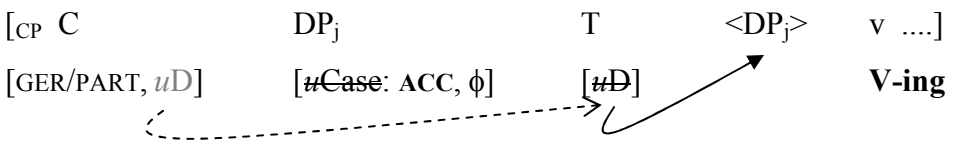
permitted null expletives (Fischer et al, 2000). Nonetheless, while null expletives disappeared in Early Modern English, the NOM absolute construction did not. Noteworthy is the fact that the construction continued to be perpetuated by prescriptive grammarians, so that we could assume that some speakers of English have "learnt" to allow for a null expletive in these obsolete constructions despite the fact that a null expletive is not an active property of the English grammar. This would explain the variation in judgments, as well as the telling prescriptive flavour. It also accounts for why NOM in non-finite CPs in English occurs in just these contexts. What is crucial is that ACC subjects start to appear alongside the NOM (and in some idiolects, totally replace it) in the 16th and 17th century (Poutsma 1929), so precisely around the time that English *lost* the null expletive. This is exactly what our analysis would predict.

So, some speakers allow insertion of [D, uϕ] to check the EPP of absolute constructions in English. The two options, with relevant feature-checking, are illustrated in (43). Given low linearization of the GER/PART feature, SV word order occurs in both cases.[55]

(43) a. <u>English adjunct gerunds with *pro*:</u>



b. <u>English adjunct gerunds without *pro*:</u>



In both (43a,b), C transfers its [uD] feature to its proxy T head. This feature checks either via *pro* insertion, with subsequent consequences (as seen also for Romanian), or checks against the

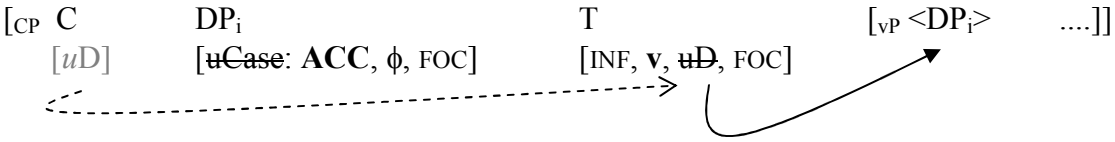
thematic subject DP. Either way, appropriate Case valuation ensues: NOM, if the probing domain contains [uϕ] (i.e., when the expletive is present) and ACC in its absence.

4.2.3 Variation in subject lexicalization

This paper argues that [D, uϕ] is required for NOM lexical subjects in non-finite domains. Nonetheless, variation is in principle expected both at the macro- (i.e. English versus Romanian type languages) but also at the micro-parametric level, especially since availability in the mental lexicon need not immediately guarantee insertion in the lexical array. The discussion in this section is by no means exhaustive. The purpose is not to provide a typology of language micro-variation with respect to subject lexicalization but, rather, to show parameters of variation in languages with active null expletives. I briefly focus on Ancient Greek and Old Italian.

According to Sevdali (2005, 2007), subject lexicalization in Ancient Greek infinitives indicates either switch reference or emphasis. To clarify, this is only an option in infinitives in the absence of control, when the subject is in some way contrastive. Given that some of these infinitives are adverbial or subject clauses, the author argues for the CP status of these infinitives and assumes Case to only be present when a Focus head projects in the clause and the interaction between Focus and T to license "contrastive Case". Suppose we take this to be essentially correct. Consequently, the EPP transferred from C as a [uD] feature can only be satisfied by a semantically salient DP and not *pro*, as null elements cannot be focused. Since in the absence of a null expletive there are no phi-features associated with the Probe, subject valuation is predicted to be ACC (see 44). This is exactly what we see in (9c) introduced in Section 1.1, which I do not repeat here for lack of space: the overt subjets, *se* 'you' and *eme* 'me', are both ACC.[56]

(44) <u>Ancient Greek infinitives with focused subjects:</u>

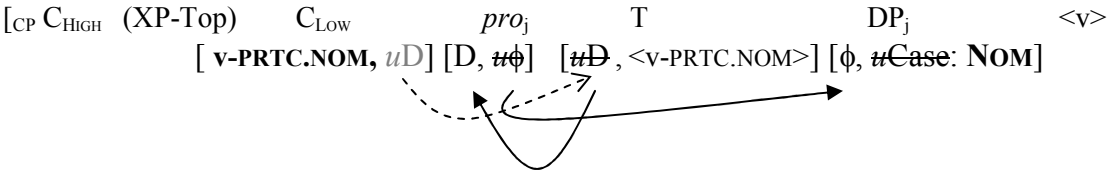


Interestingly, Ancient Greek absolute constructions tell a different story. Recall that subjects typically lexicalize as GEN, but the odd NOM is also an option, as shown in (24), repeated here as (45).

(45) [Entautha machomenoi kai basileus kai
there fighting.PRTC.PRES.**NOM**.M and king.**NOM** and
Kuros] Kte:sias legei (Xenophon, Anabasis: I, 8.27)
Cyrus.**NOM** Ktesias-NOM says
'While the king and Cyrus were fighting there, Ktesias says …'

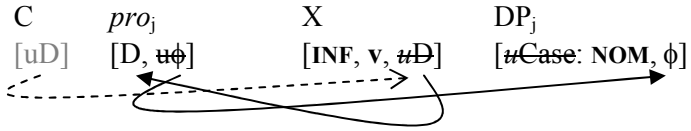
Note that in (45) there is no indication of subject dislocation to Spec,TP. Arguably here *pro* is inserted to satisfy the EPP and NOM valuation ensues for the compound lexical subject, as schematized in (46). Given linearization in (45), T-to-C movement is also assumed. In the presence of topics, as with (45), a split C is further assumed.

(46) Ancient Greek absolute constructions with NOM subjects:

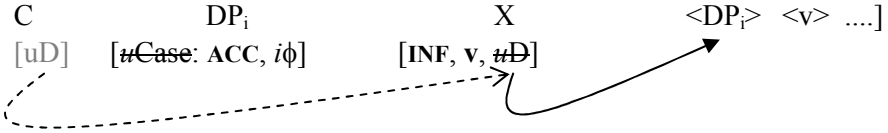


Moving on to Old Italian infinitives, lexical ACC and NOM subjects are both available but postverbal subjects are strictly NOM (Mensching 2000). Assuming that discourse conditions determined whether [uD] was checked via expletive *pro* or subject DP dislocation, I propose the representations in (47) for the data introduced in (2a,b). [57]

(47) a. Old Italian infinitives with *pro:*



b. Old Italian infinitives without *pro*



In (47a), the [uD] feature transmitted from C to its proxy head, say X, is satisfied by external Merge of the expletive, with NOM consequences for the subject, while in (47b), this feature is satisfied by the subject istelf, with ACC consequences. The fact that both pre- and post-verbal lexical subjects are licensed in the absence of any overt C marker suggests that the relationship between C and T is satisfied either via Agree (as in English gerunds, for example) or via T-to-C_{LOW}. In other words, X is potentially a C_{LOW} domain, akin to what we saw for Romanian gerunds, fact strengthened by the observation that preverbal NOM subjects were attested in Old Italian without Aux-to-Comp (LHM). This is shown in (48a) which is represented in (48b):

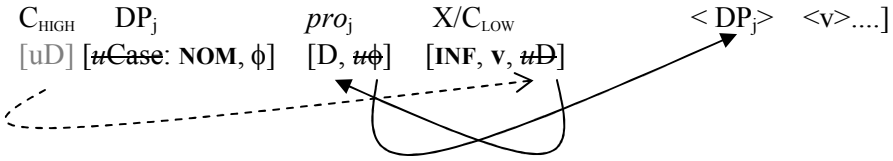
(48) a. perchè io disso [io aver trovato iscritto ...]

because I said [I to-have found written

"because I said that I had found that it was written ... "

(Mensching 2000:133, Malispini, ch. 42, 13th c; cf. Diez 1882:946)

b. Old Italian infinitives with *pro* and subject fronting *:*



The representation in (48b) indicates subsequent movement of the thematic subject into the CP, left-peripheral domain. I leave open the question of locus of movement given that we do not have the tools to determine interpretative differences.[58]

To sum up then, *pro*-availability does not automatically guarantee insertion in the lexical array and various language specific phenomena might either prevent or require the presence of the expletive in the Numeration. The main empirical claim here is that uninflected phasal domains permit NOM subjects only in languages with null expletives.

5. PRO

As stated in the Introduction, I assume that PRO bears a [uCase] feature. Conceptually, this is motivated by the argument status of PRO, as well as by its occurrence in domains that we have seen license Case. Empirically, there is plenty of literature correlating PROs Case with that of (secondary) predicates, quantifiers, and other overt associates bearing morphological Case (e.g. Adger 2007, Bobaljik and Landau 2009, Cecchetto and Oniga 2004, Landau 2008, Schütze 1997, Sigurðsson 1991, 2008). The challenge rests in explaining the facts.[59]

5.1. Formal features of PRO

The first task is to understand what makes PRO 'PRO'. Given that PRO and (c)overt pronouns are arguments, while expletives are not, I assume that the former but not the latter require a referential index, [R]. Note that referentiality is distinct from phi-features, as shown in (49). [60]

(49) a. Dan$_i$ saw him$_{j/*i}$ in the car.

b. Every woman$_i$ sat on the chair in front of her $_{i/j}$.

In (49a) *Dan* and *him* display identical ϕ-features but cannot be coindexed, while in (49b), her_i is a bound variable without reference to any specific individual. However, while pronouns have variable reference/extensions, their ϕ-features are fixed, so they have stable intensions. PRO, on the other hand, has both variable extension and variable intension. This asymmetry in represented in (50).[61]

(50) a. PRO: [D, uCase, αϕ, αR]

b. argumental *pro*: [D, uCase, iϕ, αR]

Furthermore, PRO's deficiencies cannot be 'uninterpretable' features (i.e., [uϕ], [uR]) since neither PRO nor anaphors act as Probes (i.e., they have to be in the c-command domain of their licenser and not vice versa). Hence, their variable status is reflected by [α]. Despite the fact that treating PRO uniformly as an [αϕ] runs counter to traditional GB proposals (Chomsky 1981, 1982) which assume a split between an anaphoric and a pronominal PRO, such an approach is in line with much current work (e.g. Kratzer 2009, Landau 2001, 2004, Sigurðsson 2008). It also arguably explains the silence of PRO whether controlled or not.

Once we assume that PRO is Case-marked, its lack of visibility must be otherwise accounted for. Sigurðsson (2008: 424) suggests that PRO "cannot carry 1st or 2nd person except under control" and argues that its silence is due to a lack of a π feature.[62] So, in Sigurðsson's spirit, I assume that [αϕ] (i.e. variable intension) is what prevents PRO lexicalization, whether controlled or logophoric, as in (51), despite its satisfied Case properties.[63]

(51) [PRO_i to improve $myself_i$] is a permanent goal.

To complicate matters, there do seem to be instances which arguably allow for PRO lexicalization. However, PRO can only obviate its silence when there are other features at stake: specifically, when PRO has wh-operator status (52b) and/or is focused/emphasized (52c, as well as (15)), the latter property bringing PRO in line with other anaphors which typically lexicalize only under emphasis. (52a-b) presents data from French, with (52a) showing *croire* 'believe' not to be ECM but a control predicate and (52b) showing *qui* 'who' in the stead of PRO, while (52c) is an example of focused overt PRO in Romanian.

(52) a. Je_i crois [(*Georges)/PRO_i être le meilleur].
'I believe to be the best.'

b. Qui crois-tu être le meilleur?
'Who do you believe to be the best?'

c. [$_{CP}$ A fi (* doar/numai)tu prezent la adunare]
[$_{CP}$ INF be only 2.SG.NOM present at meeting]
e de neconceput.
be.PRES.3SG of inconceivable
'It's inconceivable that you be the only one present at the meeting.'

In (52c), the undeveloped left-periphery of Romanian infinitives (see Section 4.2.1) prevents subject dislocation, so focusing is obligatorily materialized in-situ with an emphatic particle and/or stress. Note that this is different from the AG data where the lexical subject actually moves to Spec,TP/FocusP to check off the Focus feature.

Having discussed PRO's feature-al build up, as well as its silence, we can now address Case checking mechanisms in PRO contexts.

5.2 On Case and PRO

PRO lexicalization is extremely limited (e.g. never possible in Icelandic, Freidin and Sprouse 1991, Sigurðsson 2008, inter alia), so other factors have to be taken into account when determining the Case of PRO. Typically, these have focused on the Case of a nominal or adjectival predicate, quantifier, or some other syntactic object associated with PRO, as also discussed in Section 1.1.2. (53) offers some more cross-linguistic data.

(53) a. Strákarnir$_i$ vonast til [að PRO$_i$ leiðast ekki öllum$_i$
boys-**NOM** hope for [to PRO.**DAT** bore not all-**DAT**
í skóla]. (Icelandic, Sigurðsson 1991, in Landau 2003:492)
in school]
'The boys hope not to be all bored in school.'

b. Hún bað Ólaf$_i$ [að PRO$_i$ fara bara
she.NOM asked Olaf.**ACC** [to PRO.**NOM** go just
einn í veisluna]
alone.**NOM** to party.the
'She asked Olaf to just go alone to the party.'(Icelandic, Sigurðsson 2008: 414)

c. [að PRO vera ríkur] er ágætt.
to PRO.**NOM** be rich.**NOM** is nice
'It's nice to be rich.' (Icelandic, Sigurðsson 2008: 417)

d. Ivan ne znaet [kak tuda PRO dobrat'saj
Ivan.**NOM** not know [how there PRO.**DAT** to.reach
odnomu]

alone.**DAT**]

'Ivan doesn't know how to get there by himself.' (Russian, Landau 2008:884)

e. [PRO philanthropon] einai dei

friendly.**ACC**.3SG to-be must-3SG

'One needs to love people.'

(Ancient Greek, Isocrates, II:15. Adapted from Sevdali 2005: 137)

The idea here is that PRO agrees with its predicate, quantifier, and so on, so would bear the same Case value. However, it turns out that such an assumption is problematic. For instance, Landau (2008) argues on the basis of data like (53d) that non-finite C assigns DAT Case in Russian. Nonetheless, this is difficult to maintain in view of (54) where we can see that Russian predicates also surface with Instrumental Case.

(54) a. Harasho [$_{CP}$ PRO byt bogatym]

nice be.INF rich.INSTR

'It is nice to be rich.'

b. (Ja) byl bogatym.

1.SG.M.NOM be.PAST rich. INSTR

'I was rich.'

c. (Ja) budu bogatym.

1.SG.M.NOM be.FUT rich. INSTR

'I will be rich.'

d. (Ja) bogatiy.

1.SG.M.NOM rich.NOM

'I am rich.'

First, in (54a), the predicate is marked INSTR so following the logic of agreement, PRO would also bear INSTR Case. This spells trouble as now we have non-finite C in Russian indiscriminately assigning DAT or INSTR. Second, the data in (54b-d) involve finite CPs, yet the adjectival predicate in (54b-c) still occurs in the INSTR, despite the NOM subject. This suggests two things: (i) Case-transmission between the subject and the predicate is not obligatory and (ii) INSTR Case is a property of the predicate domain, perhaps correlated with presence or absence of the copula, rather than a property of C (or aspectual properties, as suggested in Richardson 2007). In the absence of conclusive evidence of Case transmission, we lack strong evidence for either INSTR or DAT PRO in Russian. [64]

The point here is that the morphological Case of (secondary) predicates need not agree with that of the DP (see also Richardson 2007) and may not always be a clear indication of what goes on with PRO. We could be dealing with dedicated predicative Cases, as suggested by Irimia (2009), or perhaps default Case, as hinted at by Schütze (1997) for English ACC pronominal predicates. In any case, the empirical data are not as reliable as we would like.

So where does that leave the Case of PRO? I suggest that we rely instead on (i) the morphological Case of quantifiers as, assuming these are part of the nominal domain, so closer to PRO, they represent an instance of Case concord, (ii) Case available to the domain of PRO occurrence and (iii) lexicalization of PRO. Icelandic data from (i) supports quirky/inherent Case on PRO (references cited). With regards to (ii), there is evidence for structural NOM from Icelandic where, in addition to the presence of non-default NOM on predicates (see data in (23a-b)), structural NOM occurs on objects with quirky subjects; to this purpose, consider the Icelandic example in (55) from Freidin and Sprouse (1991:409) reintroduced in Legate (2008: 86).

(55)	Að	PRO	batna	veikin	er	venjulegt.
	to	PRO.DAT	to.recover.from	the.disease.NOM	is	usual

'To recover from the disease is usual.'

Crucially, (55) shows that structural NOM is available in Icelandic PRO infinitives, such that, in the absence of quirky Case, PRO would bear a NOM value. In addition, we saw 'lexical' PRO occurring in the NOM form in both the Romanian and the French examples in (52).

To conclude, there seems sufficient evidence to warrant an account for structural NOM on PRO in non-finite domains.[65] The next section addresses this issue but first a disclaimer. Specifically, given the pragmatic role attributed to expletive *pro*, this nominal is never selected from the lexicon in derivations with PRO: when null, a DP cannot be relevant for discourse properties, so expletive *pro* would be futile with PRO subjects. Which means that an alternate analysis than the one developed for lexical subjects in Section 4 is in order. [66]

5.3 Deriving NOM PRO

It is well-known that PRO is available to CP not TP (IP), hence exclusively phasal, domains. Now, according to the Phase Impenetrability Condition (Chomsky 2000, 2001), only the Edge of the Phase is visible to the outside domain. Since PRO is not an Operator, it will fail to raise to the Phase Edge. However, since PRO has both variable intension and extension, it needs a value for these features (i.e. a referential and a phi-index), so must associate with relevant material outside of its Phase. This apparent contradiction provides us with conceptual motivation for postulating the presence of a Logophoric Operator (OP_{LOG}) in Spec,CP in all such derivations.[67] This OP_{LOG} has a human orientation, hence phi (including person) and referential features controlled either

by discourse (D), with the result of a [ϕ_D, R_D] value, or a matrix argument, with the result of [ϕ_i, R_i]. The presence of OP_{LOG} ensures that PRO is locally bound (as is fit for an anaphor) and solves the Edge problem. Interestingly, the OP_{LOG} provides an elegant way of reconciling some otherwise apparently contradictory data, so is also empirically motivated.

Baltin (1995) discusses data of the type in (56) which essentially shows that PRO does not raise to Spec,TP (i.e. does not move out of VP) in English. If it did, the quantifier in (56b) would be adequately c-commanded and the outcome should be grammatical, contrary to fact.

(56) a. [To PRO <u>all</u> leave now] would be unthinkable.

b.*[<u>All</u> to PRO leave now] would be unthinkable.

Conversely, the legitimacy of (57) seems to indicate PRO movement outside of its initial Merge position (i.e. to Spec,TP of the raising predicate) or the reflexive should be ruled out.

(57) $John_i$ promised his psychologist [$_{CP}$ PRO_i to seem to $himself_i$/*herself [<PRO_i> to be competent] before leaving therapy]. (example offered by LI reviewer)

The presence of a Logophoric Operator in Spec,CP provides a straightforward account for both the ungrammaticality of (56b) and the well-formedness of (57) without dislocation of PRO to Spec,TP. OP_{LOG} licenses the reflexive in (57) just as it licenses PRO itself (see (58)) - all of these variables receive a [ϕ_i, R_i] value from *John* in the matrix clause, with in-situ PRO. However, it does not license *all* in (56b) as it is not an immediately c-commanding subject of the quantifier.[68]

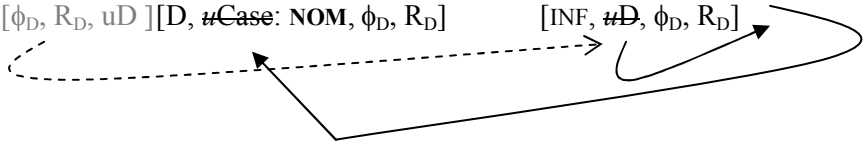
(58) $John_{\mathbf{i}}$ promised his psychologist [$_{CP}$ $OP_{LOG\mathbf{i}}$ to seem to $himself_{\mathbf{i}}$/*herself [$PRO_{\mathbf{i}}$ to be competent] before leaving therapy].

I further suggest that OP_{LOG}, as a syntactic object equipped with phi-features, plays a role in NOM Case valuation. The proposed analysis is similar in spirit to what we have seen for lexical subjects and expletive *pro* with the difference that the Operator itself is not a Probing constituent. Rather, given requirements of Spec-Head agree, these features are also present on C and, by feature-inheritance T. So, crucially, part of the domain A-Probing PRO. If correct, such an account would amount to structural NOM values cross-linguistically in the absence of inherent Case on PRO.[69]

In (59), I illustrate with previously introduced data from Icelandic.

(59) a. [að PRO vera ríkur] er ágætt.
to be rich.**NOM** is nice

b. [$_{CP}$ **OP_{LOG}** C PRO T [$_{vP}$ <PRO>]
[ϕ_D, R_D] **að** [ϕ_D, R_D, uD][D, ~~*u*Case~~: **NOM**, ϕ_D, R_D] [INF, ~~*u*D~~, ϕ_D, R_D]



Note that a central tenet of the above analysis is the fact that PRO is A-Probed, hence involved in an A-chain, with dislocation to Spec,TP. However, for English, once we've assumed PRO does not dislocate to Spec,TP, hence is not A-Probed, the account in (59b) cannot be maintained. Consequently, NOM PRO becomes problematic in English as does the fact that PRO stays in-situ and the question is wherein lies the difference. An immediate possibility that comes to mind is that in Icelandic and Romanian, for instance, there is overt evidence for a C domain projecting separately from the T domain in control constructions.[70] In English such evidence is missing. Compare the data in (60a-b).

(60) a. Ég harma **að** þegar hafi María lesið þessa bók.
I regret that already has Maria read this book

'I regret that Mary has already read this book.' (Icelandic, Roberts 1993:59)

b. [$_{CP}$ (*For) to PRO$_{arb}$ to give up now] was unthinkable.

The Icelandic complementizer *að* is not specific to control infinitives but occurs equally with finite domains, see (60a), where its function is equivalent to English *that*. Crucially, it is a C element. In English, on the other hand, the infinitive complementizer *for* cannot occur in control structures, see (60b). Now, if C projected independently of T in English infinitives, we would have no principled explanation for why *for* is ruled out in (60b).

Suppose further that the impossibility of *for* lexicalization is indicative of a merged C+T domain, in which these two heads fail to project independently. Note that in generative grammar merged heads presuppose (i) feature sharing (i.e. an infinitive value here) and (ii) lack of an intervening specifier (e.g. Culicover 1999, Giorgi and Pianesi 1997, Haider 1988). Given that PRO does not dislocate to Spec,TP, there is no intervening specifier. Failure of these heads to launch separately would thus of necessity denote the absence of a [uD] feature on C, with the effect of no A-Probe for PRO.[71] The [uCase] feature on PRO thus remains unchecked in syntax but deletes upon Transfer. The phasal domain is the necessary and sufficient condition for Case licensing so that active DPs are unequivocally de-activated at the phase level, if not already A-probed for.[72] Hence, a derivationally unchecked Case feature will be unproblematic for LF. In addition, given that PRO is in the c-command domain of the OP$_{LOG}$, its intension and extension will be appropriately valued at LF. For a schematic representation, see (61).

(61) <u>English Prepositionless CP infinitives</u>

[$_{CP}$	**OP$_{LOG}$**	**C/T**	PRO	vP]
	[ϕ_D, R$_D$]	**to** [INF]	[D, ~~*u*Case~~: **ACC$_{DEF}$**, ϕ_D, R$_D$]	

This analysis of Case-checking whereby Spell-Out can erase [uCase] from arguments without causing the derivation to crash does not renege on the Case Filter since crucially lexicalization is ruled out in these contexts, as is well-known and seen in (62).

(62) a. *To me/her/him give up now is unthinkable.

b. For me/her/him to give up now is unthinkable.

Note that (62a) can only be a Case Filter violation as nothing requires the presence of PRO in this derivation. Compare with (62b), where C projects independently of T, the DP is A-Probed and the ACC form is inserted as discussed in Section 4.2.2.

To sum up, I have argued for the presence of a Logophoric Operator in all control constructions. If [uD] is present on the phase head, PRO will be A-Probed and assigned a NOM value given the presence of phi-features in the derivation. If, nonetheless, this feature is absent as postulated for English, PRO will not be A-Probed. In this case, [uCase] is checked and erased upon Transfer without valuation and/or Case form.

6 Predictions beyond non-finite CP domains

If this analysis is on the right track, we can in principle expect to see languages (or dialects or specific grammatical constructions) where subjects and objects have the same Case or where subjects can be ACC in finite CP domains and objects can be NOM with phasal v*P. Recall that nothing a priori associates T with NOM and v* with ACC and, in fact, we have already seen that other heads can act as A-Probes for thematic subjects if immediately selected by a phasal C head (e.g. Aspect). Interestingly, these predictions are borne out.

In Khoekhoe (Central Khoisan, spoken in Namibia), for example, the subject and object both have the same Case in interrogative contexts, as illustrated in (63).

(63) axa-p-a ko !^{x}o ani-s-a ? [73]

child-M.SG-OBL RCT.PST catch bird-F.SG-OBL

'Did the boy catch the bird?' (Compton 2005:11)

While this Case is referred to as 'oblique' in the descriptive literature, it is valued in the absence of [uϕ] on either T or v, so I take it to be an instance of ACC on both the subject and the object DP. This is reminiscent of the Imbabura Quechua data in (19) and, generally, discussion in Section 1.2. Crucially, Case values depend on the morphosyntactic properties of the probing domain and are not specific to (C)-T or v*, a point also supported by NOM Case values.

Returning to West Country varieties, including Newfoundland English, these show what is referred to as "pronoun exchange" in the descriptive literature, such as use of NOM where one would expect ACC. Consider (64).

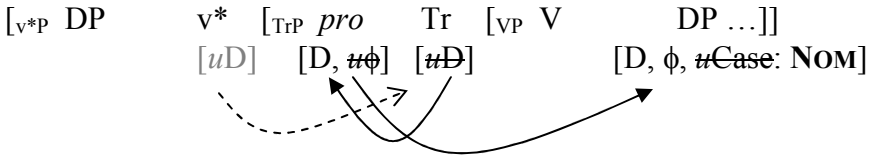
(64) a. She pushed I down.

b. Pass he over to me.

The typical explanation in the literature is that NOM replaces ACC whenever there is emphasis. Under the present proposal, the object DP surfaces with NOM if and only if the probing domain involved in assigning Case (i.e., v*) contains [uϕ]. Maximal rhematic focus obtains when a DP is deeply embedded within the predicate domain. Suppose that whenever there is need to focus/emphasize the object, a null expletive *pro*, available to the mental lexicon of these dialects as already discussed, is merged in the specifier of Tr (the proxy head of v*) to satisfy [uD], thus

preventing the object from displacement. This would ensure an "inverted-object" construction similar to the inverted subject constructions of Romance which have been argued by Rizzi (1997), among others, to involve focusing of the subject.[74] Maximal embedding of the object yields the desired pragmatic effects, while at the same time guaranteeing NOM, given the need of expletive *pro* to check its [uϕ] features, as in (65). In addition (65) shows that syntactic licensing of objects is distinct from selection of objects (see also Chomsky 2007).

(65) NOM objects with expletive *pro*:



These data all point to a dissociation between specific syntactic heads and particular Case values and strengthen the exclusive relationship between NOM valuation and the presence of ϕ-features.

7 General Implications for Case

Following insights in Vergnaud's (1977) seminal work, Chomsky (1980) proposes the Case Filter which is initially viewed as a PF requirement given its focus on lexical NPs (and later A-chains). However, since wh-phrases have Case, Chomsky (1981) revises the Case Filter to include variables and, with the PF motivation gone, capitalizes on work by Aoun (1979) and suggests instead that the Case Filter is motivated by LF, with Case rendering an argument visible for theta-role assignment. Lasnik (2008) revisits this split and, based on the fact that ellipsis (a PF process) "repairs" otherwise ungrammatical data, see (66), concludes that "the Case Filter is, in fact, a PF requirement," Lasnik (2008:35).

(66) a. *I alleged John to be a fool.

b. John, I alleged to be a fool.

c Mary did [~~allege John to be a fool~~] too.

Specifically, while (66a) is ungrammatical in view of the fact that *John* fails to receive Case, (66b-c) are well-formed. In (66b), A-bar movement is assumed to satisfy the Case Filter (for discussion see Kayne 1984 and Bošković 1997), while in (66c) deletion, a PF process, must be responsible for repairing the violation in (66a) as topicalization is ruled out. Hence the violation was necessarily a PF one to begin with.

Lasnik's (2008) conclusion is in line with recent work (Sigurðsson 2008, 2009) arguing for Case as a PF morphology property, with no LF or syntactic counterpart, but runs counter to proposals where Case is still assumed structurally relevant (Legate 2008). Furthermore, Lasnik's (2008:35) final comment as to "what it means for items with no phonetic content (PRO, WH-trace) to have to obey a PF requirement" is left for future consideration.

The analysis in this paper supports Lasnik's (2008) view while also maintaining the syntactic relevance of Case. Since the NOM versus ACC split is argued to be dependent on the presence versus absence of [uϕ], respectively, *Case valuation* is *syntactically determined*.

The presence of [uCase] as a deficiency on nominal arguments is postulated for visibility requirements within the computational system. This follows once we observe that theta-marked DPs can be A-Probed, while non-argumental DPs cannot. However, [uCase] is irrelevant to LF in the same way that agreement is. Both [uCase] and [uϕ] lack content and must delete prior to LF. Since Case and agreement values are both irrelevant to LF, it makes sense to assume they automatically check upon Transfer if they have failed to check within the derivational process.

On the other hand, *valuation* is relevant to PF. Feature complexes serve as instructions to morphological insertion, along the lines of DM models. I assume that the presence of [uCase] requires specific valuation instructions (i.e. feature complexes) or else insertion will not proceed.[75] Specifically, DP arguments must be A-Probed or they will fail to lexicalize. This, in effect, means that overt DP arguments can never bear default Case or, to put it differently, there is no default syntactic Case.[76] Returning to Lasnik's last comment, [uCase] is then irrelevant for null arguments like PRO or *pro*, as there is no lexical insertion. But the crucial point is that syntax is not privy to this irrelevancy as the computational component cannot tell whether something will be subsequently lexicalized or not (i.e. is null or not). On the other hand, non-argument DPs lack a [uCase] feature so no Case value can ever be associated with such DPs. Nonetheless, PF has to insert a vocabulary form, so will insert the language default (à la Schütze 2001). A schematic representation is offered in (67).

(67) (i) DP_{θ} [uCase]:

- inherent Case or A-Probed (lexical DP, referential *pro*, PRO)
  → specific valuation instructions sent to PF
  ✓ DP [~~uCase~~: $\mathbf{K_1/ K_2/.../ K_n}$]
- not A-Probed (PRO only)
  → $*DP_{\textbf{lexical}}$ [~~uCase~~: **?**];
  ✓ no form (i.e. silence) at PF

(ii) DP → no [uCase]
✓ morphological default Case form at PF

In effect, the Case Filter stands as initially postulated. But, at the same time, Case is still present in syntax, if only as a deficiency driving valuation and determining lexicalization.

8 Conclusion

This paper is an attempt at refining our understanding of Case licensing and valuation in view of recent Minimalist advances and DM models. It distinguishes between syntactic/abstract Case, construed as a [uCase] feature on DP arguments for computational visibility purposes, and morphological Case, seen as equivalent to DP lexicalization forms. It assumes that [uCase] is synonymous to the Case Filter and is driven by PF rather than LF considerations. While [uCase] checks and erases upon Spell-Out, syntactic valuation of this feature is required for lexicalization purposes. Syntactic valuation obtains either if [uCase] is checked upon first Merge (inherent Case value) or if the DP is subsequently A-Probed (structural Case value). Morphological default Case forms (as in Schütze 1997, 2001) cannot satisfy the absence of syntactic Case values, hence cannot replace the Case Filter, and are exclusively the domain of non-argument DPs.

Case licensing, understood as checking of [uCase], is shown to be a property of phase heads (i.e. points of Transfer) and not of agreement (or tense, or default options). Valuation as NOM or ACC is argued to be a dynamic property of the entire probing domain, rather than being associated with finite T and phasal v, respectively. Non-finite domains, while lacking agreement, are cross-linguistically seen to license both NOM and ACC lexical subjects, while certain predicate domains may license NOM objects. Empirical facts point towards a strong correlation between NOM and agreement/phi-features, which in itself is not a novelty, but no such correlation holds insofar as ACC is concerned. Probing domains that are phi-complete (crucially containing π) associate with NOM values, while simple [uD] A-Probes trigger ACC. While this account departs from standard assumptions correlating structural Case with agreement, it does maintain a dichotomy in which agreement is the crucial ingredient.

In the absence of ϕ-features on (C)-T, the Probe is either a [uD] deficiency or a null expletive. Null expletives are argued to be felicitous primitives of Universal Grammar with a

role in Case valuation. Their presence in the derivation guarantees a NOM Case value on their associate. In non-finite CPs, languages without null expletives will license at most ACC subjects, while languages where null expletives are an active part of the grammar trigger NOM DP values whenever *pro* is present in the lexical array. This option is strictly semantico-pragmatically determined, as discussed.

NOM, then, is not a primitive of finite or inflected T but the spell-out of a bundle of features, conspicuously available to uninflected T domains as long as the ϕ-specification is met. Overall T (or I, more generally) is typically associated with NOM, and v* with ACC, because the issue of finiteness and, implicitly, the presence of a [uϕ] Probe on an inflectional head is sorted out at the level of the C phase and not the v* phase.

An analysis which assigns NOM to finite (C)-T and ACC to v* a priori cannot readily explain the language facts discussed in this paper. On the other hand, the analysis I have proposed here, based on feature-al specifications of probing domains, allows for the flexibility needed to capture cross-linguistic variation at both the macro- and micro-parametric levels, while at the same time having the conceptual merit of moving the burden of Case values away from some poorly understood independent property of (C)-T and v*.

In addition, the analysis provides a systematic account of argument lexicalization forms. These overt DPs take shape based on feature complexes shipped off from the syntactic component. PRO remains invisible regardless of whether it receives a Case value in the computational system, with the exceptions discussed. Its silence is linked to its intrinsic feature-al composition (i.e. lack of inherent intension and extension), rather than to lack of a Case value. Our account allows for a lexical Case value, a structural NOM value, or no Case value for PRO, with grammaticality throughout as the Case Filter is inoperative on invisible DPs.

Endnotes

[*] Acknowledgements forthcoming.

[1] In addition, sentences like ***I alleged John to be a fool***. (Lasnik 2008: 34) would be predicted grammatical, contrary to fact.

[2] A line of reasoning that is hugely indebted to the work of Marantz (1991/2000) and followers (e.g. Harley 1995, Schütze 1997, 2001).

[3] I use the term 'subject' to refer to the structurally highest DP argument within the predicational domain that is 'active' (i.e., can act as a Goal). This DP will enter an Agree relationship with the T domain, provided there is a Probe searching for nominal related features within that domain. Once an Agree relationship is established between the T domain and the subject, whether this DP dislocates to Spec,TP or not depends on language (or construction) specific properties, to be refined later. Crucially, location in Spec,TP is not the defining property of subjecthood.

[4] While in Romanian clausal gerunds like (1a) cannot occur in argument positions, they are not labelled participles as the language has distinct morphology for both categories.

[5] [uF] is used to represent uninterpretable formal features. Checked features are striked and traces are indicated via angled brackets. The following abbreviations are used: Agr: agreement, DFT: default, AUX: auxiliary, ASP: aspect, SBJ: subjunctive, INF: infinitive, GER: gerund, IMP: imperative, DES: desiderative, PRES: present, PRF: perfect, PRTC: participle, PST: past, AOR: aorist, FUT: future, COP: copula, CL: object pronominal clitic, SCL: subject pronominal clitic, SU: subject, OBJ: object, SG: singular, PL: plural, NOM: Nominative case, ACC: Accusative case, DAT: Dative case, GEN: Genitive Case, ABL: Ablative Case, INSTR: Instrumental, ABS: Absolutive Case, ERG:

Ergative Case, REFL: reflexive, M: masculine, F: feminine, N: neuter, LOG: logophoric, OP: operator, π: person, #: number, g: gender, and PE: a preposition associated with Romanian direct objects that have an <e> type denotation (see Cornilescu 2000a).

[6] To avoid any confusion given that in Old Italian *lui* was also sometimes used for the NOM (e.g. in Dante's work), Mensching (2000:208) points out in Footnote 6 that Boccaccio strictly distinguishes between *lui/lei* (ACC) and *egli/ella* (NOM) in the Decameron.

[7] Nothing hinges on the exact label of the verbal head assigning Case to a VP internal DP; this can be v, the verbalizing head of Marantz (2001), T_o of Pesetsky and Torrego (2004a), Tr of Bowers (2002), AGR-O of Lasnik (2003), or V of Chomsky (2007, 2008). Crucially, it is a verbal head involved in the stacking of events which is lower than the theta-assigning head responsible for the insertion of subjects, otherwise labelled Voice in Marantz (following Kratzer, 1996), v in Pesetsky and Torrego (following much of Chomsky's work who in turn follows Marantz), Pr(ed) in Bowers, and v* in Chomsky (2007, 2008) to distinguish it from unaccusative v. Following Bowers (2002), in this paper I use Tr for the complement of v* and take this to be a functional head. See Pesetsky and Torrego (2006) for reasons as to why only functional heads may act as Probes and establish Agree.

[8] I show T as the proxy head for C, as standardly assumed. However, it is unlikely that T is always involved. Specifically, Romanian gerunds (Avram 2003) and infinitives in Ancient Greek (Sevdali 2005) have been argued to have aspectual, rather than temporal properties, so in those cases C presumably discharges it's A-properties on Asp, rather than T (see Section 2).

[9] For derivations with expletive *pro* checking EPP ([uD] on T) in Spec,TP, the DP Goal is phi-Probed twice: once by the expletive, once by T. Either way, NOM is expected.

[10] For ABS as equivalent to NOM, see also Bittner and Hale (1996).

[11] A reviewer points out that in the absence of a Case Probe it would be difficult to explain the ungrammatical data in (i):

(i) a. * Each child was spoken one secret word [to t].

b. [To each child] was spoken one secret word t.

c. Each child was spoken [to t].

d. * [To each child] was spoken t.

If (ia) is ruled out by some sort of locality constraint, (id) seems to be ruled out by the failure to check T's Case deficiency. However, note that in (id) [uϕ] also has not been checked. PPs are opaque, phasal domains (Abels 2003) and DPs contained within them cannot check uninterpretable ϕ-features. Consequently, the fact that pseudo-passives do not pied-pipe in English, as in (id), does not represent clear evidence for Case as an independent Probe. However, given the well-formedness of *To each child was told three stories*, we could follow Branigan (2005) and assume that unchecked [uϕ] results in default agreement rather than ungrammaticality. If so, then (id) may fail because of T's unchecked Case. Nonetheless, even if we insist on a Case Probe, this could only be construed as a free rider on [uϕ]. The interdependency of [uCase] and [uϕ] is supported by the fact that languages which divorce A-type feature checking do so in one way and one way only: EPP-checking versus Case and ϕ-feature checking (see also discussion in Schütze 1997 on EPP checking independent of Case checking). Note that this interdependence entails that [uCase] as a Probe is non-extant on P and v* heads, which lack [uϕ]. This could explain why one and the same P or V can be both transitive and intransitive. The idea that ACC Case need not be discharged goes back to at least Chomsky (1995) and is in sharp contrast to data like (id). Summing up, to the extent that [uCase]

occurs in the derivation, it will be accompanied by [uϕ]. Note also that [uCase] would be absent in non-finite C domains lacking [uϕ] so there is no point in construing this as a separate Probe.

[12] In addition to work by Chomsky, for recent proposals on the relationship between Case and agreement in Minimalism, see also Baker 2008, Branigan 2005, Landau 2004, Legate 2008, Markman 2009, and Schütze 1997, 2001.

[13] Note that 'agreement' is used here to refer strictly to phi-feature agreement and not cases of object agreement that reflect on the definiteness of the DP object (e.g. Hungarian, Bartos 1997, Coppock 2004, Farkas p.c., Chichewa and Bantu more generally, Baker 2008, Slave, Rice 1989, Ndebele, Alboiu and Avery 2009). For instances, in Hungarian, transitive verbs with definite/specific objects use a paradigm that is distinct from that used for transitive verbs with indefinite objects and intransitives; however, agreement is not with person and number (references cited above). I also discount head-marking languages of the Bantu and Iroquoian type, where object DPs are adjuncts rather than arguments (Baker 1996, Markman 2009), as it is unclear whether these bear structural Case (these are not morphologically Case marked). Incidentally, note that in some of these languages it is unlikely that the object marker denotes an instance of agreement. Kramer (2010) points out that PP arguments can be referenced by the object marker in Amharic, regardless of whether ACC Case is at stake, while Woolford (2003) argues that PPs do not participate in agreement.

[14] Note that under this division of labour, inflected infinitives in European Portuguese of the type in (i) from Raposo (1987: 86) would qualify as 'finite'.

(i)	Será	difícil	[eles	aprovarem	a proposta].
	'It will be	difficult	they	to-approve-AGR	the proposal.'

However, this is not why I do not discuss this particular construction here. Terminology aside, the Nominative subject in (i), *a proposta* 'the proposal', could be licensed by either agreement, the phase head, or both. See both Raposo (1987) and Ambar (2006) for evidence that these inflected infinitives are CP phasal domains.

[15] Note that these are T heads which lack inflection entirely throughout a particular paradigm. Cases of accidental gaps in an otherwise overt paradigm are not considered ϕ-featureless. Thus, for English I assume, as is standard, that finite T has ϕ-features despite the fact that singulars may or may not show overt agreement morphology and plurals typically show no agreement.

[16] Various authors assume P to be external to CP but to have a role in activating Case-assigning properties of the infinitive Inflectional domain, properties intrinsically related to agreement (e.g. Haegeman 1985, Ledgeway 1998, Motapanyane 1995, Raposo 1989). This is untenable under the current approach which assumes no [uϕ] on T in these CPs (see also Schütze 1997).

[17] Absolute participial constructions typically show agreement in gender and number in Romance, on a par with participles in passives. Chomsky (2008) states that inflection on participles is simply a morphological effect of agreement, with no significance in the syntactic computation. Arguably then, ϕ-features on (C)-T are not present in absolute participial constructions in Romance either and, crucially, π is absent.

[18] I do not discuss cases where PRO bears the Case of its controller as in these instances it is arguably difficult to maintain Case-assignment within the non-finite clause. Presumably, some Case transmission mechanism is at stake, implementable in a variety of ways (e.g. Hornstein 1999, Landau 1999, 2008, Pires 2007, inter alia).

[19] Note, however, that the author takes this to be an instance of default NOM Case.

[20] While Genitive absolute is the standard Case (Sevdali 2007), an ACC value is possible with impersonal verbs (Sevdali, personal communication). I assume the Genitive to be lexical.

[21] While the *pro*-drop nature of Romanian might make the covert subject amenable to either a PRO or *pro* analysis, the obligatorily anaphoric nature of '*x*' (hence, unspecified phi-features) rules out *pro*, a pronominal element with interpretable phi.

[22] A related argument can be made from the behavior of Russian numeral subjects. Bošković (2006) discusses agreement patterns of these nominals which can either be GEN(itive) (i.e., genitive of quantification) or NOM. While GEN subjects can occur with either a default singular or show plural agreement, if the numeral subject is NOM, agreement is obligatory.

(i)	a.	Pjat'	ètix	devušek	rabotali/rabotalo	tam.
		five	these.GEN	girls.GEN	worked.PL/SG	there
	b.	Èti	pjat'	devušek	rabotali/ * rabotalo	tam.
		these.NOM	five	girls.GEN	worked.PL/SG	there

The author argues against optional agreement and concludes that agreement forces NOM Case on both NOM and GEN numerals. In effect, ϕ-Probes trigger NOM values.

[23] Uriagereka (2006, 2008) also focuses on the relevance of π in relationship to Case.

[24] NOM includes non-default ABS, as discussed in Legate (2008).

[25] For other references where Tense on T is a C attribute see also Dobrovie-Sorin (1994), Farkas (1992), Krapova (2001), Roberts and Roussou (2002), and Varlokosta (1994).

[26] On the phasal status of DPs - which explains structural Case licensing in the Hungarian possessives - see Chomsky (2007, 2008), following Svenonius (2004), among others.

[27] See also Dobrovie-Sorin (1994) and, especially, Motapanyane (1995) for a more comprehensive discussion that the gerundive verb in Romanian moves to the C domain. See Section 4.1.1 for remarks on the status of preverbal subjects in Romanian.

[28] Concerns as to how reduced CPs fit in with Chomsky's (2007, 2008) claim of Tense as a phasal property can be readily dispelled. If I understand Chomsky correctly, the claim made is that temporal properties of T are dependent on C and not vice-versa. Insofar as C is concerned, it simply needs a proxy head to discharge its uninterpretable features. From a theoretical standpoint, there seems no principled reason to assume this proxy head could not be Asp, or some other functional head.

[29] The question arises as to whether *all* ACC arguments move (whether subjects, direct or indirect objects, and objects of prepositions) given the [uD] Probe specification. Equating the EPP with [uD] on T (as in recent Minimalist developments) does not necessarily entail that [uD] triggers movement with all heads. Whether we should turn this conditional into a bi-conditional is to my mind an interesting but unrelated question. What is crucial here is that the DP is probed for (i.e. the operation *Agree* is established). Whether movement ensues or not is a separate matter.

[30] Crucially, this also explains why, contrary to A-bar movement, A-movement operations are prohibited outside of their phasal domain (see Chomsky 2000 et seq.).

[31] This proposal is similar in spirit to Legate's (2008:85), who states that "abstract Case features are determined in the syntax and realized in a postsyntactic morphology."

[32] Note that Manzini and Savoia (2008) put forth a non-feature-based theory where they equate NOM with D(efiniteness) and ACC with N projections in the sentential tree. While very different from the proposal here, there is common ground in that T and v are no longer the locus of these Case values and also, in that NOM presupposes some deictic property.

[33] Chomsky (1981) introduces *pro*, an empty category that does not always bear the same array of featural specifications. On the one hand, there is the null subject of *pro*-drop languages, a nominal element that is referential and ϕ-complete and enters the derivation in theta-assigning domains, on the other hand, there is a null expletive, which is non-referential, lacks intrinsic ϕ-values and cannot be merged in theta-related positions. I assume that argumental *pro* is featurally specified as [D, iϕ], so never a Probe, while the null expletive is featurally specified as [D, uϕ].

[34] As a D category, null expletives are potentially also specified for [uCase]. Nothing crucial hinges on whether this feature is present (or not), so I leave it out for ease of exposition. Chomsky's (1995:288) standpoint is that expletives are Caseless nominals but Chomsky (2004), following Lasnik (1999), revises this assumption for *there*, so the issue is unclear.

[35] Note that Chomsky (2008:146) does not rule out Spec as Probe in "special cases" (presumably whenever the Spec is non-branching and so c-command is not violated) and Chomsky (2004: 114), takes expletive *there* to be "a simple head, not formed by Merge".

[36] For languages where I could not locate discussion for independently (non-control) Case-marked PRO, a hyphen is used. For Ancient Greek, Czech, German, Icelandic, and Russian, the Case of PRO is based on indirect evidence (e.g. Case on non-verbal or secondary predicates, quantifiers, and so on). For Romanian, NOM value reflects lexicalization of PRO, as well as lack of structural ACC for subjects regardless of finiteness issues. For English, ACC Case of PRO (e.g. Schütze 1997) is assumed based on its distribution (i.e. environments that otherwise license ACC subjects). See Section 5 for relevant discussion. Irish lacks conclusive evidence for a null expletive. In fact, Legate's (1999) analysis and discussed asymmetries with Romance provide evidence against it, as do analyses where Spec,TP is occupied by the predicate (Oda 2002).

[37] Alexiadou and Anagnostopoulou (1998) argue against null expletives (see also Manzini and Savoia 1997, 2002), suggesting instead that the EPP can be checked by verb raising to T in languages without lexical DPs in Spec,TP. Crucially, this option is only available to languages where verbal agreement morphology includes the relevant nominal features required by the EPP. Since in non-finite domains verbs lack any nominal features, EPP checking must be assumed to resort to *pro* here. For further arguments for null expletive *pro* in Minimalism, see Cardinaletti (2004), Rezac (2004), Rizzi and Shlonski (2005), and Torrego (1998), among others.

[38] Note that when *pro* is part of the lexical array, "Preference of Merge over Move" (Chomsky 2000:104) guarantees insertion of the null expletive in Spec,TP as opposed to dislocation of the thematic subject. Alternatively, Uriagereka (2002) argues that any lexical item present in the numeration must make it to LF as part of general conditions of Inclusiveness and Recoverability. Either way, inserting *pro* into the derivation has theoretical precedence over subject dislocation.

[39] 'Specificity' here refers to definite DPs or indefinite DPs with a referential, partitive, or a generic collective reading (see de Hoop 1996). For examples see (i) from Alboiu (2000:32):

(i) a. definite DP:

Prietena	mea	a	obținut	o bursă	în Franța.
friend.F.SG-the	my	AUX.3PL	obtained	a fellowship	in France

'My friend got a fellowship in France.'

b. referential indefinite DP:

O	prietenă	de-a	mea	e	lingvistă.
a	friend.F.SG	of-GEN.F	my	is	linguist.F.SG

'A friend of mine is a linguist.'

c. partitive indefinite DP:

Doi peşti sunt negri (, al treilea e roşu).

two fish are black (, the third is red)

'Two fish are black (the third is red).'

d. generic collective DP:

Trei peşti sunt mai scumpi decît doi.

three fish are more expensive than two.

'Three fish are more expensive than two.'

This specificity requirement holds for both unergative and unaccusative preverbal subjects in Romanian, as illustrated in (iia) and (iib), respectively.

(ii) a. (*Cinci pisici) au mîncat (cinci pisici).

(five cats) AUX.3PL eaten (five cats)

'Five cats have eaten.'

b. (*Cinci pisici) au plecat (cinci pisici).

(five cats) AUX.3PL left (five cats)

'Five cats have left.'

A preverbal subject would be licit in the above examples only if this DP could be understood partitively (i.e., as specific); in this case, there would be a set of known cats, out of which five are involved in the above predications. Unless the DP is somehow topical/'anchored' in the discourse (or contrastively focused – not shown here), it cannot appear preverbally. For similar observations on Romanian, see Cornilescu (1997, 2000b) and Dobrovie-Sorin (1994), a.o.

[40] This is further reinforced by the data in (i), discussed in Alboiu (2002:76), assuming Condition C to be operative at LF. See also Zubizarreta (1998), for Spanish.

(i) a. Azi [profesorul lui Victor$_i$] l$_i$-a lăudat

today teacher-the his Victor CL.3SGM.ACC-AUX.3SG praised

'Victor$_i$'s teacher praised him$_i$ today.'

b. * Azi l_i-a lăudat [profesorul lui Victor$_i$].

today CL.3SGM.ACC-AUX.3SG praised teacher-the his Victor

[41] A reviewer expressed concern over the assumptions that semantico-pragmatic factors can be assumed to play a role in determining whether *pro* is part of the Numeration and, hence, has a role in EPP checking. I do not see a problem with assuming that semantic and pragmatic factors can drive the derivation once these properties have grammaticized (i.e., have been assimilated by the computational system in an adequate manner). Note also that Chomsky's (2004) OCC feature is semantic in nature as are features such as Topic and Focus. In any case, in languages where preverbal subjects are semantico-pragmatically constrained, the EPP requirement must be assumed to check independently of these DPs. It is beyond the scope of this paper to explicate why certain languages but not others resort to null expletives, but crucially, one must assume a split between the formative in Spec,TP and preposed subjects in languages such as Romanian. One direction might be to explore Cardinaletti's (2004) two-fold split of preverbal subject positions into a position hosting the subject of predication (i.e., the 'notional' subject) and a purely formal position hosting the grammatical subject. Perhaps natural languages have the option of separating these positions or not. More specifically, a language such as Romanian would allow for both positions, with *pro* occupying the EPP position and semantically relevant preverbal DP subjects occupying the subject of predication position. In the absence of a notional subject, the latter position would not project. But, crucially Spec,TP would always host expletive *pro*. Conversely, languages such as English, which show no semantic restrictions on the DP in Spec,TP would *not* be assumed to distinguish between these two preverbal subject positions. A

unique A-related position, i.e., Spec,TP, could perhaps also explain why English (and other languages lacking null expletives) has to resort to more feature-ally specified expletives, like *there*, instead. Note that such structural cross-linguistic asymmetries are mirrored elsewhere in the computational system. For instance, Pylkkänen (2008) argues that Japanese distinguishes between Spec,VoiceP and Spec,CauseP in the predicational domain, while English collapses these two postions. Note further that Rizzi and Shlonski (2005:13) also view expletives as formal devices required by "discourse conditions" or "communicative intentions" and Tomić (2006) argues for null expletives as a property of languages that are structurally pragmatically oriented.

[42] Empirical evidence for its lack of phi-features comes from the fact that expletive *pro* can co-exist with post-verbal subjects in any person. See, for instance, (1a) and (3a).

[43] Following Cardinaletti (1997), I take German *es* and Icelandic *það* to be generated in Spec,TP (IP) and moved to Spec,CP given that these do not invert with finite verbs (see also Sigurðsson 2008). Note also that any expletive assumed to be deictic (e.g. *there,* Kayne 2008), must bear a π feature, as person is a prerequisite for deixis (Bianchi 2008).

[44] A reviewer wonders about the Case value of *three men* in (i).

(i) I believed [there to be three men in the room].

I take its value to be ACC, as is typically assumed. This is ECM, so structural ACC is made available via [uD] discharged by matrix v*. Even if *there* were to be construed as having deficient # and g, these would not suffice in changing the associate's Case value.

[45] I assume that LHM, as well as the presence of P with infinitives, is a direct manifestation of the presence of a syntactic relationship between C and its proxy head. This relationship could be triggered by properties of C (see Roberts and Roussou 2002, Pesetsky and Torrego 2001, 2004a), or it could be seen as a need of T to access features of the phase head (e.g., 'tense anchoring', as

in Ledgeway 1998, Poletto 2000, Varlokosta 1994 or A-related features, as in Belletti 1990, Rizzi 1982, Watanabe 1996). Note that what counts is the syntactic relationship and *not* the actual visibility of the C head, an issue relevant for English gerunds.

[46] Absolute participial constructions can be viewed as a sub-type of the gerund construction, where a *be*-GER is replaced by a null Asp head: (ia), is semantically equivalent to (ib).

(i)a. [$_{CP}$ Odată (fata / ea) Ø deşteptată (fata / ea)], ...
$_{CP}$ once (girl-the.NOM/she) ASP awoke. PRTC.FSG, (girl-the.NOM/she)

b. [$_{CP}$ Fiind (fata / ea) <fiind> deşteptată (fata / ea)], ...
$_{CP}$ be-GER (girl-the.NOM/she) ASP awoke. PRTC.FSG, (girl-the.NOM/she)

I assume that the unaccusative vP in (ia) is selected by a null Aspectual head which lacks the GER specification. Consequently, no head movement to C can ensue and a stative adverb is inserted for semantic clause-typing, as seen for infinitives. Case-licensing is not affected.

[47] Keep in mind that the discussion focuses on phasal/CP non-finite domains. Reduced non-finite domains are irrelevant because subject lexicalization is not an internal property of the respective clause. For instance, Romanian gerunds occur either as adjuncts or as complements to perception verbs (Avram 2003). The former, as CP domains, license NOM subjects. The latter, however, are reduced clauses involved in ECM, with clitic raising (so no CP) and ACC subjects. Consider (ia), for illustration, and (ib) for indication that the C domain is not instantiated as there is no LHM:

(i) a. L$_i$-am văzut (pe Chomsky$_i$) vorbind (pe Chomsky$_i$).
CL.3SGM.**ACC$_i$**-AUX.1 seen PE Chomsky.**ACC$_i$** talk.GER PE Chomsky.**ACC$_i$**

b. *Am văzut (pe Chomsky$_i$) vorbind-ul$_i$ (pe Chomsky$_i$).
AUX.1 seen PE Chomsky.**ACC$_i$** talk.GER-CL.3SGM.**ACC$_i$** PE Chomsky.**ACC$_i$**
'I/We saw Chomsky (give a) talk.'

[48] Pires (2001) argues these are TP domains but Reuland (1983) shows they can extrapose, allow *wh*-extraction and permit epistemic adverbs, all of which point toward a C domain and CP status.

[49] *-ing* as a C head is far from new, as illustrated by some of Abney's (1987) structures.

[50] Abney (1987) proposes that the verb raises to *-ing*. Nonetheless, standard raising tests seem to indicate otherwise, as shown in (i):

(i) a. [Him not being (*not) what we had hoped for] did not matter.

b. [Her never being (*never) late again] made a huge difference.

[51] For other DP related properties of gerunds, see McCawley (1988) and Pires (2007).

[52] Note that I do not assume a phi-feature on the D head selecting the ACC-ing gerund clause as these gerunds are inherently indefinite (Portner 1992). Furthermore, with ACC-ing gerunds (nominal CPs), D, being indefinite, is non-phasal and lacks Case-licensing properties. Conversely, with POSS-ing gerunds, D is definite and presuppositional (Portner 1992), hence phasal and thus capable of checking (and valuing) Case. However, I do not discuss gerunds with possessive subjects here as these do not expand to a CP domain (for discussion see Abney 1987, Chomsky 1981, Emonds 1970, Horn 1975, Moulton 2004, Pires 2001, Reuland 1983, among others). Given that sentences like *His eating all the cake bothered Mary* are felicitous in English, one must assume at least a v*P layer in POSS-ing gerunds (i.e., there is an external agentive argument, [D, ϕ:3SG.M, ~~uCase~~:GEN], as well as an ACC object, *all the cake*, so the v* phasal layer is a must). Since this v*P layer fails to project to C (see cited literature), there cannot be an ACC or NOM subject. Rather, the subject has its [uCase] feature checked at the D phasal level and receives the inherent GEN/POSS value that phasal D heads bestow in English.

[53] This view is in line with Chomsky's (2008) analysis of gerunds as containing a [$_D$ V-ing] head moving to C and yielding a C/D head, with either C or D projecting (see also Hiraiwa 2005). However, in our analysis, a category neutral *–ing* merges directly in C and is selected by D.

[54] Evidence for CP-internal ACC Case assignment/checking comes from the inability of these ACC subjects to passivize (i.e. move to Spec,TP of the main clause) discussed in Cornilescu (2003:439). Compare (ia), containing a small clause participial, with (ib), containing a gerund.

(i) a. He$_i$ was found [$_{SC}$ t$_i$ dead / sleeping].

b. *He$_i$ was regretted [$_{CP}$ t$_i$ leaving].

[55] Alternatively, following Cardinaletti's (2004) claim that the subject of predication projects separately from the grammatical subject, the DP may raise to the left of *pro*, above T. The issue is irrelevant for linearization in gerunds but would explain Newfoundland English data like (26) - *For he to listen to that talk was awkward* - unless we assume *to* merges lower than T (see, Cowper and Currie Hall 2001, for a VP-related merge analysis of infinitive *to*).

[56] Given that we have no clear way of telling whether C transfers its EPP/uD feature to an independent Focus head or T [+Foc], it is difficult to tell whether the lexical subject is involved in a pure A-relationship or not. See Belletti (2001) for Italian, and Ndayiragije (1999) for Kirundi for analyses where Focus itself is responsible for satisfying Case requirements.

[57] I assume a similar explanation for Case variation in Latin gerunds. While subjects are mainly lexicalized as ACC, the postverbal subject in (11) is, unsurprisingly, NOM.

[58] Note that in standard modern Italian lexical subjects in uninflected CPs are restricted to Aux-to-Comp (LHM) constructions (Belletti 1990, Rizzi 1982), with preverbal subjects ruled out. This suggests very different infinitive structures diachronically speaking. Specifically, the left

peripheral field in modern Italian non-finite CPs must be more limited, with less available XP positions than in Old Italian and a single C head (akin perhaps to Romanian infinitives).

[59] See also Legate (2008) for discussion on the "thorny" relationship PRO has had with structural Case in generative grammar.

[60] See also Baker (2008:31) for the relationship between referential indexing and phi-features.

[61] See also Sigurðsson (2008) who argues PRO is both a reference and a phi-feature variable, while overt pronouns and anaphors are simply reference variables. See Chierchia (1989) for *de se* readings in OC (hence, variable intension).

[62] See also Schütze (1997) for suggestions that PRO's silence is semantic rather than syntactic.

[63] Note that the type of Case (i.e. structural or inherent) PRO receives is irrelevant. Legate (2008: 86) revisits data from Freidin and Sprouse (1991) which shows that even a quirky Dative subject PRO cannot be lexicalized in Icelandic. Under the approach assumed here, PRO's silence is no longer striking.

[64] Note that the same logic carries over to AG predicates which bear GEN or ACC depending on type of predicate, as discussed.

[65] NOM for PRO was (to the best of my knowledge) first proposed by Sigurðsson (1991).

[66] For instance, despite the availability of structural NOM in other Romanian non-finite domains, as discussed in the paper, NOM values on PRO need not be acquired through the same mechanisms. The next section, in fact, develops an analysis showing that they are not.

[67] See also Manzini and Roussou (2000). For an alternate view, see Landau (1999, 2001, 2004, 2008). Given that Landau's analysis relies on the presence of [uϕ] in infinitives, his is not a viable option under the current analysis where these features are missing on non-finite C.

[68] See also Rezac (2010) for discussion on the inability of agreement (phi-features) to license floating quantifiers.

[69] See Baltin and Barrett (2002) for a similar claim in work in progress.

[70] As we have seen, contexts of PRO occurrence in Romanian involve either infinitives (52c) or subjunctives (15). With subjunctives, the complementizer *ca* is often optional (see Alboiu and Motapanyane 2000), occuring with an expanded left-periphery hosting Topic and Focus under Rizzi's (1997, 2004) cartographic approach. Nonetheless the subjunctive particle *să* is compulsory, as is the particle *a* in infinitives. Typically, these particles have been analysed as merging in the highest head of the verbal functional domain: Mood, I, or T (see Alboiu 2002, Cornilescu 2000, Isac 2002, Motapanyane 1995, Pîrvulescu 2001, Rivero 1994, Terzi 1992), with subsequent dislocation to C (Alboiu 2007, Farkas 1985, Hill 2003) suggested by their ambiguous C-T nature and their occurrence with verb raising (Dobrovie-Sorin 1994).

[71] At this point, I have no explanation as to why English might behave in this manner (i.e. lacks EPP in these contexts). Presumably the necessary presence of a OP_{LOG} in these contexts also satisfies the EPP CI interface condition which I assume universal.

[72] On similar proposals for ϕ-features, see Branigan (2005) who argues that unvalued [uϕ] is granted a default 3SG value upon Spell-Out, which presupposes a phase head.

[73] Khoekhoe lacks agreement morphology, 'RCT' stands for 'recent' past and '!^{X}' denotes an alveolar click with a velar fricative manner/release (Richard Compton, personal communication).

[74] That postverbal (inverted) subjects have maximal focus prominence in Romance has also been argued for by Alboiu (1999, 2002, 2004) for Romanian, Vallduví (1995) for Catalan, and Ordóñez (1998) and Zubizarreta (1998) for Spanish. Note that this type of focus is to be kept

distinct from operator/contrastive focus associated with the Focus head in the preverbal field, as it does not trigger any of the typical A-bar effects.

[75] Going back to Branigan (2005), one might wonder why a default 3SG morphological value is ok for agreement that has not been syntactically valued. In other words, why is there no 'Agreement Filter' similar to the Case Filter. My response is only tentative but I would like to suggest that SG number and 3 person (or the absence of person to quote Benveniste) are *universal* defaults, so inserted without problems. There is presumably no such equivalent for Case.

[76] Recall that this postulation is required or else the Case Filter would be vacuous (see also Schütze 2001). If we decided it is, then we would need to find explanations outside of Case for why data like (62a) and (67a), inter alia, are ill-formed.

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