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The Nominative Puzzle and the Low Nominative Hypothesis

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Under the view of nominative Case taken by Chomsky (2000, 2001), one would expect nominative to be the marked or complex Case, being merged after accusative. In fact, however, it is the other way around, nominative preconditioning accusative and also being the Case of simple structures (unaccusative, etc.). The article argues that this Nominative Puzzle is not real, the nominative argument in fact being the first argument merged, raised across the accusative later in the derivation for independent reasons. This approach not only accounts for the dependency correlation between accusative and nominative (Burzio’s Generalization), but also offers a derivational account of Condition A correlations (anaphors being merged higher than their ‘‘antecedents’’). Importantly, it also makes it possible to explain Icelandic quirky constructions in terms of a general matching theory. In addition, the article develops a novel approach to Move as applying for the purpose of successful feature matching.

Keywords: Condition A, Burzio’s Generalization, intervention, Move, quirky Case, structural Case

1 Introduction: The Nominative Puzzle

In the standard Government-Binding approach (Chomsky 1981 and subsequent work), nominative Case marking (in combination with the Extended Projection Principle (EPP)) was taken to account for the contrast between (1) and (2).

(1) a. *Would have been elected John.
   b. *Seems John to be happy.
   c. *Arrived John at the station.

(2) a. John would have been elected.
   b. John seems to be happy.
   c. John arrived at the station.

The low NPs in (1) are in non-Case positions, it was assumed; hence, these structures were ruled out by (the EPP and) the Case Filter (Chomsky 1981:49). However, it was further assumed, these structures are rescued by NP-movement, which moves the NPs to the high subject positions in...
(2), where they can be assigned nominative Case: “An NP is moved . . . in order to escape a violation of some principle: the Case filter . . . or . . .” (Chomsky 1986:143).

Another, closely related question was why NPs in examples like (3a–d) could not escape a Case Filter violation by being assigned accusative Case, like the object in the active clause in (3e).

(3) a. *Would have been elected me.
   b. *There would have been elected me.
   c. *There would have been me elected.
   d. *Me would have been elected.
   e. They would have elected me.

Similarly, as discussed by Burzio (1986), Belletti (1988), and many others, arguments of unaccusative verbs cannot usually be accusative. This is illustrated by the Icelandic example in (4).

(4) Þá hafði skyndilega birst maður/*mann.
   then had suddenly appeared man.NOM/*ACC
   ‘Then a man had suddenly appeared.’

Facts of this sort led Burzio (1986:178) to state his famous generalization (Burzio’s Generalization (BG)).

(5) All and only the verbs that can assign a θ-role to the subject can assign accusative Case to an object.

This formulation is consistent with the early contention (Chomsky 1981 and subsequent work) that PRO must be Caseless. Thus, the verb hit in (6) can assign accusative to its object, as it assigns a θ-role to its subject, namely, PRO.

(6) John tried PRO to hit me.

BG is valid as an empirical generalization (for those types of facts it applies to), but, as Abraham (1986:5) had already noted, it is mysterious, involving a conspiracy of Case theory and θ-theory, predestining NP-movement, as it were. Given that nominative Case is active in PRO infinitives, as argued in Sigurðsson 1991, we can escape this conceptual weakness by viewing BG as a correlation between (only) the structural Cases, rather than between the external role and the internal Case.

(7) All and only the verbs that take a Nom subject can assign structural Acc to an object.

In other words, structural accusatives are contingent on structural nominatives, while the opposite is not true. In previous work (Sigurðsson 2003:249), I have referred to this correlation between the structural Cases as the Sibling Correlation (Acc being the “younger, dependent sibling”).

(8) (Acc → Nom) & ¬(Nom → Acc)

For a similar understanding, see Haider 1984 and Yip, Maling, and Jackendoff 1987, among others.
On this view, BG is a plain, tautological truth. Given a structure where only the structural Cases are available, a single event participant or argument is Nom (Case\(_1\)), an additional one is Acc (Case\(_2\)). Thus, Case marking is, prototypically, a strategy to make a morphological distinction between arguments (Sigurðsson 2003, 2005).

Certain types of accusatives are not preconditioned by the presence of a nominative argument, including quirky accusatives and adverbial accusatives, as in the German examples in (9).\(^1\)

   me.ACC hungers
   ‘I am hungry.’

   b. Mir wurde den nächsten Tag geholfen.
   me.DAT was the next day.ACC helped
   ‘I was helped the next day.’

Conversely, predicative constructions have double nominatives in such languages as Ancient Greek, Latin, and many varieties of Germanic. This is illustrated for Yiddish and Icelandic in (10).\(^2\)

(10) a. Ikh bin a guter yid/*a gutn yid.
    I am a good Jew.NOM/*ACC

   b. Hun er sennilega Ísleandur/*Ísleand.
    she is probably Icelander.NOM/*ACC
    ‘She is probably an Icelander.’

In spite of these and many other data that neither BG nor the Sibling Correlation has a direct bearing on, there can be no doubt that the dependency correlation between structural Acc and Nom is a striking phenomenon that holds across (the core of) accusative systems. Thus, even in languages like Icelandic and German that have some quirky accusatives, most accusatives are structural, hence only possible in the presence of a nominative subject.

(11) a. Sie würden mich gewählt haben.
    they.NOM would me.ACC elected have
    ‘They would have elected me.’

    I/*me was elected
    ‘I was elected.’

\(^1\) For more types in Icelandic and some other languages, see Sigurðsson 1989, 2003, 2005. In contrast, the accusatives found in Dat-Acc patterns in Tamil, Faroese, and Middle English might perhaps be analyzed as structural. As discussed in Sigurðsson 2003:249ff., this would seem to gain support from historical developments in both English and Faroese (as described in, e.g., Allen 1996, Eythórsson and Jónsson 2003).

\(^2\) Nom-Nom patterns of this sort arguably involve Case copying (notice that predicative constructions involve only one participant or argument). Danish, North Frisian, and most varieties of English and Norwegian, on the other hand, have the type *It is me*, which I will not discuss here (but see, e.g., Åfarli 1992, Sigurðsson 2005, and the highly informative discussion of English in Quinn 2005).
However, in a minimalist approach to derivation (Chomsky 1995 and subsequent work), the Sibling Correlation raises a very peculiar problem. Given the standard view that derivation operates bottom to top, we seem to be forced to assume that Acc is the first Case, merged lower than Nom. If so, it is truly a puzzle that nominative is the simple Case that seems to come for free. Thus, it is the normal Case for listed and other isolated DPs and also for DPs in simple structures (unergative, unaccusative, and, in many languages, predicative), whereas other Cases are typically added in more complex structures (transitive, ditransitive). Also, as we have seen, Acc is clearly not the first but rather the second Case with respect to Nom; that is, it is dependent on Nom being present in the structure, whereas Nom is independent of other Cases. In other words, although Nom is standardly taken to be assigned higher and later than Acc, it nonetheless cannot see Acc, whereas Acc is aware of Nom, a fact that would seem to force look-ahead. I refer to this state of affairs as the Nominative Puzzle.

In what follows, I argue that the puzzle is not real, the Nom argument actually being merged as the first argument, raising across Acc later in the derivation for independent reasons. For this to work, however, a principled understanding of Move must be developed. I argue that Move applies for the purpose of successful feature matching, being triggered by Inactive Intervention.

2 More History: A T-Nom Connection or a More Powerful v*?

Chomsky (2000, 2001:6ff.) tries to (partly) solve the Nominative Puzzle by suggesting a difference between v* and v. Only the former is $\phi$-complete, assigning accusative under agreement (indirectly, through V), whereas plain v is defective or $\phi$-incomplete, hence does not assign Case. Nominative, in turn, is invariably the responsibility of T(ense); that is, (finite) T is like v* in being $\phi$-complete but also unlike v* in assigning nominative rather than accusative Case. Thus, the sole argument of unaccusative, passive, and other defective predicates is assigned Nom (He drowned), whereas the same argument of a corresponding transitive predicate gets Acc, as required (They drowned him).

Ingenious as this idea is, it encounters problems, both technical and empirical. One technical problem is that active predicates that happen not to take an overt direct object (He looked at us, She sat down, etc.) have to be analyzed either as taking a covert object or as being defective, like passives and unaccusatives. Another is that the first argument that is merged, as the sister of (the root) V, does not know whether it is going to be accusative or nominative. It would clearly be preferable not to have to assume this delay in Case knowledge (even though Chomsky’s implementation of the idea escapes violating cyclicity). (In passing, notice that delayed Case knowledge would be devastating if the lexical array contains full-fledged inflected forms (as in

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3 This problem might seem to be avoidable in a top-to-bottom approach (e.g., Phillips 2003, Bianchi and Chesi 2005), but in fact such an approach fares no better than a bottom-to-top approach. Thus, in a German clause beginning with a DP like Peter, the derivation would have to look ahead “downward,” as it were, in order to know if the DP is an experiencer dative, an inherent accusative, or a nominative.
Chomsky 1995)—like, say, Icelandic Nom saga ‘story, saga’ and Acc sögu—but that, I contend, is implausible in any case. See further below.)

A third technical problem is that ‘‘Case itself is not matched,’’ although it is ‘‘assigned value under agreement’’ (Chomsky 2001:6). It is unclear where these values come from: they are invisible for matching but visible for assignment.

I think it is fair to say that many linguists would be willing to live with these technical bumps, if nothing further was at stake. However, the idea that Nom is assigned (under agreement) by T, the alleged T-Nom connection, faces serious empirical problems. Thus, nominative objects and nominative predicative DPs are found in various kinds of infinitives in Icelandic (e.g., Sigurðsson 1989, 1996, 2000). Some examples:

(12) a. Við töldum [henni hafa leiðst strákarnir/*strákana].
   we believed her.DAT have.INF found-boring boys.NOM/*ACC
   ‘We believed her to have found the boys boring.’

b. Hana langaði ekki til [að leiðast þeir/*þá].
   her.ACC longed not for to find-boring.INF they.NOM/*ACC
   ‘She did not want to find them boring.’

c. Mér fannst [henni ekki hafa verið sýnd virðing/*virðingu.
   me.DAT found her.DAT not have.INF been shown respect.NOM/*ACC
   ‘In my view, she wasn’t shown respect.’

(13) a. Að líka svona fáránleiki/*fáránleika!
   to like.INF such absurdity.NOM/*ACC
   ‘To like such absurdity!’

b. Að vilja verða kennari/*kennara!
   to want.INF become.INF teacher.NOM/*ACC
   ‘To want to become a teacher!’

c. Það voru taldir hafa verið veiddir fjórir laxar.
   there were believed have.INF been caught four salmon.NOM
   ‘People believed there to have been four salmon caught.’

Moreover, in colloquial Icelandic, negative infinitives (with pleading force) allow overt, contrastively focused nominative subjects.

(14) Ekki þÍD/*YKKUR fara líka!
    not you.NOM.PL/*ACC.PL leave.INF too
    ‘Please, don’t YOU leave too!’

Low nominatives have been attested for many other languages (see, e.g., Mensching 2000, Alexiadou and Anagnostopoulou 2001), albeit in somewhat different places, as it were. One ‘‘potential place’’ is the predicative position in languages like German and Swedish.

(15) a. Es reicht mir [ich/*mich (selber) zu sein].
    it suffices me I/*me (self) to be
    ‘It is sufficient for me to be me (myself).’
Yet another—and, in my view, the most serious—problem for the alleged T-Nom connection is that it defies the most fundamental fact of the structural Case system of language, namely, that there is a dependency correlation between structural Acc and structural Nom, as discussed above. That is, structural Acc is conditioned by Nom being present in the structure, while the opposite is not true. A related problem is that it is not clear why $T_\phi$ and $v_\phi (v^*)$ should assign different Cases: the Case difference has no function or justification in this system, and it is thus unclear what would block $T_\phi$ and $v_\phi$ from assigning the same Case.4

Trying to circumvent these problems, I have suggested (in Sigurðsson 2000, 2003) that $v^*$ assigns or matches Nom and Acc simultaneously (in transitive predicates; plain v assigning Nom in defective predicates). This has above all two advantages. First, it breaks the T-Nom connection, thus rendering examples like (12)–(15) unproblematic. Second, it makes the “Acc decision” dependent on the “Nom decision.” However, much as in Chomsky’s approach, it is not clear why the Cases assigned should be distinct. In addition, Case knowledge must also be delayed in this system; that is, the arguments don’t know their Case until $v$ (giving Nom) or $v^*$ (yielding Nom + Acc) has been merged. Moreover, $v^*$ would have to be able to distinguish between the “Nom-to-be” and the “Acc-to-be.” The two are structurally distinct in the approach I pursued, but this is nonetheless a technical and a conceptual drawback: the Acc argument has to wait for its Case2 while $v^*$ is discharging its Case1 to the Nom argument. Assigning even only the slightest intelligence of this sort to the computation is conceptually dubious; it is presumably entirely “dumb.” Finally, this approach fares no better than Chomsky’s with respect to listed and other isolated nominative DPs. It would seem reasonable to require that our Case theory be able to account for this very simple fact.

3 The Low Nominative Hypothesis

Here, I will explore the “obvious” solution to the Nominative Puzzle, namely, that it is not real, nominative in fact being the lowest or first Case, merged before any other Cases, as a sister of a predicate. I refer to this suggestion as the Low Nominative Hypothesis, LNH. A basic assumption I will be making is that there are no complex syntactic primitives (cf. the Feature Uniqueness Principle in Sigurðsson 2000).5 Any application of Merge adds a single feature F to a structure

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4 Nom-Acc versus Nom-Nom (or Unmarked-Unmarked) variation, where the second Nom “replaces” the Acc object under certain conditions, is found in some languages, including Japanese (see, e.g., Heycock and Doron 2003, Nomura 2003), Tamil (Lehmann 1993), Telugu (K. V. Subbarao, pers. comm.), and Turkish (e.g., Encø 1991). The second nominative in Nom-Nom constructions of this sort typically relates to specificity, modal scope, telicity, and so on.

5 However, syntactic features are complex in the sense that they have combinatory properties, making it possible for them to match and combine with other elements—hence my atom metaphor in Sigurðsson 2004a.
XYW, yielding F[XYW]; reapplication of Merge adds another single feature G, yielding G[FXYW]; and so on. Lexical items, on the other hand, are typically complex, each matching or interpreting a set of features, \{F, G, \ldots \}.

It follows that the notions ‘‘\(\phi\)-complete v’’ (\(v^*\)) and ‘‘\(\phi\)-complete T’’ must be understood as cover terms ‘‘for a richer array of functional categories’’ (in Chomsky’s words on the latter; see 2001:fn. 8), and that is just what I will do: split these complex notions into a ‘‘richer array of functional categories.’’ That is: \(v^* = \) minimally v plus Pers(on)\(_O\) and Num(ber)\(_O\), and T = minimally T plus Pers(on)\(_S\) and Num(ber)\(_S\).

In effect, these different views on complexity of basic syntactic elements do not lead to radically different analyses and solutions. Much like Chomsky, I assume that active \(\phi\)-features are an important driving force of the computation. However, distinguishing between Person and Number has both conceptual and empirical advantages (see the discussion in section 5 of Icelandic quirky constructions).

Another, more radical consequence of this atomic approach is that syntax does not operate with lexical items, in the usual sense of that term. That is, syntax has no knowledge of the phonological make-up of words. The computation has to be able to give instructions to the sensorimotor system interface (for our purposes, the ‘‘(morpho)phonological component’’), and it may be that these instructions include some knowledge of the phonological make-up of lexical roots and morphemes (as opposed to words); but this is not obviously the case. As will be discussed, late realization of some elements usually referred to as lexical items is forced; that is, for these items at least, the computation does not have access to any phonological information at all. It follows that the phonological component is capable of storing the relevant phonological items (see further Sigurðsson 2004b,c).

Let us now return to the derivation of ‘‘simple’’ transitive Nom-Acc patterns, like We would have selected her. What we want to understand is how the accusative argument her gets to know that it is to be accusative rather than nominative, and, likewise, how the nominative escapes winding up as an accusative. That is, we want to have an account of the fact that the following patterns are all excluded in usual accusative systems:

(16) a. *Us would have selected she.
b. *Us would have selected her.
c. *We would have selected she.

The first decision of any numeration/derivation is whether or not the event has a participant. If it has, the participant (\(\theta\)) is merged with V (or some other predicate type).

(17) \( V [\theta_1] \) (and \( \theta_1 \rightarrow \text{Nom} \))

As indicated, \( \theta_1 \) gets the Nom value without further ado: it comes for free, is given as the first Case. The second decision is whether there is another participant. If there is, the following structure results:

(18) \( \theta_2 [V \theta_1] \) (and \( \theta_2 \rightarrow \text{Acc} \))
Again, the Case comes for free, this time as the *second Case*. Thus, the structural Cases do not need any licensing; that is, as in Chomsky’s approach, “Case itself is not matched,” the difference being that they are not “assigned” any values either, since the values are given. Inherent “lexical” Cases, in contrast, are matched (see below).

Assume also that $\theta_2$ is matched by $V$, $\theta_2$ in turn matching $v$ (the next element up that is merged). If so, the structure now contains no active or uninterpreted Case or $\theta$-features, so further derivation must be driven by other features. By hypothesis, $v$ has an uninterpreted Asp(ect) value, Asp in turn having an uninterpreted T value, which in turn has an uninterpreted Mood value. The arguments have uninterpreted $\phi$-features. After merger of $v$, Asp, T, M(ood), and Pers$_O$/Num$_O$, the structure is either (19) or (20), where the relative order of Pers$_O$ and Num$_O$ is irrelevant for our purposes (and where I disregard gender and classifiers).


Typological research suggests that a clause may contain several Asp and T-features (Cinque 1999; see also, specifically on Tense, Julien 2001 and Eide 2002), but, to my knowledge, the properties of such “extra” categories remain to be studied from a minimalistic matching perspective, so I will disregard them here.

It is not clear whether anything in grammar forces (19) rather than (20) or vice versa. It seems quite possible that individual languages select one of these orders by mere convention or even allow both. I leave the question open, assuming (20) for expository reasons.

Let us consider (20) more closely. At this stage in the derivation, all the features of Acc have been valued in relation to some higher feature, and its syntactic computation is thus completed. In other words, Acc has no further active features; it is “frozen in place” (see Chomsky 2001:6; cf. also the related but slightly different approach in Richards 1997, 1998). Accordingly, an active feature of Nom may now be targeted by a probe across Acc. The feature in question, I assume, is Number, still active in Nom but already inactivated in Acc. That is, the next step in the derivation is merger of Num$_S$ (or, if one likes, Num$_2$).

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6 Evidently, it is morphology (PF) that interprets or translates $\theta_1$ and $\theta_2$ as Nom versus Acc; that is, Nom and Acc are not themselves syntactic features but *translations* of syntactic relations in terms of morphological features (see the approach in Sigurðsson 2003, 2004b,c, 2005 and a similar conception in Hale and Keyser 2002; see also the discussion in section 5). In other words, morphology (deep PF) does not “speak” the language of narrow syntax; it understands it and translates it into its own language or code. I am using Nom and Acc here for expository ease (in the sense ‘the arguments that are going to show up as Nom and Acc in morphology’).

7 An underlying assumption here is that syntax is blind to $\theta$-content (see Sigurðsson 1989:245ff.). Notice also that the Uniformity of $\theta$-Assignment Hypothesis (UTAH) was meant to be “a guiding principle of grammar which characterizes the level of D-structure” (Baker 1988:46) and is thus not statable in an approach that has no syntax-internal levels, like the one pursued here (and in Chomsky 2000 and subsequent work). However, the empirical merits of UTAH follow in the present approach if argument structure is a Semantic Form (SF) interpretation of a fully computed syntactic structure, read off at the phase (as it must be in minimalist accounts; cf. the discussion in Chomsky 2004). The same applies to the “idiom chunk argument” (discussed in, e.g., Marantz 1984, Holmberg 1986).

8 Unless it has active wh or some other feature that matches some element of the C domain. Notice, however, that C probes have not yet been merged, so Acc is fully interpreted with respect to probes that are active at this stage in the derivation.
In most constructions in most SO languages (SOV, SVO, VSO), Nom subsequently raises into the vicinity of NumS. The standard assumption has long been that an attracting probe attracts a category into its specifier position. However, in feature-based syntax, as pursued here, there are arguably no projections or fixed positions. I opt here for the minimalistic assumption that features (and feature-built structures) are the only syntactic elements and that they do not come with any empty positions or projected structures. Thus, I adopt the approach suggested in Sigurðsson 2004b that Move always tucks in. At first sight, one might be tempted to assume that Move tucks in into the edge of the probing domain, but there are in fact reasons to believe that it is strictly local, taking minimal steps only (see section 5). Thus, I assume (22), where Nom has crossed both Acc itself and its inactivating probes, v and PersO/NumO.


Here, Nom in a clause like We would have selected her has been minimally raised across Acc; but we are still only in the middle of the derivation, as we will see.

In passing, notice that the equidistance problem (discussed in Chomsky 1995) dissolves in the present approach, the reason being that the Minimal Link Condition is relativized with respect to active features.

4 Inactive Intervention Forces Move

It is not obvious what forces movement in general. Thus, Chomsky (e.g., 2001) does not take a stand on the question, simply using EPP as a label for the phenomenon. Adopting the approach in Sigurðsson 2004b, I will assume that a probe F attracts an active feature value $r^+$ under the condition of Inactive Intervention. A probe F checks all elements that are potential hosts of its goal feature, that is, elements that contain an inactive value $a$ of the searched feature, and it continues probing until it finds a matching value of the searched feature, that is, the active value $r^+$, where probing immediately stops. If $r^+$ is the only value of $r$ in the probing domain, movement need not take place (and cannot, except perhaps by pied-piping), and a long-distance Agree correlation arises (as in English subject interrogatives like Who saw the movie?, where wh in the C domain probes for who but does not attract it). If, on the other hand, the searched structure contains the inactive $r$ value, $a$, then Move places $r^+$ to the left of the highest inactive $r$ and its inactivating probes, to ensure that successful matching takes place, $F \leftrightarrow r^+$ (as in English nonsubject interrogatives, like What did he see?, where the subject has an inactive wh-feature).10

9 The notion “position” has no conceptual status in feature-based syntax (whereas one could make contentful use of the notion “space”). Notice also that the present approach suggests a different understanding of Minimal Design (or the Strong Minimalist Thesis) than that pursued in Chomsky 2004, where Merge and Move are unified. Here, instead, I assume that Merge and Agree should be unified (as in Sigurðsson 2004a,b).

10 An inactive feature value is either inactivated in the derivation (see below) or inactive already in the numeration (a lexical option).
In the structure in (21), the valued or inactivated Number feature of Acc inactively intervenes between NumS and the active Number feature of Nom; hence, raising of Nom across Acc, as in (22), is forced.

This approach gains support from the behavior of indefinite subject DPs. If Nom is definite, it must usually raise in languages like Icelandic and English, regardless of whether or not the clause also contains Acc (for independent reasons; i.e., this definiteness effect is arguably “EPP” driven, involving matching of Fin(iteness)).

If Nom is indefinite, on the other hand, it need not raise unless the clause also contains Acc.\(^{11}\)

The inactive number intervention of the Acc *kaflana* in (24a) forces raising of the indefinite Nom *stúdentar* for the purpose of successful Num\(S\) matching, whereas no such raising of the indefinite *kaflar* is forced in (24c) (see Alexiadou and Anagnostopoulou 2001 on related and relevant facts in some other languages). In languages like Italian, though, the element attracted by Num\(S\) across Acc is plausibly a clitic (showing up as verb morphology in PF), stranding a DP (in the Kaynean style; see Platzack 2003).\(^{12}\)

\(^{11}\) Actually, this applies more generally to complements, whether Acc, inherently Cased DPs, or PP complements, suggesting that non-Acc complements match the same features as Acc complements (plus some additional features; see later on Dat and \(v_{D}\)).

Expletive *på* ‘there, it’ would also be possible in (23)–(24), just like *på* ‘then’. It behaves more like an adverbial than a pronominal, being devoid of active \(\phi\)-features.

\(^{12}\) There are many other interesting kinds of data to consider here. Swedish long object shift, as in (i), and late definite subjects, as in (ii), are two cases in point.

(i) Då slog mig den tanken att . . .
    then hit me the thought.the that    ‘Then the thought that . . . hit me.’

(ii) Det vet inte jag.
    that know not I.NOM
    ‘That, I don’t know.’
At first sight, movement of expletives into the clausal left edge might seem to challenge the present inactive intervention trigger approach to movement. However, as illustrated by Scandinavian stylistic fronting, almost any VP category (participles, infinitives, particles, etc.) counts as a potential EPP category (see Maling 1980, Holmberg 2000), thus forcing an expletive to move across them on the uncontroversial assumption that expletives are more EPP-active than their nonpronominal competitors.\(^{13}\)

Returning to the usual transitive Nom-Acc pattern, in a clause like *We would have selected her*, the next step in the derivation is merger of Pers\(_S\), yielding the structure in (26).

\[
\text{(26) Pers}_S \ [\text{Num}_S \ – M \ – T \ – \text{Asp} \ – \text{Nom} \ – \text{Pers}_O/\text{Num}_O \ – \nu \ – \text{Acc} \ – V \ – \text{Nom}]
\]

Pers\(_S\) is entirely local with respect to Nom; that is, no category containing either an active or an inactive Person feature intervenes between the two. Hence, Nom stays put, unless it contains some feature that is probed for by some element of the C domain (later in the derivation).

The next feature up is a C feature, namely, Fin. Arguably, even evidently, this feature is the mysterious EPP-feature, attracting subjects in the unmarked Case (see Sigurðsson 2004c).

\[
\text{(27) Fin} \ [\text{Nom} \ – \text{Pers}_S \ – \text{Num}_S \ – M \ – T \ – \text{Asp} \ – \text{Nom} \ – \text{Pers}_O/\text{Num}_O \ – \nu \ – \text{Acc} \ – V \ – \text{Nom}]
\]

Given the order of features in (27), roll-up V-raising produces the order of overt elements in the finite verb in a language like Icelandic ([\(V \ – \nu \ – \theta \ – \theta \ – T \ – M \ – \text{Num}_S \ – \text{Pers}_S\)]), an interesting issue that I will not discuss here (but see Sigurðsson 2001, 2004b, where this is explored).

5 Further Advantages of the Low Nominative Hypothesis

To repeat, the Nominative Puzzle is solved in a simple manner if it is not real, Nom actually being the *first Case*, raising across Acc later in the derivation for independent feature-matching reasons. Moreover, the problem raised by Condition A of binding theory, discussed by Kayne (2002), Zwart (2002), and Heinat (2003), among others, basically yields to the same kind of solution. The problem is, first, that the binding conditions are conditions on representational levels (D-Structure, etc.) that do not exist in minimalist approaches, and, second, that descriptive conditions of this sort cannot be stated in derivational terms (where look-ahead is blocked), but must instead follow from the derivation itself.

Condition A effects *do* follow if what seems to be a look-ahead property of anaphors is unreal in the same way as the Nominative Puzzle, the anaphor being merged later than its "antecedent." The anaphor then has knowledge of its "antecedent," parallel to the way Acc has knowledge of Nom. In addition, "anti-c-command," as in (28) (from Heycock and Kroch 2002:119), becomes unproblematic.

\(^{13}\) To account for apparent optionality of movement, we plausibly have to develop a theory of relativized feature activity; that is, the strongest or the most active of several competitors wins out (for a related but somewhat different conception, see Starke 2001). Perhaps multiple *wh*-movement in languages like Serbo-Croatian and Macedonian is an example of the opposite, stalemate situation. I will not pursue these issues here.
(28) a. Himself, John saw.
    b. Proud of himself, John has always been.

Yet another advantage is that the widely attested lack of nominative anaphors (e.g., Everaert 2001) is now expected.\(^{14}\) Consider (29).

(29) Máyú leiðist hún sjálf / *sig sjálf. (or whatever the form would be)
    Mary.DAT bores she.NOM self / REFL self
    ‘Mary finds herself boring.’

The Low Nominative Hypothesis (LNH) forces high merger of clausal ‘‘complements’’—for instance, exceptional Case-marking (ECM) infinitives, as in (30).

(30) Máyá taldi sig verja sig vel.
    Mary.NOM believed REFL.ACC defend REFL.ACC well
    ‘Mary believed herself to defend herself well.’

The matrix clause is derived in the usual manner, by merging \(\theta_2\) to \([\text{believe } \theta_1 (\rightarrow \text{Nom})]\), where \(\theta_2\) is an ECM infinitive, receiving the second matrix Case value, Acc. The ECM infinitive, in turn, is also derived by merging a first argument and a predicate, and by subsequent merger of a second argument.

(31) a. defend \([\theta_1]\) (and \(\theta_1 \rightarrow \text{Nom}\))
    b. \(\theta_2\) [defend \(\theta_1\)] (and \(\theta_2 \rightarrow \text{Acc}\))

By hypothesis, the infinitive contains defective Pers/Num categories, forcing raising of Nom across Acc in the usual manner.\(^{15}\) Subsequently, the raised Nom is overwritten by the matrix Acc.\(^{16}\)

(32) \([\text{ECM } \ldots \text{Acc}_1(\text{Nom}_2) \ldots - \text{v} - \text{Acc}_2 - \text{defend} - \text{Nom}_2]\) believed \text{Nom}_1]

That structural Nom is overwritten by ECM accusative is evidenced by pairs like (33a–b).

(33) a. Máy ér góð stelpa.
    she.NOM is nice girl.NOM
    ‘She is a nice girl.’

\(^{14}\) However, as has been discussed by Everaert (2001) and others, nominative anaphors are found in some languages, including Modern Greek and Japanese. Icelandic, for instance, has morphologically nominative, Case-agreeing possessive anaphors (\(\text{broðir sinn ‘brother.NOM his-own/her-own/its-own/their-own.NOM,SG,MASC}; i.e., ‘her brother, their brother’, etc.), and it also has a split reciprocal, where the second item can show up in the nominative in certain constructions (Sigurðsson 1994).

\(^{15}\) Some languages have overt number/person inflection in infinitives (see, e.g., Dalmi 2005).

\(^{16}\) Metaphorically speaking. Recall, from footnote 5, that I am using Nom and Acc for expository ease only. Evidently, \(\theta_1\) and \(\theta_2\) are not interpreted as Nom and Acc until morphology (PF); hence, there is in fact no ‘‘physical’’ overwriting of the Cases. What I am calling overwriting here for expository ease is a syntactic operation that leads to a changed Case interpretation in morphology.
b. Við töldum hana vera góða stelpu.

‘We believed her to be a nice girl.’

Now, consider the reflexivization in (30)/(32). Acc2 has knowledge of Nom2 when it is merged, hence takes the form of a reflexive. In contrast, Acc1(Nom2) cannot have knowledge of Nom1, since it doesn’t c-command it, out of the infinitive. The next steps in the derivation merge the matrix v, PersO/NumO, Asp, and so on.

(34) . . . Asp − PersO/NumO − v [ECM . . . Acc1(Nom2) . . . Acc2 . . . ] believe Nom1]

Evidently, Acc1(Nom2) raises out of the infinitive in the course of the derivation, thereby coming to c-command Nom1 and becoming aware of its presence, hence taking the form of a reflexive. Again, late lexical realization is mandatory; that is, the computation does not operate with a lexical reflexive.17

The raising of the ECM Acc is quite short, as evidenced by its position in examples like (35a), where Acc has raised across the subject-oriented í barnaskap sínum ‘in his foolishness’ (see Thráinsson 1979:chap. 6, 2001), but is nonetheless below the main verb.

(35) a. ?Jón hafði talið mig í barnaskap sínum [vera ríkan].

‘In his foolishness, John had believed me to be rich.’

b. *Jón hafði talið í barnaskap sínum [mig vera ríkan].

However, when the conditions of object shift are met, the accusative may raise higher into the matrix clause, even across relatively high speaker-oriented adverbials.

(36) Jón taldi mig því sennilega ekki [hafa verið ríkan].

‘Thus, John probably did not believe me to have been rich.’

In passing, notice that high merger of ‘complement’ clauses in a bottom-to-top derivational approach has the general advantage of enabling us to account for selectional correlations between main clauses and subordinate clauses (such as subjunctive selection and tense agreement phenomena), without having to resort to either a look-ahead design or a crash design (see Frampton and Gutmann 2002 for convincing arguments against crash design).

Finally, consider the derivation of the (in)famous Icelandic quirky Dat-Nom construction.

(37) Henni höfðu alltaf leiðst strákarnir.

‘She had always found the boys boring.’

17 I use the term lexical realization rather than lexical insertion. In my view, (morpho)phonology does not insert material into syntactic structures; rather, it translates syntax into (morpho)phonological terms.
In contrast to the purely structural Cases, I assume, inherent “lexical” Cases are syntactically matched (cf. Svenonius 2005). Here, the verb leiðast ‘bore, find boring’ matches dative, which in turn, I tentatively assume, matches vD. After merger of the next categories up we have the structure in (38).


By hypothesis, Dat matches PersO/NumO. However, it evidently still has an active feature. Somewhat surprisingly, the feature in question is an extra feature that matches Person, a truly quirky property. That is, the Icelandic lexicon has two datives, one quirky, with the extra feature, and one plain, without the extra feature, the latter, plain dative being assigned to direct objects of verbs like hjálpa ‘help’, for instance. Thus, like other parameters, the “quirky parameter” is a lexical option.

After merger of NumS, we have (39).


NumS probes for an active Number feature and finds one in Nom. Subsequent raising of Nom is forced by the inactive intervention of the inactivated Number feature of Dat. After merger of PersS, we thus have (40).


Now PersS probes for an active Person feature. If Nom has one, the probing comes to an immediate end. However, if Nom is in the 3rd person, it has a relatively inactive Person feature (sometimes claimed to be ‘no person’) and PersS may proceed probing until it finds a more active matching feature, namely, the extra feature of Dat. Subsequent raising of Dat across Nom and its inactivating probes is forced by the inactive intervention of the Person feature of Nom, and we get the structure in (41).


In case Nom is in the 1st or 2nd person, thereby having an unambiguously active Person feature, this derivation is blocked. That is, Nom itself (in (40)) must be targeted by PersS—hence the widely discussed person restriction on Icelandic nominative objects (Sigurðsson 1990–1991, 1996, 2004a; also, among many others, Taraldsen 1995, Boeckx 2000, Chomsky 2000, Anagnostopoulou 2003, López 2003, Schütze 2003).\(^{18}\)

This person restriction is a complex issue, but the core fact is that nominative objects can only be in the 3rd person.\(^ {19}\)

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\(^{18}\) This restriction sets Icelandic apart from many other languages that also have Dat-Nom constructions, such as German, Russian, and most Romance varieties (but see Rivero 2004).

\(^{19}\) Except, marginally, for those verb paradigms where 3rd person agreement is morphologically nondistinct from 1st or 2nd person agreement.

The picture is slightly different for those constructions where the nominative is not really an object but a subject of an “ECM” infinitive or a small clause. I cannot go into these details here (but see Sigurðsson 1996, 2004a).
(42) a. Honum mundu alltaf líka þeir.
   him.DAT would.3PL always like they.NOM
   ‘He would always like them.’

b. *Honum munduð alltaf líka þið.
   him.DAT would.2PL always like you.NOM.PL
   (i.e., ‘He would always like you.’)

c. *Honum mundum alltaf líka við.
   him.DAT would.1PL always like we.NOM
   (i.e., ‘He would always like us.’)

As just stated, the restriction is accounted for under the analysis in (40) = (43).


If this structure is to converge as a quirky construction, PersS must be able to probe for the extra feature in Dat, but it is blocked from doing so (by minimality arising from active intervention) if Nom contains an unambiguously active Person feature.

As pointed out in the earliest studies of this phenomenon (Sigurðsson 1990–1991, 1996:41, Taraldsen 1995), and as recently discussed in more detail by Lope´z (2003), it has been a puzzle that number and person agreement cannot operate independently in this system, that is to say, that plural agreement without person agreement is excluded, as in (44).

(44) a. *Honum mundu alltaf líka þið.
   him.DAT would.3PL always like you.NOM.PL
   (i.e., ‘He would always like you.’)

b. *Honum mundu alltaf líka við.
   him.DAT would.3PL always like we.NOM
   (i.e., ‘He would always like us.’)

The puzzle is resolved in the present approach, and the solution is basically the same as above. If these structures were to arise, PersS in (40)/(43) would have to be able to probe for Dat, across Nom, but this is impossible, as we have seen, because Nom in these cases has an unambiguously active Person feature. That is, structures like (42b–c) and (44) are correctly precluded in the present analysis: there is no way of deriving them.

The most widely studied Dat-Nom predicates in Icelandic are the ones I have been discussing so far, leiðast ‘find-boring’ and líka ‘like’. For these and some other predicates, the dative is obligatorily the subject; that is, these predicates cannot take a plain, nonquirky Dat. Another class of predicates, such as hjálpa ‘help’, can only take a plain Dat, resulting in a simple Nom-Dat pattern, just as with corresponding predicates in German and many other case languages (Sie half mir, ‘she.NOM helped me.DAT’, etc.). Interestingly, there is a third class of predicates, also not uncommon, that can opt for either the plain Nom-Dat pattern or the quirky Dat-Nom pattern.

(45) a. Líklega hafa þau ekki hentað henni vel.
   probably have.3PL they.NOM not suited her.DAT well
   ‘Probably, they didn’t suit her well.’
This Nom-Dat versus Dat-Nom alternation has been a mystery ever since it was discovered by Bernðóds (1982); that is to say, there has been no generally accepted understanding of how and why an alternation of this sort could possibly arise (see, e.g., Sigurðsson 1989 and, in particular, the discussion in Barðdal 1999, 2001 and Platzack 1999). However, if these predicates indeed differ from predicates like leiðast ‘find-boring’ and hjálpa ‘help’ in being able to select either a quirky Dat or a plain Dat, the alternation follows directly under the present approach. If that, in turn, is on the right track, we expect that the Nom-Dat patterns of these predicates will show no person restrictions, and that their Dat-Nom patterns, on the other hand, will show the same kind of person restriction as quirky Dat-Nom predicates like leiðast. As illustrated in (46) and (47), this prediction is borne out exactly:

\[(46)\]
\[\text{a. Líklega hafið þið ekki hentað } henni \text{ vel. (OK²P.NOM)}\]
\[\text{probably have.²PL you.NOM.PL not suited her.DAT well} \]
\[\text{‘Probably, you did not suit her well.’} \]
\[\text{b. *Líklega hafið } henni \text{ ekki hentað } þið \text{ vel. (*²P.NOM)}\]
\[\text{probably have.²PL her.DAT not suited you.NOM.PL well} \]

\[(47)\]
\[\text{a. Líklega hófum við ekki hentað } henni \text{ vel. (OK¹P.NOM)}\]
\[\text{probably have.¹PL we.NOM not suited her.DAT well} \]
\[\text{‘Probably, we did not suit her well.’} \]
\[\text{b. *Líklega hófum } henni \text{ ekki hentað } við \text{ vel. (*¹P.NOM)}\]
\[\text{probably have.¹PL her.DAT not suited we.NOM well} \]

My understanding of Icelandic quirky Case can be extended to ergative systems. It has been repeatedly suggested (see Woolford 1997 and references cited there) that quirky Case is of the same nature as ergative Case, as in the Hindi example in (48) (see Woolford 2003:307).

\[(48)\]
\[\text{Raamne rotii khaayii thii.} \]
\[\text{Ram.ERG bread.NOM eaten was} \]
\[\text{‘Ram had eaten bread.’} \]

The present approach enables a formal account of this intuitively appealing idea. Much as quirky subjects must match a high functional feature (Pers₃), so ergatively marked arguments correlate with some functional category, typically some Asp, T, or Pers (cf., e.g., Dixon 1994). Slightly different systems, but of basically the same nature, are found in languages like Russian and Finnish, with special ‘‘high’’ cases of negation and modality. In all systems of this sort, it seems,

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20 The same person restriction is found for Dat-Nom passives (‘Her was shown the book’ / ‘*Her were shown we’), in contrast to the Nom-Dat variant (‘We were shown her’) (Sigurðsson 1996:32).

21 This is however only the general link between quirky/ergative systems and accusative systems. Ergative systems have various properties that are not addressed here.
a nonnominative DP has some active extra feature that is matched relatively high in the clausal structure, thereby differing from Acc in not getting frozen in place in the derivation.

If this is on the right track, accusative systems crucially differ from ergative/quirky systems as sketched in (49).

(49) a. Nom ............ Acc ............ Nom
    b. Erg / Quirky ... Erg / Quirky ... Nom (‘‘Abs’’)

In both systems, the first or the lowest argument is the argument that winds up as Nom (or ‘‘Absolutive’’). The difference between the systems follows from the fact that Acc does not have an extra quirky/ergative feature, hence becomes frozen in place and is crossed by Nom.

6 Concluding Remarks

The Nominative Puzzle is solved by the Low Nominative Hypothesis, whereby Nom is the first Case merged, raising across Acc later in the derivation. The minimalistic feature approach to syntax, adopted and developed here, makes this solution available. It also suggests that features (and feature-built structures) are the only syntactic elements and that they do not come with any empty (specifier or adjunct) ‘‘positions’’ or projected structures. In addition, it suggests a very specific understanding of Move, whereby it tucks in for the purpose of successful feature matching. All these achievements are in line with the leading idea of the Minimalist Program (Chomsky 1995 and subsequent work) that syntax or the computation is a system that consists of only very few basic and simple elements and relations, that is, the features themselves and properties and operations that allow them to match and combine: Merge/Agree requiring feature matching, which in turn may require Move (under the condition of Inactive Intervention). This approach gains additional credibility in that it offers solutions to further recalcitrant problems—most centrally problems raised by Condition A relations, but also the curious problems raised by Icelandic quirky constructions.

References


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