Agree and Agreement - Evidence from Germanic

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Agree and Agreement: Evidence from Germanic

Abstract

This paper contains a descriptive overview of morphological agreement phenomena in the Germanic languages. In addition, it studies the relation of overt agreement with the underlying LF relation of Agree. It is argued that CHOMSKY’s (2000, 2001a) Probe-Goal Approach is not well suited to account for the nature of abstract Agree, although it is descriptively adequate for some instances of morphological agreement. The central claim of the paper is that Agree reduces to Merge, i.e. it is a precondition on Merge (and an integrated part of it). Thus, whenever Merge applies, the possibility of agreement arises, i.e. a language has to make a parametric choice whether or not to signal each instance of Merge/Agree morphologically. Hence, the extreme variation of agreement across languages, even within a relatively limited and a closely related group of languages, such as the Germanic ones.

The claim that Agree reduces to Merge is coined as the Agree Condition on Merge. It is claimed that this simple condition is a law of nature, hence of language. In addition, it is suggested that Move is driven by the needs of Merge/Agree, moving features to the edge of a category Y, such that the edge matches some features of the object with which Y merges. The approach pursued also supports the view that labelling and X'-theoretic conceptions are theoretical artifacts that should be dispensed with.¹

1. Theoretical background

CHOMSKY (2001a: 3) formulates his understanding of Agree as follows:

We therefore have a relation Agree holding between α and β, where α has interpretable inflectional features and β has uninterpretable ones, which delete under Agree.

In a clause like the Icelandic (1), the finite verb and the logical subject agree in number:²

¹ A preliminary version of this work was published in Working Papers in Scandinavian Syntax (2002) 70: 101-156. Many warm thanks to Christer Platzack for insightful comments on that first version. For numerous and very fruitful discussions over the years, many thanks to Anders Holmberg. Thanks also to Cecilia Falk, Cedric Boeckx, Gunlög Josefsson, Jóhanna Barðdal, Josef Bayer, Lars-Olof Delsing, Verner Egerland. Finally, many thanks to Werner Abraham for his helpful comments and important support. I alone am responsible for the shortcomings of this work.

² They are also both in the third person. However, third person is ‘absence of person’, [-1p, -2p], not ‘true person’ and hence no person agreement is involved (on Icelandic from this point of view, see SIGURDSSON 1996 and subsequent work). For convenience, I use as short abbreviations in the glosses as possible: big capitals N, A, D, G for the cases (nominative, accusative, dative, genitive), small capitals M, F, N (masculine, feminine, neuter) for the genders, SG and PL for the numbers, 1, 2, 3 for the persons, AGR for unspecified agreement, IND, SUBJ for indicative vs. subjunctive, DEF, INDEF for definite vs. indefinite.
The logical subject has interpretable number, whereas the number feature of the finite verb is uninterpretable, as it only repeats the number information of the logical subject and thus does not add anything to the conceptual interface, where the clause is interpreted, i.e. it must be deleted prior to interpretation (although it must not be eliminated at the articulatory or ‘phonological’ interface). This deletion or ‘neutralization’ is achieved by agreement with the postverbal nominative argument. The underlying relation is that of Agree and the ‘participants’ or elements of the relation are referred to as the probe and the goal: The finite verb is a probe, searching for a goal, and when it finds a goal with matching features (the nominative argument), Agree is established and the uninterpretable features of the probe are deleted for the purpose of successful interpretation (Chomsky 2000, 2001a).

However, agreement is an amazingly varied phenomenon, much more varied than this ‘simple’ approach could ever account for. This is true of even closely related languages like the Germanic ones. Consider the variation illustrated below for English, German, Swedish and Icelandic (agreeing forms are boldface):

(2) a. They would be rich.
   b. Sie würden reich sein.
      they would.3PL rich be
   c. De skulle vara rika.
      they would be rich.PL
   d. Þeir mundu vera ríkir.
      they.N.M.PL would.3PL be rich.N.M.PL

In view of the fact that some languages are similar to English or Chinese in largely or even completely lacking agreement, it is clear that morphological agreement as such is not a property of Universal Grammar (although its underlying LF relation or relations are taken to be universal in the present approach). At the other extreme we have agreement-spreading languages like

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3 The participle komið ‘come’ takes a non-agreeing, default form when selected by hafa ‘have’ (see section 2.2.1). The default form is homophonous with the agreeing N/A/N.SG form, but I refrain from giving irrelevant morphological information in the glosses; such redundant information only makes it harder for the reader to process the examples, and can easily be found in any Icelandic grammar (e.g. Einarsson 1945).

4 Cf. the Principle of Full Interpretation in Chomsky 1995.
Swahili and other Bantu languages. Consider the Swahili example in (3) (from CORBETT 1991: 43):

(3) **Kicapu kikubwa kimojia kilianguka.**

    class7.basket AGR.large AGR.one AGR.fell

    ‘One large basket fell.’

Any Swahili noun has a prefix that marks its number (SG vs. PL) and noun class (or ‘gender’, 7 or 12 in all, depending on whether or not singular and plural are classified together). **Ki-** is one of those markers, taken by e.g. the root –*kapu* in the singular (class 7). In the plural, it takes **vi-**, yielding **vikapu** ‘baskets’ (class 8). In both cases, certain other elements of the clause must agree with the class/number marker, that is, the marker ‘spreads’. Consider (4) (from CORBETT 1991: 44):

(4) **Vicapu vikubwa vitatu vilianguka.**

    class8.basket AGR.large AGR.three AGR.fell

    ‘Three large baskets fell.’

A somewhat different kind of agreement spreading is found in some Australian languages, for instance Yukulta and (the closely related) Kayardild, two nearly or already extinct Pama-Nyungan languages (ETHNOLOGUE). The Kayardild example in (5) is from LAKE (2001: 108):

(5) **Makuntha yalawuyarrantha yakurinaantha**

    woman.AGR caught.NTHA fish.AGR

    **dangkakarranguninaantha mijilnguninantha.**

    man’s.with.AGR net.AGR

    ‘The woman must have caught fish with the man’s net.’

Although the suffix -*nta* is originally a marker of oblique case, it has developed into a marker of inferential modality, and “should probably be treated as a feature of the verb which spreads to the dependents via concord” (LAKE 2001: 109).

The Swahili and the Kayardild types of agreement seem to be basically of the same nature, although they take place within different parts of the clause. The Swahili type may be sketched in the following manner:

(6) AGR₁-[CLASS₁-basket AGR₁-large AGR₁-one] AGR₁-fell

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5 The term ‘agreement spreading’ is a bit unfortunate, as it makes an implication I’m not really in a position to provide, namely that the agreement features percolate (an implication that is not obviously correct and would in any case need to be substantiated). I have not managed to come up with any better descriptive term.

6 For a discussion of ‘defective’ agreement in Bantu languages (arising in VS orders as opposed to SV orders), see VAN GELDEREN (1997: 26-28) and the references cited there.
That is, two processes are presumably involved: 1) DP-internal concord within the subject phrase. 2) Agreement of the predicate with the subject phrase as a whole. This is thus a similar relation as that between DP-internal number concord in the Germanic languages and agreement of finite verbs and predicative adjectives with the number of a subject DP as a whole. In the Kayardild type, on the other hand, the agreement seems to ‘stem from’ a modal clausal feature or a ‘head’ (inferential modality) that presumably commands the whole clause at some level of representation (later attracting the verb):

(7) \[ \text{MOD}_i [\text{woman-AGR}_i \text{caught-AGR}_i \ldots]\text{-AGR}_i \]

The modal head agrees with its complement (the rest of the clause) and, in addition, the complement shows constituent-internal concord, like the subject-DP in Swahili. As we shall see in sections 2.2. and 2.3 below, constituent-internal concord or agreement spreading is found within both predicates and DPs in some of the Germanic languages as well. Facts of this sort illustrate that agreement cannot be reduced to feature matching of DPs and TPs (as in Peetersky and Torrego 2001) or matching between extended V-projections and extended N-projections (initially plausible as that approach may seem). Agreement is much more general than that.

Reconsider the Icelandic example in (1), with the partial structure in (8):

(8) \[[ \text{there have-AGR}_i [\text{come [here [three linguists]]}]]\]

It is clear that the finite verb somehow has access to the featural information of the nominative argument, even though the latter is deeply embedded in its predicate. One way to account for this access is to assume that the finite verb can probe into its complement, as suggested by Chomsky (2000, 2001a). Suppose, however, that more elements than just the verb agree with the ‘late’ nominative, as in (9):

(9) a. \[ \text{there have-AGR}_i [\text{been [elected-AGR}_i \text{three linguists}_i]]\]
   b. \[ \text{there have-AGR}_i [\text{been [believed-AGR}_i [\text{elected-AGR}_i \text{three linguists}_i]]]\]

In cases like these, not only the finite verb but also the participles show agreement with the logical subject and hence something more than just probing of the finite verb is going on. As we shall see, multiple agreement of a very similar sort is attested within Germanic, in particular in Icelandic.

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7 This is basically the same idea as the case-path idea developed in Sigurdsson 1989, 1990-1991 (by which the case path opened up a way for the phi-features of the subject DP ‘back to’ Infl). For closely related approaches, see Peetersky and Torrego 2001, Plattzack 2001, 2002.
Given the universalist view of the internal, mental system of language, the natural working hypothesis is that non-agreement in languages like English and Chinese is in some sense a ‘null-exponent’ of the same underlying relations that are signalled by the many kinds of complex and multiple agreement in languages like Swahili and Icelandic. In view of the immense variation seen in agreement languages, however, it would seem impossible to generalize over all the various agreement phenomena (see e.g. Cinque 1999; Julien 2002: 258), let alone to also generalize over silent or ‘covert agreement’. However, this is exactly what a coherent theory of agreement must do. But, as we shall see, the Probe-Goal Approach cannot be maintained, as a probe-goal relation is much too specific and could thus not be the common denominator. In addition, it is on a slightly wrong track even where it is descriptively adequate.

An extremely general or ‘atomic’ approach is needed, an Occam’s razor. I therefore suggest that Agree reduces to Merge and possibly also to Move, inasmuch as Move can be seen as an instantiation of Merge (Starke 2001, Chomsky 2001b). It seems to me, however, that unifying Move and Merge is an oversimplification. Move (or ‘internal Merge’) does not really add information to the structure in the same way as true (‘external’) Merge does. Consider the ‘pre-movement’ structure in (10a) and the corresponding ‘post-movement’ structure in (10b). F is an element that has been merged to XP, thereby creating the structure FP, α is a category that moves to the edge of this structure and ϕ is its copy or ‘trace’:

(10) a. \[ FP F [XP \ldots \alpha \ldots ] \]
    b. \[ \alpha [FP F [XP \ldots \phi \ldots ] \]

However, on standard assumptions, the movement of α must have been triggered by some feature or property in the ‘pre-movement’ structure in (10a), say by some requirement of F, call it f. If so, the movement-information is already there, in a sense (by merger of F or f), that is, the movement is predestined by Merge and does, accordingly, not add any information to the structure.

It would thus seem that Move is vacuous, and in a sense it is: Typically, movement or word order differences between languages are semantically unimportant. – In another sense,  

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8 FNL or the “faculty of language in the narrow sense” in the terminology of Hauser et al. 2002.
9 One way of implementing this is to say that agreement is a parametric property of the lexical items involved in an agreement construction. I shall however not detail about technicalities here (but see section 3 for some speculations).
10 In footnote 6 in Derivation by Phase, Chomsky (2001a: 42) suggests that Concord is a similar relation as that of Agree, albeit a distinct one, “involving Merge alone”. I propose, in contrast, that Agree and Concord are the same relation, both involving Merge and feature matching.
11 ‘Edge’ is here used in an intuitive, non-technical sense (roughly the sense defined in Chomsky 2001a: 13). Edge phenomena will be discussed in more detail in sections 2.1.5 and 3.
12 With respect to grammaticality within any given language, however, movement is of course not vacuous. Parametrized EPP effects may be needed.
however, Move is ‘meaningful’: movement of an element or a feature $\alpha$ to the edge of FP renders FP amenable to external Merge, as will be discussed in section 3. That is, Move does not reduce to Merge, but it is driven or motivated by the its ‘needs’.

Given that Move is always predestined or motivated by Merge, we can restrict our attention to the latter. Thus, my central hypothesis may be stated as the **AGREE CONDITION ON MERGE**:

(11) Two objects or elements, $X$ and $Y$, may be merged only if the relation of Agree holds between them.

It is more accurate to say that elements *match* each other’s requirements prior to Merge and *agree* as a result of Merge. When the need arises, we will use this more accurate terminology, otherwise using Agree as a general term for both matching and Agree itself.

Being a condition on Merge, Agree is necessarily a sisterhood relation, not a probe-goal relation. However, there is more to this than just sisterhood: the properties or features of the merged objects also matter, that is, they must agree in a sense to be explicated. Defining the relation of Agree amounts to defining the *fundamental problem of compositionality*:\(^\text{13}\) How can two distinct units ever make up a whole, that, in turn, may function as a part of another, larger whole? This is the very ‘mystery’ of language structure, stated in extremely simple terms.

It is useful to think of Merge/Agree like chemical reactions and chemical bonds. Atoms cannot merge to form chemical bonds unless they ‘agree’ in a sense, that is, the negatively charged electrons of one atom must be attractable by the positively charged nucleus of another atom and vice versa. The result is a *bond*, a larger unit where the subunits share some of their outer shell or ‘edge’ electrons (‘agreement features’). Adopting this ‘atom metaphor’, I also find it profitable to replace the $X’$-theoretic notions ‘head’ and ‘specifier’ with *nucleus* and *edge*. In view of the fact that usual labelling is problematic and must arguably be dispensed with (see *Starke* 2001, *Collins* 2002), this is a timely step. See further below and section 2.1.5.

Reconsider ‘distant agreement’ as in (1) and the simple (12):

(12) \textit{
\begin{tabular}{c}
 Pað & hafa & komið & málfísindamenn.
\end{tabular}}

there have.3.PL come linguists.N.M.PL

For sake of expository ease, let us assume that this clause only has the extremely simple structure in (13):

(13) \textit{
\begin{tabular}{c}
 [there [Agr have [come [linguists]]]]
\end{tabular}}

\(^{13}\) In a more basic sense than usually considered. The focus here is not on the effect of composition (as in many semantic approaches), but on the more fundamental question of how composition itself is possible in the first place.
Let us also make the pedagogical (but wrong) assumption that (13) illustrates the exact compostionality of the syntactic structure, that is, reflects its derivational history: the main verb first merging with the nominative argument, yielding [come linguists], the second cycle of Merge simply yielding [have come linguists] and the final cycle yielding [there have come linguists]. What the Agree Condition on Merge says, then, is that the relation of Agree holds not between have and linguists, but between every two objects that have been merged, that is:¹⁴

(14)  a. [come] & [linguists]
    b. [have] & [come linguists]
    c. [there] & [have come linguists]

However, the only morphological agreement is that between have and linguists. Thus, there is no straightforward correlation between Agree and visible or audible agreement. More often than not, Merge/Agree is ‘silent’, in fact, the result of a parametric choice not to express a particular instance of Merge in morphology. Secondly, even when Merge/Agree is not silent, it is often only ‘partial’ in that it only involves some (phonological) subpart of a merged element. Both these aspects of Merge/Agree need to be understood and accounted for (for some observations, see sections 2.1.5 and 3).

Before we start describing and discussing facts from the Germanic languages, a few words on the basic clause structure assumed here are in place. CHOMSKY (1991, 1993) suggested that the Infl head of the clause splits into ‘subject agreement’ or AgrS, tense or T and ‘object agreement’ or AgrO, the corresponding maximal projections being AgrSP, TP and AgrOP (AgrSP corresponding to IP in older systems). While many have adopted this system, CHOMSKY himself quickly abandoned it (1995: 349 ff.): Agr does not have any content at LF and must thus be eliminated from the system. The clausal functional heads in CHOMSKY’s approach have since been only T(ense) and the so-called little v, the simple IP-clause being merely a TP dominating a predication phrase or an aspect phrase, referred to as vP.

It seems plausible, if not trivially obvious, that there can be no complex agreement or inflectional elements at the basic syntactico-semantic structure of language, LF: what would they be doing there? In contrast, being meaningful, the subparts of the Infl of the earlier work of CHOMSKY (e.g. 1981, 1986) must obviously ‘be there somewhere’. These subparts are not only tense but minimally also mood, person and number.¹⁵ Rather than eliminating AgrS, I thus assume that it splits into Pers(on) and Num(ber), thereby adopting the approach in SIGURDSSON ¹⁴ This is only meant to illustrate the general point. Of course, these are not the real objects of combination, since we don’t take any functional structure into account.
¹⁵ In CHOMSKY’S approach, the relevant elements are situated within T and v (in a similar fashion as they were situated within Infl in earlier approaches, see e.g. SIGURDSSON 1989: 25).
2000 and subsequent work. Similarly, the tense ‘head’ or nucleus must split into at least M(ood) and T(ense). This gives us – minimally – the clausal structure in (15).

(15)  [CP C [PersP Pers [NumP Num [MP M [TP T [vP v [VP V]]]]]]]

I conceive of all complex structures as molecular, such that for instance the ‘CP’ is a ‘C molecule’. In the interest of readability, however, I keep the conventional phrasal notation, ‘CP’, ‘VP’ and so on (without all single bar categories, though). It is important to notice that this does not imply labelling or projections in the present approach.

As for Icelandic, the plural verbal inflection renders rather impressive evidence in favor of this radical splitting of ‘Infl’ (see SIGURDSSON 2001 for some discussion, also of the more opaque singular forms). This is illustrated in (16) for the plural past tense indicative and subjunctive forms of ganga ‘walk’. The subjunctive marker -i- is mostly invisible, but it is sometimes indirectly visible as a palatalization effect on a preceding -g- or -k-, indicated in spelling by the letter -j- (boldface below).

(16)  

\[
\begin{align*}
\text{V} & \quad \text{T} & \quad \text{M} & \quad \text{Num} & \quad \text{Pers} \\
a. \quad \text{geng} & \quad - & \quad - & \quad u & \quad m & = \text{gengum (PAST.IND.PL.1)} \\
b. \quad \text{geng} & \quad - & \quad - & \quad u & \quad \delta & = \text{genguð (PAST.IND.PL.2)} \\
c. \quad \text{geng} & \quad - & \quad - & \quad u & \quad - & = \text{gengu (PAST.IND.PL.3)} \\
d. \quad \text{geng} & \quad - & \quad i & \quad u & \quad m & = \text{gengjum (PAST.SUBJ.PL.1)} \\
e. \quad \text{geng} & \quad - & \quad i & \quad u & \quad \delta & = \text{gengjúð (PAST.SUBJ.PL.2)} \\
f. \quad \text{geng} & \quad - & \quad i & \quad u & \quad - & = \text{gengú (PAST.SUBJ.PL.3)}
\end{align*}
\]

As argued by RIZZI (1997), the C-domain must presumably split as well, and, as in CINQUE (1999), JULIEN (2002) and much related work, the M, T and v domains each also splits into many

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16 Closely related ideas are developed for Icelandic in HAEBERLI 2002, and have also been suggested for other languages, for instance by SHLONSKY 1989 (according to HAEBERLI 2002, 294, 296), EGERLAND 1996b (who, however, assumes both PersP and AgrSP), and, in a different fashion, POLETTI 2000. For expository reasons, I leave object features out of consideration. – A conceptually related but a different approach explored in PLATZACK 2002 is that DPs contain PersP.

17 See also e.g. SIGURDSSON to appear and the works cited there. Arguably, Gender or Class is also a clausal element, visible in inflected predicates in the Scandinavian languages, as discussed in section 3 (whereas it seems to be much higher in the clausal structure in languages where it is visible on the finite verb, such as Arabic and Hindi/Urdu). I do not assume that Person should be split into a Speaker and a Hearer (as in e.g. POLETTI 2000). The Speaker and the Hearer are necessarily ‘silent’, in the Speech Phrase, SP, an LF-structure that dominates CP (i.e. the personal pronouns and pronominal clitics do not directly represent the speech situation participants, although they represent event participants that may happen to be coreferential with the speech situation participants). For some discussion, see SIGURDSSON to appear and section 3.

18 Arguably, it is also the trigger of a widespread i-Umlaut in past subjunctive forms, even synchronically, but I shall not pursue this here. Strong verbs like ganga have, of course, no tense suffix, marking tense with Ablaut of the stem vowel. Presumably, the null tense ‘marker’ triggers or matches Ablaut when it immediately c-commands the verb stem (prior to Verb Raising) in much the same fashion as the mood marker triggers/matches Umlaut (whenever the stem has a vowel amenable to Umlaut).
subdomains. However, the simple structure in (15) is sufficiently articulated for most of our purposes (but for some extensions, see section 3).

2. Germanic agreement phenomena

Let us now turn to agreement phenomena in the Germanic languages and see how they bear on the theoretical issues raised in section 1. Icelandic is the richest agreement language among the Germanic languages (with the exception of complementizer agreement, which it lacks). I shall therefore largely base my description on that language, only complementing it now and then by adding comparative data from the other Germanic languages. I shall describe and discuss the following phenomena:

I Finite verb agreement
II Primary predicate agreement
III Secondary predicate agreement
IV DP-internal agreement or concord
V Noun-possessor agreement
VI Complementizer agreement

My discussion of finite verb agreement (section 2.1) and of primary predicate agreement (section 2.2) is rather thorough, whereas I only give a sketchy overview of the other four phenomena (in section 2.3). 19

The purpose of the following presentation is threefold. First, I wish to present a typological overview of Germanic agreement phenomena, since such an overview is lacking and since the range and complexity of the data are not generally appreciated. Second, by presenting these complex data, I underpin my claim that the Probe-Goal Approach to Agree is much too specific: it cannot account for agreement variation in even only Germanic. Third, some of the presented data form a basis for the concluding discussion in section 3.

Readers who are not interested in the details of the data ought to be able to go to the concluding discussion in section 3 after only a quick glance at the highlights of this chapter, above all the discussion in 2.1.4-2.1.5. Conversely, readers who are primarily interested in the data might wish to only quickly browse through section 3.

19 Possibly, the structural genitive in languages like English and Mainland Scandinavian (as opposed to the morphological genitive in Icelandic and German) can be analyzed as an agreement marker. In addition, stem-final thematic vowels and so-called binding vowels and binding consonants in compounds can be thought of as word formation agreement markers, that is, mere 'signs of compositionality' below the word-level.
2.1 Finite verb agreement

2.1.1 Subject-verb Agreement vs. Reverse Agreement

The Icelandic finite verb shows agreement in person (1, 2, 3) and number (SG, PL), as illustrated by the present tense indicative paradigms in (17). Only some of the numerous inflectional paradigms are represented:

<table>
<thead>
<tr>
<th></th>
<th>byrja</th>
<th>heyra</th>
<th>telja</th>
<th>fá</th>
<th>þurfa</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>byrja</td>
<td>heyri</td>
<td>tel</td>
<td>fæ</td>
<td>þarf</td>
</tr>
<tr>
<td>2SG</td>
<td>byrjar</td>
<td>heyrir</td>
<td>telur</td>
<td>færð</td>
<td>þarfð</td>
</tr>
<tr>
<td>3SG</td>
<td>byrjar</td>
<td>heyrir</td>
<td>telur</td>
<td>fær</td>
<td>þarf</td>
</tr>
<tr>
<td>1PL</td>
<td>byrjum</td>
<td>heyrum</td>
<td>teljum</td>
<td>fáum</td>
<td>þurfum</td>
</tr>
<tr>
<td>2PL</td>
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<td>heyrið</td>
<td>teljið</td>
<td>fáið</td>
<td>þurfið</td>
</tr>
<tr>
<td>3PL</td>
<td>byrja</td>
<td>heyra</td>
<td>telja</td>
<td>fá</td>
<td>þurfa</td>
</tr>
</tbody>
</table>

Most paradigms have five distinct forms in the indicative, present and past, and in the past subjunctive, but only four in the present subjunctive. Strong verbs with a stem in a vowel, like fá ‘get’, however, show six forms in the present indicative. So-called ‘mediopassive’ verbs in –st, like heyrast ‘get heard’, fást ‘be available’, etc., have fewer distinct forms, mostly four in the present indicative but down to even only two in the present subjunctive.

Most other Germanic varieties have simplified the system to a varying extent. Consider the overview in (18) of the ‘normal present indicative paradigm’ in some of the languages in question (with hear and it’s cognates as an illustrating example). The information is taken from VIKNER (1997-1998: 90-91, 94) and THRÁINSSON (2001: 18):

<table>
<thead>
<tr>
<th></th>
<th>Singular forms (1-2-3):</th>
<th>Plural forms (1-2-3):</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Icelandic</td>
<td>heyri – heyrir – heyrir</td>
<td>heyrum – heyrið – heyra</td>
<td>5</td>
</tr>
<tr>
<td>German</td>
<td>höre – hörst – hört</td>
<td>hören – hört – hören</td>
<td>4</td>
</tr>
<tr>
<td>Frisian</td>
<td>hear – hearst – heart</td>
<td>hearre – hearre – hearre</td>
<td>4</td>
</tr>
<tr>
<td>Yiddish</td>
<td>her – herst – hert</td>
<td>hern – hert – hern</td>
<td>4</td>
</tr>
<tr>
<td>Dutch</td>
<td>hoor – hoort – hoort</td>
<td>horen – horen – horen</td>
<td>3</td>
</tr>
<tr>
<td>Faeroese</td>
<td>hoyri – hoyrir – hoyrir</td>
<td>hoyra – hoyra – hoyra</td>
<td>3</td>
</tr>
<tr>
<td>English</td>
<td>hear – hear – hears</td>
<td>hear – hear – hear</td>
<td>2</td>
</tr>
<tr>
<td>Swedish</td>
<td>hör – hör – hör</td>
<td>hör – hör – hör</td>
<td>1</td>
</tr>
</tbody>
</table>
This illustrates only a part of the variation, though. Other varieties of Germanic include Danish, Norwegian and Afrikaans, that are like Swedish in having only 1 present tense form, West Flemish and the Norwegian dialect Hallingmålet, both with 2 forms (albeit with very different functions), Pennsylvania German with 4 forms and the Swedish dialect or language Älvdalsmålet, also with 4 forms, that is, a common singular form and three distinct plural forms (see VIKNER 1995: 152; 1997-1998; VAN NESS 1994; DONALDSON 1994; ROHRBACKER 1994: 105 ff.). High Alemannic has up to 5 forms and Austrian-Bavarian varieties may even have 6 forms (Werner Abraham, p.c.).

Interestingly, Icelandic (and German) finite verb agreement is not just simple subject-verb agreement. To be sure, plain subject-verb agreement is the ‘usual’ and the ‘normal’ finite verb agreement type, illustrated in (19):

\[
\begin{align*}
1SG & \quad \text{Ég sé bókina.} & \quad \text{Ég hef séð bókina.} \\
& \quad \text{I see book.the} & \quad \text{I have seen book.the} \\
2SG & \quad \text{Þú séð bókina.} & \quad \text{Þú hefur séð bókina.} \\
3SG & \quad \text{Hún sér bókina.} & \quad \text{Hún hefur séð bókina.} \\
& \quad \text{(Hún = FEM)} \\
1PL & \quad \text{Við sjáum bókina.} & \quad \text{Við höfum séð bókina.} \\
2PL & \quad \text{Þið sjáið bókina.} & \quad \text{Þið hafið séð bókina.} \\
3PL & \quad \text{Þeir sjá bókina.} & \quad \text{Þeir hafa séð bókina.} \\
& \quad \text{(Þeir = MASC)}
\end{align*}
\]

As these examples indicate, subjects most commonly precede the finite verb (in non-inverted orders) and trigger its obligatory agreement in both number and person. However, Icelandic (and German) also has several types of REVERSE AGREEMENT, that is, the finite verb sometimes agrees with a nominative that is to its right, internal to the predicate. First, Icelandic has the well-known ‘late subject’ type illustrated in (1) above and in (20). As seen, the type allows but does not require the presence of the expletive það ‘there, it’ (in clause-initial position only):

\[
\begin{align*}
\text{(20) a. & \quad \text{það hafa komið hingað hrir málvísindamenn.} } \\
& \quad \text{it have.3PL come here three linguists.N}
\end{align*}
\]

---

20 Much of the following discussion is to a varying extent based on earlier work, in particular SIGURDSSON 1989, 1990-1991 1993, 1996, 2000, 2002. I shall not try the reader’s patience by pointing this out each time.

21 Icelandic has gender distinctions in plural, third person pronominals, as well as in singular ones.

22 Reverse agreement is often ‘defect’, not allowing the full range of agreement (see Universal 33 in GREENBERG 1966 and, for instance, VAN GELDEREN 1997, BENMAMOUN 2000, PLATZACK 2002). A related phenomenon, that I shall not discuss here, is defect or incomplete agreement with coordinated nominatives. FRIÐÍÖNSSON (1990-1991) contains a useful discussion of many of the agreement complications that arise in Icelandic coordinated structures.

23 Recall my abbreviations in the glosses: N, A, D, G for the cases (nominative, accusative, dative, genitive), M, F, N for the genders (masculine, feminine, neuter) and SG and PL for the numbers.
‘There have arrived three linguists here.’

b. Þess vegna komu hingað stundum þrír málvísindamenn.
   there fore came.3PL here sometimes three linguists.N
   ‘Therefore, three linguists sometimes came here.’

**Second**, the finite verb also shows number agreement with *nominative objects*, as in (21):

(21) a. Henni hafa alltaf leiðst bræður sínir.
   her.D have.3PL always bored brothers.N her.N.REFLEXIVE
   ‘She has always found her (own) brothers boring.’

b. Henni líkuðu sennilega ekki athugasemdirnar.
   her.D liked.3PL probably not comments.the.N
   ‘She probably didn’t like the comments.’

**Third**, the verb may also agree ‘downwards’ in number with third person *complement subjects* (of infinitives or small clauses), as in (22):

(22) a. Henni fundust bræðurnir gáfaðir.
   her.D found.3PL brothers.the.N intelligent
   ‘She considered the brothers to be intelligent.’

b. Henni mundu virðast bræðurnir hafa verið gáfaðir.
   her.D would.3PL seem brothers.the.N have been intelligent
   ‘The brothers would seem to her to have been intelligent.’

This typologically rather unusual construction is referred to as *Dative and Nominative with Infinitive*, D/NcI, in Sigurðsson 1989 and I shall adopt that term here.24

**Fourth**, the verb agrees with *NP predicates* in clauses with either demonstrative þetta ‘this’ or demonstrative það ‘it’ as a subject:

(23) a. Þetta hafa líklega bara verið heir.
   this have.3PL probably only been they.N.M.PL
   ‘It has probably only been them.’

b. Eru það þá kannski bara heir?
   are.3PL it then perhaps only they.N.F.PL
   ‘Is it then perhaps only them?’

24 In line with the traditional terms Accusative with Infinitive and Nominative with Infinitive, AcI and NcI, respectively. All three terms, AcI, NcI, and D/NcI, are slightly misleading, for two reasons: First, the complement is often a small clause rather than an infinitive. Second, the argument that is normally structurally case-marked, as either accusative (in AcI) or nominative (in NcI and D/NcI), may bear inherent ‘quirky’ case in Icelandic (depending on the predicate of the infinitive or the small clause).
A similar phenomenon is found in German, albeit less prominently (*Wir sind es (nur) ‘we are it (only)’ is usually preferred over *Es sind (nur) wir ‘it are (only) we’*).

### 2.1.2 Reverse Agreement: a closer look

For convenience, let us label the above mentioned reverse agreement types as follows:

1. **Late Subject Agreement** ['therefore *have* come here linguists’]
2. **Nominative Object Agreement** ['her *have* liked these comments’]
3. **D/NcI Agreement** ['her *have* seemed *they* be intelligent’]
4. **Reverse Predicate Agreement** ['it are only *they*’]

Late subjects are subject to the definiteness effect:

   there fore have.3PL sometimes come here men.the.N

   b. *Pess vegna hafa stundum komið hingað heir.
   there fore have.3PL sometimes come here they.N

It follows that the nominative in the Late Subject Construction can never be a personal pronoun of any sort. Nominative Object Agreement and D/NcI Agreement are subject to a slightly less severe restriction, in that they are confined to third person. Thus, in the Nominative Object Construction, we get the following grammaticality patterns:

   him.D would.3PL always like they.N
   ‘He would always like them.’

   b. *Honum munduð alltaf líka bið.
   him.D would.2PL always like you.N.PL
   [i.e. ‘He would always like you’]

   c. *Honum mundum alltaf líka við.
   him.D would.1PL always like we.N
   [i.e. ‘He would always like us’.]

The fact that (25a) is grammatical, in contrast to (24b), suggests that raising of the dative in (25) serves the same ‘purpose’ as potential raising of the nominative would do in (24).\(^{26}\) That, in turn, highlights the urgency of the question of why (25b, c) are ungrammatical.

---

\(^{25}\) Default third person singular ‘agreement’ does not rescue these examples. On the contrary, it only makes them still worse.

\(^{26}\) Namely, the ‘purpose’ of person matching, see below and SIGURDSSON 2003a, to appear.
A similar pattern is found for D/NcI:

(26)  
   a. *Henni munduð pá virðast þið vera hérna.
       her.D would.2PL then seem you.N.PL be here
       [i.e. ‘It would then seem to her that you are here.’]
   b. *Henni mundum þá virðast við vera hérna.
       her.D would.2PL then seem we.N be here
       [i.e. ‘It would then seem to her that we are here.’]
   c. *Henni mundum þá virðast við vera hérna.
       her.D would.2PL then seem we.N be here
       [i.e. ‘It would then seem to her that we are here.’]

The constructions are alike in that they both have a dative ‘quirky’ subject and a nominative argument that is a potential agreement controller: \text{DAT-V(AGR)-NOM}. However, there are also sharp differences between the constructions. First, the Nominative Object Construction is monoclausal while D/NcI is complex or ‘biclausal’ in the sense that it contains not only a simple main clause but also a subordinant predication (an infinitive or a small clause). Thus, the nominative has a different status in these constructions, as sketched below:

(27)  
   a. \text{DAT- [V - NOM]}
   b. \text{DAT- [V - [NOM + PREDICATE]]}

Second, first and second person nominatives are fully grammatical in D/NcI, provided that they do not control agreement. That is, the finite verb is allowed to show up in the default third person singular (= non-person), but not in the agreeing person. This is illustrated (in part only) in (28), where the infinitival complement is within brackets:

(28)  
   a. Mér mundi/*munduð þá virðast [þið vera hérna].
       me.D would.3SG/2PL then seem you.N.PL be here
       ‘It would then seem to me that you are here.’
   b. Henni mundi/*mundum þá virðast [við vera hérna].
       her.D would.3SG/1PL then seem we.N.PL be here
       ‘It would then seem to her that we are here.’
   c. Okkur mundi/*mundir þá virðast [þú vera hérna].
       us.D would.3SG/2SG then seem you.N.SG be here
       ‘It would then seem to us that you are here.’

\text{27} That is to say, when the complement subject is not ‘quirky’. ‘V’ in the formula stands for the finite verb (the predicate may of course be more complex).
In contrast, first and second person nominatives are degraded in the Nominative Object Construction, even when they do not trigger agreement. This is illustrated in (29), where ‘??*’ indicates a slightly less sharp ungrammaticality than the plain star:

(29)  

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Henni</td>
<td>*mundi/*munduð alltaf líka þið.</td>
<td>her.D would.3SG/2PL always like you.N.PL</td>
</tr>
<tr>
<td></td>
<td>[i.e. ‘She would always like you.’]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>Henni</td>
<td>*mundi/*mundum alltaf líka við.</td>
<td>her.D would.3SG/1PL always like we.N</td>
</tr>
<tr>
<td></td>
<td>[i.e. ‘She would always like us.’]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>Henni</td>
<td>*mundi/*mundir alltaf líka þú.</td>
<td>her.D would.3SG/2SG always like you.N.SG</td>
</tr>
<tr>
<td></td>
<td>[i.e. ‘She would always like us.’]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For first or second person nominatives, the agreement differences between the constructions may thus be sketched as below; ‘1/2’ simply stands for ‘either first or second person’:

(30)  

<table>
<thead>
<tr>
<th>NOMINATIVE OBJECT:</th>
<th>D/NCI:</th>
</tr>
</thead>
<tbody>
<tr>
<td>['me like(s) Nom']</td>
<td>['me seem(s) Nom + Predicate']</td>
</tr>
<tr>
<td>*DAT-V1/2-1/2.NOM</td>
<td>*DAT-V1/2-1/2.NOM + PRED (full agreement)</td>
</tr>
<tr>
<td>??*DAT-V3SG-1/2P.NOM</td>
<td>okDAT-V3SG-1/2P.NOM + PRED (3SG ‘agreement’)</td>
</tr>
</tbody>
</table>

For third person plural nominatives the general pattern is as follows:

(31)  

<table>
<thead>
<tr>
<th>NOMINATIVE OBJECT:</th>
<th>D/NCI:</th>
</tr>
</thead>
<tbody>
<tr>
<td>['me like(s) Nom']</td>
<td>['me seem(s) Nom + Predicate']</td>
</tr>
<tr>
<td>ok*DAT-V3PL-3PL.NOM</td>
<td>ok*DAT-V3PL-3PL.NOM + PRED (full agreement)</td>
</tr>
<tr>
<td>??*DAT-V3SG-3PL.NOM</td>
<td>ok*DAT-V3SG-3PL.NOM + PRED (3SG ‘agreement’)</td>
</tr>
</tbody>
</table>

The generalizations for the constructions can be summarized as follows:

(32)  

<table>
<thead>
<tr>
<th></th>
<th>THE NOMINATIVE OBJECT CONSTRUCTION:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a1.</td>
<td>Third person nominatives are licensed, normally requiring number agreement.</td>
</tr>
<tr>
<td>a2.</td>
<td>First and second person nominatives are prohibited (and full agreement is even worse than default 3SG ‘agreement’).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>THE D/NCI CONSTRUCTION:</th>
</tr>
</thead>
<tbody>
<tr>
<td>b1.</td>
<td>Nominatives in all persons are licensed.</td>
</tr>
<tr>
<td>b2.</td>
<td>Third person nominatives allow but do not require number agreement.</td>
</tr>
</tbody>
</table>
b3. First and second person nominatives sharply disallow full agreement (i.e. they are grammatical as such, but only with a default 3SG form of the finite matrix verb).

It would thus seem that the person feature of the nominative must be matched in the simple Nominative Object Construction (and the ungrammaticalitity of the construction for first and second person nominatives stems from the fact that obligatory person matching is blocked), whereas the nominative in D/NcI apparently survives without person matching.28

Common to both constructions and to finite clauses in general is that only nominatives may control agreement (see further below). In addition, however, the relation of the nominative and the finite verb plays a role. While a nominative subject may be in any person and triggers obligatory full agreement, nominatives that are either direct objects or subjects of a non-finite complement (an infinitive or a small clause) are subject to complex restrictions, both with regard to their person selection and with regard to agreement triggered by the selected person.

However, the distinction between licensing and disallowing the full range of persons and person agreement is not simply that between (matrix) subjects and non-subjects. Thus, the Reverse Predicate Agreement Construction shows no restrictions on person selection or person agreement:

\[(33) \quad a. \; \textit{þetta erum bara við}. \quad \text{this are.1PL only we.N} \]
\[ \text{‘This/It is only us.’} \]

\[ \; b. \; \textit{Eruð þad þá bara þið?} \quad \text{are.2PL it then only you.N.PL} \]
\[ \text{‘Is it then only you?’} \]

\[ \; c. \; \textit{Ert þetta þú?} \quad \text{are.2SG this/it you.N.SG} \]
\[ \text{‘Is this/it you?’} \]

It follows that some other feature or property than just ‘structure’ in the straightforward configurational sense of most syntactic theories decides whether or not nominative non-subjects may control full agreement.

Compare the Nominative Object Construction and the Reverse Predicate Agreement Construction; the ‘Subject-Verb Inversion’, typical of the Germanic Verb-Second languages, underscores that \textit{henni} ‘her.DAT’ in (34) and \textit{þetta} ‘this/it’ in (35) are the syntactic subjects in these constructions. The grammaticality judgements are robust:
The finite verb has access to the person and number features of the nominative NP or DP in (34b) and (35), thus being able to agree with it. In (34a), on the other hand, the finite verb cannot ‘reach’ the second person object, that is, something blocks the correlation, *intervenes* between the finite verb and the person of the object. Arguably, it is the dative that is the interfering factor (BOECKX 2000; SIGURÐSSON 1996, 2000). This *Dative-Intervention* is not found in Dat-Nom constructions e.g. in German or Russian (on the latter, see SIGURÐSSON 2002: 719 f.; on the former, SIGURÐSSON to appear). Compare the Icelandic (25b, c) above, = (36), and the German (37):

(36) a. *Honum munduð alltaf líka bið.

him.D would.2PL always like you.N.PL

[i.e. ‘He would always like you.’]

b. *Honum mundum alltaf líka við.

him.D would.1PL always like we.N

[i.e. ‘He would always like us.’]

(37) a. Ihm würdet ihr immer gefallen.

him.D would.2PL you.N.PL always like

‘He would always like you.’

b. Ihm würden wir immer gefallen.

him.D would.1PL we.N always like

‘He would always like us.’
This is a most striking dichotomy. I shall return to it in section 2.1.4.

2.1.3 The Nominative Restriction

As mentioned above, only nominatives may ever control finite verb agreement in Icelandic and German. This Nominative Restriction is a very familiar phenomenon, cross-linguistically. For Icelandic, however, this is in a way a remarkable restriction, since Icelandic is renowned for having numerous constructions with non-nominative ‘true’ (syntactic) subjects. We have already seen some examples of this, in the Dat-Nom constructions discussed above. A few more examples, where the oblique subjects are underlined:

(38) a. Hana vantaði peninga.
    her.A lacked money.A
    ‘She lacked money.’

b. Henni var óglatt.
    her.D was un-joyous
    ‘She was nauseated.’

c. Henni var engin vorkunn.
    her.D was no pity.N
    ‘There was no reason to pity her.’

d. Hennar gætti ekkert á fundinum.
    her.G noticed not-at-all at meeting.the
    ‘She was not at all noticeable at the meeting.’

Icelandic non-nominative arguments of this sort behave syntactically like usual nominative subjects in the language (in contrast to similar arguments in e.g. German). That is, they trigger reflexivization in a similar fashion as nominative subjects, can be represented as ‘silent’ subjects of infinitives (PRO) and as the subject gap in Conjunction Reduction structures, participate in ‘Subject-Verb Inversion’, undergo raising and so on. In view of this, it is interesting that these subjects do not trigger agreement (see the discussion in e.g. SIGURDSSON 1996, 2003a, to appear).

Clauses with a non-nominative subject most commonly have a default third person singular finite verb, as in (39):

(39) a. Okkur leiddist að hugsa um strákana.
    us.D bored.3SG to think about boys.the.A
    ‘We found it boring to think about the boys.’

SIGURDSSON 1989, 1996) with which the nominative null-agrees.
b. *Okkur líkði vel að hugsa um hestana.*  
us.D liked.3SG well to think about horses.the.A  
‘We liked attending to the horses.’

c. *Okkur var sagt frá atburðunum.*  
us.D was.3SG told from events.the.D  
‘We were told about the events.’

As we have seen, however, verbs with dative subjects agree in number with a third person nominative object. Thus, if we ‘exchange’ the infinitival and prepositional complements in (39) with direct nominative objects, as in (40), we get plural agreement on the verb: 29

(40)  
a. *Okkur leiddust strákarnir.*  
us.D bored.3PL boys.the.N.PL  
‘We found the boys boring.’

b. *Okkur líkuðu hestarnir vel.*  
us.D liked.3PL horses.the.N.PL well  
‘We liked the horses.’

c. *Okkur voru sagðir atburðirnir.*  
us.D were.3PL told events.the.N.PL  
‘We were told the events.’

In short, non-nominative subjects never control finite verb agreement, but clauses with such subjects may show finite verb number agreement with a nominative third person object. Notice that passives behave like active predicates in this respect, as seen in (40c). I shall return to the Nominative Restriction, arguing that it constitutes an argument against the Probe-Goal Approach to Agree.

Third person singular is also the form of the finite verb in various types of impersonal clauses, with the expletive *það* ‘there, it’ in first position, as in (41):

(41)  
a. *Það rignir stundum mikið í Róm.*  
it rains.3SG sometimes much in Rome  
‘It sometimes rains much in Rome.’

b. *Það er oft leiðinlegt hérna á kvöldin.*  
it is.3SG often boring here in evenings.the  
‘It is often boring here in the evenings.’

c. *Það er yfirleitt ekki talað um þetta mál hér.*  
it is.3SG generally not talked about this matter here

---

29 Mostly obligatorily, but sometimes only optionally. See SIGURDSSON 1996.
‘This matter is generally not discussed here.’

d. það má ekki reykja hér.

‘It is not allowed to smoke here.’

Expletive það is not a syntactic subject, but a placeholder of the first position in finite clauses (Thráinsson 1979 and many others, e.g. Platzack 1987, Sigurdsson 1989, Magnússon 1990, Holmberg and Platzack 1995, Vikner 1995, Jónsson 1996). If some other constituent takes the first position, then það must not be spelled out, that is, the type ‘sometimes rains it in Rome’ is ungrammatical; instead, one has to say ‘sometimes rains in Rome’, without the expletive. Icelandic has various impersonal, subjectless and það-less clause types of this sort, some of which are illustrated in (42). As seen, the finite verb shows up in the default third person singular:

(42) a. Stundum rignir mikið í Róm.
sometimes rains.3SG much in Rome

‘Sometimes, it rains much in Rome.’

b. Oft er leiðinlegt hérna á kvöldin.
only is.3SG boring here in evenings.the

‘It is often boring here in the evenings.’

c. Um þetta mál er yfirleitt ekki talað hér.

about this matter is.3SG generally not talked here

‘This matter is generally not discussed here.’

d. Hér má ekki reykja.

here may.3SG not smoke

‘It is not allowed to smoke here.’

The expletive must also be left out in the ‘corresponding’ questions, as in (43), and, again, the finite verb is in the third person singular:

(43) a. Rignir stundum mikið í Róm?
rains.3SG sometimes much in Rome

‘Does it sometimes rain much in Rome?’

b. Er oft leiðinlegt hérna á kvöldin?
is.3SG often boring here in evenings.the

‘Is it often boring here in the evenings?’

c. Er yfirleitt ekki talað um þetta mál hér?
is.3SG generally not talked about this matter here
‘I this matter generally not discussed here?’

d. Má ekki reykja hér?
may.3SG not smoke here
‘Is it not allowed to smoke here?’

Similar facts, albeit much less frequently, are found in German:

(44) a. Über diese Sache wird hier meistens nicht gesprochen.
about this matter is.3SG here generally not talked

b. Darüber muss doch gesprochen werden.
there-about must.3SG though talked be

(45) Wird hier darüber nicht gesprochen?
is.3SG here there-about not talked

Clauses of this sort are often analyzed as having a ‘silent’ subject, so-called expletive pro, as sketched in (46):

(46) a. [about this matter is pro generally not talked here]

b. [is pro not talked about it here?]

In order to account for the 3SG form of the verb, one could say that pro, the ‘silent subject’, is inherently third person singular – and that the verb simply agrees with the 3SG features of pro. Alternatively, one could say that there is no real subject in structures of this sort and that the 3SG form is default, signalling the absence of specified person and number values.

2.1.4 Dative Intervention: Icelandic vs. German

Both the alternatives just mentioned (3SG agreement vs. default non-agreement) could be extended to German ‘impersonal’ constructions, with a ‘prominent’ non-nominative argument, as in (47):

(47) a. Mir ist kalt.
me.D is.3SG cold

b. Mir wurde geholfen.
me.D was.3SG helped

Spelling out the expletive es in structures of this sort is grammatical (Es ist mir kalt, Es wurde mir geholfen, etc., as discussed in SIGURDSSON 1989 and HAEBERLI 2002), suggesting that the types in (47) might involve a silent subject (alternatively spelled out as es). This analysis is sketched in (48):
(48) a. DAT is pro cold
   b. DAT was pro helped

The status of pro (and PRO) is unclear and quite problematic in the minimalist program, but let us assume this analysis of the German facts, for the sake of the argument. The important point for our purposes is that this analysis could however not be extended to Icelandic. In that language, the dative is arguably a subject, mostly behaving like a usual nominative subject (with respect to a host of phenomena that are commonly referred to as ‘subjecthood tests’, such as binding, word order phenomena, raising to subject and so on). Thus, the spelling out of the expletive það in examples of this sort is sharply ungrammatical:

(49) a. Mér er kalt. / *það er mér kalt.
   me.D is.3SG cold / it is me cold
   b. Mér war hjálpað. / *það var mér hjálpað.
   me.D was.3SG helped / it was me helped

The 3SG form of the verb in Icelandic examples of this sort, then, should arguably not be analyzed as agreeing with a silent pro subject. On the other hand, there are also reasons to doubt that the 3SG form is simply a non-agreeing default form. That is, there is evidence that the third person of the verb in clauses with a non-nominative subject is actually due to ‘null-agreement’ with the oblique subject: a syntactically active but a morphologically non-active or invisible matching correlation.

The evidence in question comes from the deficient agreement patterns in the Nominative Object Construction and in the D/NcI Construction, discussed in section 2.1.2. Reconsider (25) = (50):

(50) a. Honum mundu alltaf lika þeir.  Ók3P.AGR-3P.NOM
    him.D would.3PL always like they.N
    ‘He would always like them.’
   b. *Honum munduð alltaf lika þið.  *2P.AGR-2P.NOM
    him.D would.2PL always like you.N
    [i.e. ‘He would always like you’]
   c. *Honum mundum alltaf lika við.  *1P.AGR-1P.NOM
    him.D would.1PL always like we.N
    [i.e. ‘He would always like us’.

We have an account of the ungrammaticality of the person agreement with the nominative object in (50b, c) if the person feature of the finite verb complex of the clause is already ‘engaged’ in (invisibly) matching the person of the dative subject and is thus blocked from agreeing in person with the nominative object as well. At some level of representation, both arguments are within
the predicate (vP in the notation of CHOMSKY 2000), hence c-commanded by both the Pers(on) and the Num(ber) feature of the finite verb complex:

\[(51) \quad [CP \ C [\text{PersP} \ Pers [\text{NumP} \ Num \ldots [\text{DAT}\ldots \text{NOM}\ldots]]]]]\]

The dative subject evidently raises into the vicinity of the Pers head. The nominative also raises, but to a lower position, an Object Shift type of raising (see e.g. COLLINS and THRÁINSSON 1996; for ease of exposition however, I do not take Object Shift into account here). Assume that the dative raises to Edge,NumP, such that it is immediately ‘c-commanded’ by Pers:

\[(52) \quad [CP \ C [\text{PersP} \ Pers [\text{NumP} \text{DAT}, \ Num \ldots [\text{DAT}\ldots \text{NOM}\ldots]]]]]\]

As indicated by the ‘matching paths’, Num does not intervene between Pers and the dative subject, and hence the latter may match ‘silently’. Similarly, having been raised, the dative does not intervene between Num and the nominative object and they may accordingly agree. This accounts for the grammaticality of (50a): Pers ‘agrees silently’ with the dative (third person being an unspecified person or ‘no’ person), and Num agrees (with only the number of) the nominative object. In contrast, Pers cannot agree with the nominative object since, first, it is already engaged in a matching relation with the dative, and, second, the dative intervenes between the two (a Minimal Link Condition violation, cf. CHOMSKY 2001a: 16). Hence, the ungrammaticality of (50b, c).

Now, recall that German radically differs in this respect from Icelandic, as do many other languages. Reconsider (37) = (53):

\[(53) \quad \text{a. } \text{Ihm würdet ihr immer gefallen.} \]
\[\quad \text{him.D would.2PL you.N always like} \]
\[\quad \text{‘He would always like you.’} \]
\[\text{b. } \text{Ihm würden wir immer gefallen.} \]
\[\quad \text{him.D would.1PL we.N always like} \]
\[\quad \text{‘He would always like us.’} \]

These facts suggest that the dative does not intervene between Pers and the nominative at the relevant level of representation. One way to accommodate this is to assume that the dative raises

---

30 The position in question is presumably at the edge of EP in the system discussed in section 3.
31 As already mentioned, X‘-theoretic labels must be dispensed with (cf. also e.g. STARKE 2001, COLLINS 2002). Edges and nuclei are thus only separated by a comma.
32 On dative intervention, see BOECKX 2000, SIGURÐSSON 2000 and, for a different set of data, HOLMBERG and HRÓARSDÓTTIR 2002. – In view of the fact that nominative (first and second person) subjects match both Num and Pers, the question arises why non-nominative subjects do not ‘null-agree’ with Num (resulting in a ‘singular’ form) as well as with Pers (yielding a ‘third person’ form). This is accounted for if the relevant movement and feature matching processes apply prior to morphological agreement.
out of the agreement scope of Pers prior to agreement, to Edge,PersP. Abstracting away from the word order differences between German and Icelandic, this gives us the structure in (54):

\[(54) \quad [CP \ [PersP \ DAT, \ Pers \ [\text{[NumP Num} \ldots \ [\text{DAT} \ldots \ \text{NOM} \ldots] \text{[]}\text{[}]}\text{[}]]]\]

On the assumption that the German Pers parametrically differs from the Icelandic one in being unable to match non-nominatives,\(^{34}\) raising of the dative to a position where it would enter into potential person matching is blocked. Such raising would serve no purpose (i.e. it would be ruled out by economy), and hence the matching position is not an available landing site for the dative. It follows that no dative-intervention arises, and both Pers and Num can access the nominative argument without violating the Minimal Link Condition.

By abstracting away from the VO/OV dichotomy, I am not claiming that the underlying order of elements is uniform across languages. There may very well be a universal order of elements (Kayne 1994; Cinque 1999), but, as far as I can see, this would then be so by some evolutionary ‘accident’ rather than by conceptual necessity.\(^{35}\) On the other hand, we need to assume that basic functional elements, ‘visible’ or not, are the same in all languages, or else there could be no Universal Grammar.

Rather than postulating a universal order of elements, I am assuming that the order differences between German and Icelandic, underlying or superficial, are irrelevant with respect to the phenomena under discussion. This assumption might turn out to be wrong, but, it remains to be disproven and is thus the null-hypothesis at present.\(^{36}\)

Now, recall the Nominative Restriction. In spite of having non-nominative subjects, entering into a matching relation with Pers, Icelandic is like German and many other languages in only permitting overt morphological agreement of the finite verb with nominative arguments. It is important that we do not just take this restriction for granted but try to understand it and account for it: It is by no means the case that language categorically forbids agreement controlled by non-nominatives. Thus, we need to develop an account of the Nominative Restriction on finite verb agreement in Icelandic and many other languages. As I have argued elsewhere (in e.g. Sigurðsson 2003a), finite verb-oblique agreement seems to be blocked by economy: Inherent morphological case is an agreement morphology in itself, such that e.g. the dative of the DP of a dative-taking item X is in

\(^{33}\) See Sigurðsson 2002 on Russian, Subbarao 2001 on Telugu and e.g. Davison to appear on Hindi.

\(^{34}\) Alternatively, the difference might boil down to morphological differences between Icelandic and German DPs, as suggested in Sigurðsson 1994.

\(^{35}\) Given the theoretical premises assumed here, at least.

\(^{36}\) For a very different approach to the difference between Icelandic and German with respect to non-nominative subjects, ultimately relating it to radically different structures of the languages and the VO/OV dichotomy, see Haider, e.g. 1997, 2001. As discussed in Sigurðsson to appear, however, Tamil, an SOV language, seems to be like Icelandic in having ‘true’ non-nominative subjects. Also, postulating radically different functional structures in
morphological agreement with the selectional requirements of X. If the DP where to agree also
with the finite verb, it would be simultaneously involved in two morphological agreement
relations. Overt ‘polygamy’ of this sort is not forbidden in language, but it is commonly avoided,
arguably for reasons of economy.

On this account, morphological agreement is not merely a reflection of a single underlying
syntactic relation, Agree: it is crucially affected by other factors as well. This is an important
observation. It illustrates that morphological agreement cannot be interpreted as bearing on Agree in
any straightforward or simple manner. Both phenomena, Agree and agreement, have to be carefully
studied in their own right.

2.1.5 Nucleus-Edge Matching and Stylistic Fronting

Notice that the edge of a category does not check features of its own ‘head’ or nucleus in this
approach. Rather, a nucleus is in a potential checking or matching relation with the edge of its
sister, Nucleus-Edge Matching. Thus, as illustrated in (52) above, Icelandic oblique subjects
match Pers when situated in Edge,NumP, not Edge,PersP. This approach therefore predicts that
Edge,PersP is available as a checking or a matching site for some feature of the C-domain:

\[
\text{CP} \ldots C \ldots [\text{PersP} X(P), \text{Pers} [\text{NumP} \ldots]
\]

This is borne out by Icelandic Stylistic Fronting, a much discussed process that fronts various
elements into the position immediately c-commanded by C, traditionally referred to as Spec,IP.39

Three examples are given in (56). For ease of presentation, copies are shown as traces:

\[
(56) \quad \text{a.} \quad \text{Þetta er mál [sem mikið, hefur verið talað t_i um].}
\text{this is matter that much has.3SG been talked about}
\text{‘This is a matter that has been discussed a lot.’}
\[
\text{b.} \quad \text{Ég vissi ekki [að talaði, hefði verið t_i um ūetta mál].}
\text{I knew not that talked had been about this matter}
\text{‘I didn’t know that this matter had been discussed.’}
\[
\text{c.} \quad \text{Talað hefur verið t_i um að fara.}
\]

---

37 That is, the ECM or AcI type of correlation is not exceptional, after all. – The underlying assumption here is that
for instance an object of a verb is not its direct complement, but an edge element of a silent functional ‘head’ or
nucleus in a small clause complement. See Brody 2000 for an elaboration of this insight (albeit with different
implications for matching theory). I return to this issue in section 3.

38 Nominative subjects are likewise in or at Edge,NumP when they match Pers.
talked has been about to go
‘People have talked about going.’

The C feature that is checked or matched by Stylistic Fronting to Edge,PersP is an EPP feature in the approach of HOLMBERG (2000), but the Fin (finiteness) feature in SIGURDSSON 2003b. The feature in question is most commonly matched by a (nominative or an oblique) subject, leaving a copy in Edge,NumP, as illustrated in (57):

\[(CP \ldots \text{Fin} [\text{PersP SUBJ}, \text{Pers} [\text{NumP} \, \text{ti}, \text{Num} \ldots \, [\ldots \, \text{ti}, \ldots]]])\]

It follows that Stylistic Fronting of a non-subject can never take place in the presence of a regular (phonologically spelled-out, non-delayed) subject, a restriction known since MALING 1980 as the ‘Subject Gap Condition’ (Maling’s Generalization). This is illustrated in (58). For clarity, the subject is underlined, whereas the Stylistically Fronted participle is boldface:

\[
\begin{align*}
\text{a. } \texttt{\underline{Þetta er mál}} & \quad [\text{sem} \, \underline{\text{hann}} \, \text{hefur talað mikið} \, \text{um}]. \\
& \quad \text{this is matter that he has.3SG talked much about} \\
& \quad ‘\text{This is a matter he has talked much about.}’ \\
\text{b. } *\texttt{Þetta er mál} & \quad [\text{sem} \, \underline{\text{mikið}}, \text{hann} \, \text{hefur talað} \, \text{ti um}]. \\
& \quad \text{this is matter that he much has.3SG talked about} \\
\text{c. } *\texttt{Þetta er mál} & \quad [\text{sem} \, \underline{\text{mikið}}, \text{hann} \, \text{hefur talað} \, \text{ti um}]. \\
& \quad \text{this is matter that much he has.3SG talked about} \\
\text{d. } \texttt{Þetta er mál} & \quad [\text{sem} \, \underline{\text{mikið}}, \text{hefur verið talað} \, \text{ti um}]. \quad = (56a) \\
& \quad \text{this is matter that much has.3SG been talked about} \\
& \quad ‘\text{This is a matter that has been discussed a lot.}’
\end{align*}
\]

In the absence of a regular subject, Stylistic Fronting may apply to the closest possible candidate (in a sense explicated in HOLMBERG 2000). In the presence of a regular subject, on the other hand, the subject itself must be stylistically fronted, from Edge,NumP to Edge,PersP. That is, Stylistic Fronting to Edge,PersP of a non-subject across an overt subject in Edge,NumP would violate the Minimal Link Condition (or Relativized Minimality, RIZZI 1990). On this account, Edge,PersP is not an ‘A-position’ (see the discussion in RÖGNVALDSSON and THRÁINSSON 1990).\footnote{Also, of course, a distinction between ‘maximal’ and ‘non-maximal’ objects of movement makes no sense in the present approach.}


\footnote{The Fin feature is silent by necessity in main clauses, but it is matched under Nucleus-Edge Matching by a lexical element in Edge,PersP (SIGURDSSON 2003).}

\footnote{The Fin feature is silent by necessity in main clauses, but it is matched under Nucleus-Edge Matching by a lexical element in Edge,PersP (SIGURDSSON 2003).}
Nucleus-Edge Matching is very similar to Chomsky’s probe-goal mechanism. However, it is not tantamount to Merge/Agree itself. Rather, it is its specific implementation as well as its prerequisite. In order for X to be able to Merge/Agree with Y, an edge feature of X has to match a nuclear feature of Y. For instance: a NumP that merges with Pers has an edge element (e.g. a dative subject) containing a feature that matches a nuclear feature of Pers, a PersP that merges with Fin has an edge element, e.g. a stylistically fronted category, that contains a feature that matches a nuclear feature of Fin, and so on. – Notice that X and Y with features \( x_1, x_2, x_3 \) … and \( y_1, y_2, y_3 \) … may possibly Merge/Agree in more than one way, such that different features are involved in each instance of Nucleus-Edge Matching. Variation of this sort is evidently severely limited, but the logical possibility arises, underscoring the fact that we need to distinguish between feature matching and Agree itself.

I shall return to Nucleus-Edge Matching in section 3, where I suggest that it offers a new understanding of Move as driven by the needs of Merge/Agree.

2.1.6 Non-intervening subjects

Finally, recall that demonstrative petta ‘this' and demonstrative það ‘it' differ from non-nominative subjects in that they do not block person agreement with a late or a low nominative, in the Reverse Predicate Agreement Construction. Reconsider (33) and (35a), repeated here as (59) and (60):

(59) a. Petta erum bara við.
   this are.1PL only we.N
   ‘This/It is only us.’

b. Eruð það bara þið?
   are.2PL it only you.N.PL
   ‘Is it then only you?’

c. Ert petta þið?
   are.2SG this/it you.N.SG
   ‘Is this/it you?’

(60) þá haðið petta sennilega bara verið þið.
    then have.2PL this probably only been you.NOM.PL
    ‘Then this/it has probably only been you.’

Prior to NP-movement, the relevant structure of e.g. (60) is as shown in (61):

(61) [CP C [PersP Pers [NumP Num … [ PETTA … NOM]]]]
**Petta** (as well as þad in 59b) is a default form (‘neuter singular nominative/accusative’), that is, it is void of all featural content, except for its phonological features, its D-feature and its demonstrative force (see the discussion in SIGURDSSON 1996). In particular, it has no values for ‘true’ person, number and gender, thus cannot intervene between Pers/Num and the predicative nominative. Arguably, it moves directly to Edge,PersP, by Stylistic Fronting, matching the Fin feature, like other instances of Stylistic Fronting. Thus, þad and petta are like oblique ‘prominent’ arguments in German in not ‘counting’ as intervenors (being unable to match Pers), and the question of intervention or not is not simply a question of parametric distinctions between distinct languages, but a more fine-grained issue. Again, the data illustrate that there is more to morphological agreement than just a simple probe-goal relation.

This concludes our discussion of finite verb agreement in Germanic: Simple subject-verb agreement, reverse agreement phenomena (four major types), the nominative restriction, dative intervention and Nucleus-Edge Matching. Even if we were to restrict our attention to only finite verb agreement, the data are so complex and varied that a simple Probe-Goal Approach to Agree could not account for but a fraction of the facts. Moreover, there are additional, quite complex and varied agreement facts within Germanic that any general theory of Agree and agreement must account for. We shall take a look at (many of) these data in the next two subsections.

### 2.2 Primary predicate agreement

#### 2.2.1 The facts in Icelandic

In Icelandic, both predicative adjectives and passive past participles agree with their nominative subject, as illustrated in (62)–(63):

**Predicative Adjective Agreement in Finite Clauses:**

(62) a. *Hann* var lúklega rúkur.
   he.N.M.SG was probably rich.N.M.SG

b. *Hún* var lúklega rúk.
   she.N.F.SG was probably rich.N.F.SG

c. *þad* var lúklega rúkt.
   it.N.N.SG was probably rich.N.N.SG

d. *Þeir* voru lúklega rúkir.
   they.N.M.PL were probably rich.N.M.PL

---

42 Plausibly, the demonstrative force is given or default in the absence of any features specifying the D-feature.
43 For a discussion of the surprising and problematic Dutch pattern *Het waren hun* ‘it were.PL them.ACC’, see VAN GELDEREN (1997: 154). I have nothing to add to her discussion.
e. *þær* *voru líclega ríkar.*
   they.N.F.PL were probably rich.N.F.PL
f. *þau* *voru líclega rík.*
   they.N.N.PL were probably rich.N.N.PL

**PAST PARTICIPLE AGREEMENT IN FINITE CLAUSES:**

(63) a. *Hann* *var líclega kosinn.*
   he.N.M.SG was probably elected.N.M.SG
b. *Hún* *var líclega kosin.*
   she.N.F.SG was probably elected.N.F.SG
c. *það* *var líclega kosíð.*
   it.N.N.SG was probably elected.N.N.SG
d. *þeir* *voru líclega kosnir.*
   they.N.M.PL were probably elected.N.M.PL
e. *þær* *voru líclega kosnar.*
   they.N.F.PL were probably elected.N.F.PL
f. *þau* *voru líclega kosin.*
   they.N.N.PL were probably elected.N.N.PL

As seen, the agreeing features are case, gender and number. The same pattern is seen in most infinitives and small clauses (as shown only partially in (64)-(65)). For a discussion of the case-theoretical implications of this and related facts, see SIGURDSSON 1991 and subsequent work (the infinitival clauses are marked off by parentheses):

**PREDICATE AGREEMENT IN ‘NOMINATIVE INFINITIVES’:**

(64) a. *þeir* *vonuðust til [að verða ríkir].*
   they.N.M.PL hoped for to be(come) rich.N.M.PL
   ‘They hoped to get rich.’
b. *þeir* *vonuðust til [að verða kosnir].*
   they.N.M.PL hoped for to be elected.N.M.PL
   ‘They hoped to be elected (by someone).’

(65) a. *Mér höfðu virst [þeir vera ríkir].*
   me.D had seemed they.N.M.PL be rich.N.M.PL
   ‘They had seemed to me to be rich.’

---

44 Definiteness is an agreement feature in DP-internal concord in the Germanic languages (see section 2.3), but not in predicative agreement.
b. *Mér höfðu virst [heir vonast til [að verða kosnir]].*
   me.D had seemed they.N.M.PL hope for to be elected.N.M.PL
   ‘It had seemed to me that they hoped to be elected.’

In addition, the same patterns are seen in ECM or AcI constructions (both infinitives and small clauses), the only difference being that the agreeing case is accusative instead of nominative on both the ‘subject’ and the predicate:

**Predicate agreement in ‘accusative infinitives’:**

(66) a. *Ég mundi því telja [bá vera ríka].*
   I would thus believe them.A.M.PL be rich.A.M.PL
   ‘I would thus believe them to be rich.’

b. *Ég mundi því telja [bá hafa verið kosna].*
   I would thus believe them.A.M.PL have been elected.A.M.PL
   ‘I would thus believe them to have been elected.’

Moreover, **multiple predicate agreement** is found in both nominative and accusative infinitival (and small clause) structures:

**Multiple predicate agreement:**

(67) a. *peir mundu vera taldir vera sagðir*
   they.N.M.PL would be believed.N.M.PL be said.N.M.PL
   hafa verið kosnir.
   have been elected.N.M.PL
   ‘They would be believed to be said to have been elected.’

b. *Ég mundi telja bá vera sagða hafa verið kosna.*
   I would believe them.A.M.PL be said.A.M.PL have been elected.A.M.PL
   ‘I would believe them to be said to have been elected.’

Multiple agreement of this sort is problematic for the simple Probe-Goal Approach to Agree (cf. the discussion in CHOMSKY 2001a: 18, and in FRAMPTON and GUTMAN 2000).

As discussed in section 2.1.3, **only nominatives** may ever control finite verb agreement. Much the same restriction applies to primary predicate agreement. More exactly, the following generalizations hold:

I Only **nominatives** may control primary predicate agreement in **finite clauses**.

II Only those **accusatives that correspond to nominatives** in finite clauses may control

---

45 They are also problematic for the approach in SIGURDSSON 1993, of course.
primary predicate agreement in ECM or Acl constructions.

This is rather neatly demonstrated by adjectival predicates such as ‘cold, freezing’, ‘hot, warm’, ‘ill, bad’, ‘good, well’, that may either take a nominative (theme) or a dative (experiencer) subject. When the subject is nominative (or accusative in ECM), agreement is obligatory, but impossible when the subject is dative. Consider this for ‘cold, freezing’. 46

(68)  
a.  \textit{peir voru kaldir}.
    they.N.PL  were.3PL  cold.N.PL
    ‘They were cold (to touch).’

b.  \textit{peim var kalt}.
    them.D.PL  was.3SG  cold.N/A.N.SG
    ‘They were cold/freezing.’

(69)  
a.  \textit{Ég taldi há vera kalda}.
    I  believed  them.A.M.PL  be  cold.A.M.PL
    ‘I believed them to be cold (to touch).’

b.  \textit{Ég taldi heim vera kalt}.
    I  believed  them.D.PL  be  cold.N/A.N.SG

Active participles selected by \textit{vera} ‘be’ and \textit{verða} ‘become’ show the same agreement properties as do passive participles, whereas active participles selected by \textit{hafa} ‘have’ (and by the modal \textit{geta} ‘can’) never agree, instead showing up in a default N/A.N.SG (supine) form: 47

(70)  
a.  \textit{Strákarnir voru hofnir / farnir / byrjaðir}  =  N.M.PL
    boys.the  were.3PL  disappeared / gone / begun

b.  \textit{Strákarnir hófðu horfið / farið / byrjað}  =  N/A.N.SG
    boys.the  had.3PL  disappeared / gone / begun

Active participles selected by ‘have’ agree with their raised clitic objects in Italian and French (e.g. \textit{egerland} 1996a: 164 ff.). This is illustrated for French in (71a): 48

(71)  
a.  \textit{Paul les a repaintes}.
    Paul  them  has  repainted.F.PL

b.  \textit{Paul a repeint/*repa\textsc{\textcircled{e}}ntes les chaises}.
    Paul  has  repainted  the  chairs.F.PL

---

46 While the dative construction is semantically narrow (referring only to animates sensing coldness), the nominative construction has many meanings, of which I only give the most central one.
47 Icelandic perfect types are discussed in e.g. \textit{fridi\textsc{\textcircled{j}}\textsc{\textcircled{n}sson}} (1989), \textit{sigurdsson} (1989: 322 ff.), and \textit{jónsson} (1992).
Active participle agreement of this sort was also sporadically found in Old Norse. In contrast to Italian and French active participle agreement, however, the Old Norse agreement was neither contingent on the position nor the content of the object, as illustrated in (72):

\[(72)\]

\[\begin{align*}
\text{a. } & \text{brátt hefi ek ykkr } \text{brenda} \\
& \text{soon have I you.A.PL burned.A.M.PL} \\
& \text{‘Soon, I will have burned you.’}
\end{align*}\]

\[\begin{align*}
\text{b. } & \text{svá hafði Helgi hrædda gorva fjándr sín} \\
& \text{so had Helgi afraid made.A.M.PL enemies his.A.M.PL} \\
& \text{‘Helgi had made all his enemies so afraid (that …).’}
\end{align*}\]

It is not clear, to say the least, how one would account for the fact that Icelandic has lost this type of agreement in terms of the Probe-Goal Approach to Agree. Rather, it seems that we have to analyze the historical change in terms of ‘shallow’ morphophonological agreement processes. Notice that these processes do not involve or reduce to a parametric choice of whether a participle agrees or not. The historical change applies not to past participles in general but specifically to those participles that are selected by hafa ‘have’.

Once again, then, the Probe-Goal Approach does not bear on the morphological agreement variation manifested within the Germanic languages. Contradictory as it may seem, we need both a more specific account and a more general one. That is, more specific or microscopic analyses of various morphological agreement phenomena are called for, and, simultaneously, we need a much more general notion of abstract Agree.

2.2.2 The Germanic variation (or at least much of it)

In this section, I shall present (much of) the German variation with respect to primary predicate agreement (PRED-AGR), in view of the Icelandic facts just described. Let us start out by reviewing the central aspects of the Icelandic system:

I LEXICAL ITEMS: Icelandic PRED-AGR applies to both adjectives and past participles.

II FEATURES: Icelandic PRED-AGR involves agreement in (structural) case, gender and number

III CLAUSE TYPES: Icelandic PRED-AGR applies (to predicative adjectives and participles) in finite clauses as well as in both ‘nominative infinitives’ (and small clauses) and ‘accusative infinitives’ (and small clauses).

\[\text{From NYGAARD (1906: 188). See also SIGURDSSON (1993: 48).}\]
**IV** MULTIPlicity: Icelandic PRED-AGR can *multiply* or apply repeatedly in certain infinitival and small clause structures (the ECM type of structures and their passive counterparts).

**V** CASE RESTRICTIONS: Icelandic PRED-AGR is blocked by inherent case of the potential agreement controller, that is, only structurally case-marked DPs may ever control PRED-AGR (accusative DPs in ECM or AcI structures, otherwise nominative DPs). As we have seen, much the same restriction applies to finite verb agreement – it may only be controlled or triggered by a nominative.

Faeroese normally has the ‘Icelandic type’ of agreement (in case, gender and number) of both predicative adjectives and past participles, at least in finite clauses.\(^{50}\)

The ‘dramatic’ distinction within Germanic with respect to predicate agreement is that between North- and West-Germanic. The West-Germanic languages plainly have *no predicate agreement* at all. Thus, even German, that has both finite verb agreement and DP-internal concord, has no predicate agreement. Consider the invariant predicative forms in (73) (reminiscent of the so-called short forms in Russian, cf. e.g. Franks 1995):

(73)  
\[\text{a. } \text{Ein } \text{guter Mann ist immer gut}/^*\text{guter.}\]
\[\text{a good man is always good}\]
\[\text{b. } \text{Eine } \text{gute Frau ist immer gut}/^*\text{gute.}\]
\[\text{a good woman is always good}\]
\[\text{c. } \text{Ein } \text{gutes Kind ist immer gut}/^*\text{gutes.}\]
\[\text{a good child is always good}\]

Past participles also have an invariable, non-agreeing form:

(74)  
\[\text{a. } \text{Der Mann wurde } \text{gewählt}/^*\text{gewählter.}\]
\[\text{the man was elected}\]
\[\text{b. } \text{Die Frau wurde } \text{gewählt}/^*\text{gewählte.}\]
\[\text{the woman was elected}\]
\[\text{c. } \text{Die Männer wurden } \text{gewählt}/^*\text{gewählte.}\]
\[\text{the men were elected}\]
\[\text{d. } \text{Die Frauen wurden } \text{gewählt}/^*\text{gewählte.}\]
\[\text{the women were elected}\]

\(^{50}\) There are some interesting differences between the languages with respect to the distribution of inherent and structural cases (Barnes 1986; Petersen et al. 1998), but I shall not discuss these here, since they only affect the preconditions on, and hence the distribution of agreement, not the mechanism of agreement itself. In addition, however, there is some tendency in spoken Faeroese to develop non-agreeing ‘short forms’ of at least predicative adjectives (Petersen et al. 1998: 70).
Within the North-Germanic or the Scandinavian branch, the major parameters of variation are the following (a distinction has to be made between three major varieties of Norwegian: 1, 2 and 3):

I The mainland Scandinavian languages differ from Icelandic and Faeroese in not having any agreement in case (as they only have pronominal case and structural genitive case).

II All the mainland Scandinavian languages are like Icelandic and Faeroese in having agreement of predicative adjectives.

III A variety of Norwegian, found mainly along the south and the west coast, is also like Icelandic and Faeroese in having general participle agreement with the logical subject of the predicate. Following HÖLMBERG (2002: 100 ff.), I refer to this variety as Norwegian 3.

V Swedish and another variety of Norwegian, including the nynorsk standard, show variation with respect to participle agreement, sometimes having agreement with an expletive subject, sometimes with a non-expletive subject. HÖLMBERG (2002) refers to the Norwegian variety or varieties is question as Norwegian 2.

VI Danish and most varieties of Norwegian, including the bokmål standard, lack participle agreement altogether. These varieties are called Norwegian 1 by HÖLMBERG (2002).

We can thus sketch the Germanic predicate agreement variation as follows:

(75)  
a. West-Germanic: No PRED-AGR  
b. Danish, Norw. 1: Adjectival agreement, no participle agreement  
c. Norw. 2, Swedish: Adjectival and varied participle agreement  
d. Norw. 3, Faer., Ice.: Adjectival and non-varied participle agreement

The distinction between adjectival and participial predicates in Danish and Norwegian 1 is illustrated by the Norwegian examples in (76), from CHRISTENSEN and TARALDSEN (1989: 81, endnote 1):

(76)  
a. Gjestene er fulle/*full.  
guests.the are drunk.PL/SG  
b. Gjestene er komet/*komne.  
guests.the are come.SG/PL  
‘The guests have arrived.’

In Norwegian 3, on the other hand, the participle must agree with the non-expletive (logical) subject, as shown in (77), from CHRISTENSEN and TARALDSEN (1989: 58). These varieties of Norwegian have the locative der ‘there’ as an expletive.
Finally, in Norwegian 2, the participle shows varied agreement, agreeing with either an expletive (pronominal det ‘it’), or with the logical subject, in case it raises across the participle, as in (78a), also from CHRISTENSEN and TARALDSEN (1989: 58):

(78) a. **Giustene er nett komne/*kome.**
   guests.the are just arrived.PL/SG

   ‘Some guests have just arrived.’

   b. **Der er nett komne/*kome nokre gjester.**
      there are just come.PL/SG some guests
      ‘Some guests have just arrived.’

The same applies to Swedish: It has neuter singular agreement with the expletive if the logical subject is to the right of the participle, but agreement with the logical subject in case it moves to the left of the participle:

(79) a. **Tre böcker blev skrivna/*skrivet.**
   three books were written.PL/N.SG

   ‘There were three books written.’

   b. **%Det blev tre böcker skrivna/*skrivet.**
      it were three books written.PL/N.SG
      ‘There were three books written.’

   c. **Det blev skrivna/*skrivet tre böcker.**
      it were written.N.SG/PL three books
      ‘There were three books written.’

HOLMBERG (2002: 106 ff.) argues that the above described Scandinavian participle agreement variation can be accounted for if the phase notion is parametrized (the Participle Phrase being a phase in Swedish and Norwegian 2 but not in the other Scandinavian varieties). I propose instead that the variation in question is a ‘shallow’ morphophonological phenomenon, not reflecting any

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51 CHRISTENSEN and TARALDSEN convincingly argue that the singular form of the participle actually agrees with the expletive neuter singular det in cases like (78b), whereas the expletive der in (77b) cannot control agreement, not having any pronominal phi-features (number, gender, …). See also HOLMBERG (2002: 100 ff.).

52 This is the general pattern. There are, however, some speakers that accept agreement with the logical subject also in examples like (79c) – but the pattern of these speakers differs from that found in Icelandic in that the agreement is not obligatory, but rather a bit degraded. At the other extreme, certain Northern Swedish dialects are like Danish and Norwegian 1 in not having any participle agreement (Lars-Olof Delsing, p.c.). – Examples like (79b) have variable acceptance, i.e. some speakers find them degraded or unacceptable (Cecilia Falk, p.c.).
‘deep’ (narrow) syntax differences between the closely related languages in question. More specifically, I suggest that it relates, at least partly, to the ‘morphological strength’ of gender. See further the discussion in section 3.

A somewhat less central but no less interesting variation arises in Scandinavian passives of double object verbs. Consider the dichotomy in (80) between Swedish (80a) and Icelandic (80b), discussed by HOLMBERG (1994, 2002). As before, the agreement controller is underlined, whereas the relevant agreeing element is boldface:

(80) a. **Det blev **givet **pojken presenter.**
   
   *it was given.N.sg boy.the presents*
   
   ‘There were presents given to the boy.’

   b. **Það voru **gefnar **einhverjum strákum **brjár **bækur.**
   
   *it were.3pl given.n.f.pl some boys.d.m.pl three books.n.f.pl*

Icelandic expletive **það ‘it, there’ is like demonstrative **það ‘it’ and **þetta ‘this’, discussed in section 2.1.6, in that it is void of ‘true’ pronominal features, hence cannot control agreement, in contrast to Swedish **det. The participle must thus resort to agreeing with the nominative object **brjár **bækur ‘three books’ in both gender and number, but this is blocked by the intervening dative **stráknum ‘the boy’. If the dative is moved to the left of the participle, such that it does not intervene between the (gender of the) participle and the (gender of the) nominative object, the structure becomes grammatical (for a different interpretation of this fact, see HOLMBERG 2002: 99):

(81) **Það voru **einhverjum strákum **gefnar **brjár **bækur.**
   
   *it were.3pl some boys.d.m.pl given.n.f.pl three books.n.f.pl*
   
   ‘Some boys were given three books.’

2.3 Some notes on other agreement/concord types

Four other agreement/concord types deserve mention here:

I SECONDARY PREDICATE AGREEMENT

II DP-INTERNAL CONCORD

III NOUN-POSSESSOR AGREEMENT

IV COMPLEMENTIZER AGREEMENT.

53 The Swedish example in (80a) is from HOLMBERG (2002: 87). Many speakers find it questionable, but allow the same word order for certain other predicates than **ge ‘give’, for instance **tilldana ‘confer, award’, **erbjuda ‘offer’.
I. SECONDARY PREDICATE AGREEMENT crucially differs from simple primary predicate agreement in two respects (see the discussion in SIGURDSSON 2002: 708 ff.).

A Secondary predicate agreement crosses predication boundaries, that is, it involves a predicate (adjective or participle) that agrees with a DP located in another (matrix) predication.

B While primary predicate agreement is blocked by inherent case, as discussed above, secondary predicate agreement is not subject to any such case restrictions. In other words, secondary predicates may agree with a DP irrespective of its case, whereas primary predicates can only agree with structurally case marked DPs (this follows from the blocking of ‘agreement polygamy’, discussed in section 2.1.4).

Some simple Icelandic examples are given in (82) (from SIGURDSSON 2002: 709). As usual, the agreement controller is underlined whereas the relevant agreeing predicate is boldface:

(82) a. Strákarnir hittu kennarann drukknir.
   boys.the.NM.PL met teacher.the.AM.SG drunk.NM.PL
   ‘The boys met the teacher drunk (i.e. the boys were drunk).’

b. Strákarnir hittu kennarann drukkinn.
   boys.the.NM.PL met teacher.the.AM.SG drunk.AM.SG
   ‘The boys met the teacher drunk (i.e. the teacher was drunk).’

c. Strákarnir sýndu kennaranum óvirðingu drukknun.
   boy.the.NM.PL showed teacher.the.DM.SG disrespect drunk.DM.SG
   ‘The boys showed the teacher disrespect (when he was) drunk.’

In these examples, the secondary predicate is a small clause adjective, but it may also be in certain other types of adjuncts or in infinitival complements. Such examples may or may not involve overt case agreement (as discussed in Thráinsson 1979 and in SIGURDSSON 2002).54

II. DP-INTERNAL CONCORD involves agreement of nominal modifiers (adjectives, demonstratives, determiners, quantifiers, semi-predicates) in number, gender, case, and, less centrally, definiteness. This is briefly illustrated for definite DPs in (83) and (84), and for indefinite ones in (85)-(86):

(83) a. Allir þessir fjórir frægu karlar
   all.NM.PL these.NM.PL four.NM.PL famous.PL.DEF men.NM.PL

b. Alla þessa fjóra frægu karla

54 That is, they may either show up in the nominative or in the same case as their overt agreement controller. – Gender and number agreement with the overt controller are always obligatory.
Various types of disjoint or distant agreement are probably best analyzed as subtypes of DP-internal concord. For instance:

(87)  a.  **Karlarnir**  fóru  **allír**  á  fundinn.
    men.the.N.M.PL went all.N.M.PL to meeting.the

    b.  **Konurnar**  fóru  **allar**  á  fundinn.
    women.the.N/A.F.PL went all. N/A.F.PL to meeting.the

**III. NOUN-POSSESSOR AGREEMENT.** Possessive pronouns agree with their noun. In the Scandinavian languages, however, this is restricted to first and second person and to the reflexive
third person possessives, i.e. third person non-reflexive possessives have an invariable genitive form. A few examples from Icelandic:\footnote{The agreement has gone lost in first and second person plural in everyday Icelandic (GUÐMUNNSSON 1972) and}

\[(88)\]
a. \textit{Bræður mínir} / \textit{Bræður þínir} / \textit{Bræður sínir} = N.M.PL  
brothers my / brothers your / brothers his/her/their  
b. \textit{Bræðum mínum} / \textit{Bræðrum þínum} / \textit{Bræðrum sínun} = D.M.PL  
c. \textit{Systur mínar} / \textit{Systur þínar} / \textit{Systur sínar} = N/A.F.PL  
sisters my / sisters your / sisters his/her/their  

\[(89)\]  
\textit{Bræður hans}, \textit{braðrum hans}, \textit{systur hans}  
brothers.N his, brothers.D his, sisters.N/A his  

IV. COMPLEMENTIZER AGREEMENT. Some West-Germanic dialects have complementizer agreement. At least: West-Flemish, Groningen, South Hollandic, East Netherlandic, Luxemburgish, Bavarian, Brabantish (ZWART 1993a, 1993b and many others). This is illustrated in (90) for West Flemish and in (91) for Munic Bavarian (both from ZWART 1993a, 318-319). In the latter dialect, complementizer agreement is accompanied by \textit{pro-drop}:

\[(90)\]  
a. \textit{dank} \textit{ik} kom(e)n  
that I come.1SG  
b. \textit{datj} \textit{ij} werk  
that he works.3SG  

\[(91)\]  
a. \textit{damidds} kommds  
there-with come.2PL  
‘So that you will come.’  
b. \textit{damid} \textit{ich kom}  
there-with I come.1SG  
‘So that I will come.’

This concludes our descriptive overview of some of the central aspects of agreement and concord phenomena in the Germanic languages.

3. Concluding discussion

Several agreement phenomena that are well-known from other language families are not found in Germanic. For instance: Preposition-complement agreement, verb agreement with more than one argument simultaneously, various types of ‘external’ complementizer agreement (as opposed to
the West-Germanic ‘internal’ or rightward complementizer agreement). However, it seems fair to say that the richness of Germanic agreement phenomena, their complexity and variety, is impressive for such a limited and closely related group of languages.

Reconsider the Germanic variation in (2) above, sketched again in (92):

(92) a. They would-Ø be rich-Ø. ENGLISH
    b. They would-AGR be rich-Ø. GERMAN
    c. They would-Ø be rich-AGR. SWEDISH
    d. They would-AGR be rich-AGR ICELANDIC

On standard assumptions, both agreement types are reflections of a deeper relation at the underlying syntactico-semantic level of LF, Agree in the terminology of CHOMSKY (e.g. 2000, 2001a). Given that all languages have the same basic structure, Universal Grammar, the relation in question must be universal, that is, it must ‘be there’ in a language like English, in spite of not being reflected in the morphology of that particular language, a ‘silent’ parametric choice.

A structure that is void of morphological agreement, like the English one in (92a), clearly does not have ‘agreement’ in any plausible sense in common with a rich agreement structure, like the Icelandic one in (92d). Rather, the semantic content of the agreement features is common to both languages and so is their combination, Merge.

Reconsider the Agreed Condition on Merge, ACM, in (11) = (93):

(93) Two objects or elements, X and Y, may be merged only if the relation of Agree holds between them.

This condition is arguably, if not trivially, a law of nature, hence of the biological/physical system of language. Recall also multiple participle agreement as in (67) = (94):

(94) a. þeir mundu vera taldir vera sagðir
    they.N.M.PL. would be believed.N.M.PL. be said.N.M.PL
    hafa verið kosnir.
    have been elected.N.M.PL
    ‘They would be believed to be said to have been elected.’
    b. Ég mundi telja há vera sagða hafa verið kosna.
    I would believe them.A.M.PL. be said.A.M.PL. have been elected.A.M.PL
    ‘I would believe them to be said to have been elected.’

largely in Faeroese too (PETERSEN et al. 1998).
The problem posed by data of this sort to the Probe-Goal Approach now vanishes. This is just an ordinary instance of agreement under repeated application of Merge/Agree. Nothing mysterious is involved. The same is true of the Swahili and Kayardild examples in (3)-(5).

When two linguistic ‘atoms’ or units X and Y merge, they do not only become sisters, they also match by necessity. That is, X matches the requirements of Y and vice versa. As discussed in section 2.1.5, matching is Nucleus-Edge Matching in the present approach. This entails that, for instance, objects of verbs are not really complements but edge-elements in ‘complements’ that normally have a silent ‘head’ or nucleus, F:

\[(V, H) \rightarrow [FP, DP, F]\]

V and FP merge/agree, but the relevant matching features of FP are situated at its edge, in the DP.

Notice that Move follows in the present approach as motivated by the needs of Merge/Agree: If X is to be merged with a selecting Y, its edge features must match the requirements of Y and this is accomplished by movement of an element containing the matching features to the edge of X (in addition, Move relates the ‘inner spheres’ of X to its edge). It follows that any main clause must be selected by a silent LF element, Fin (or Speech Time/Place, ST/P), ‘heading’ a Speech Phrase, SP (see below).

It is conceivable that V in (95) is itself an edge element of a silent nucleus, H, and that it is in fact this nucleus that agrees with FP and matches the features of DP:

\[(H, V) \rightarrow [FP, DP, F]\]

The aspectual semantics of Icelandic case, recently discussed by Svenonius (2001, 2002), thus reside within the minimal shell that contains the DP and its selector (i.e. we need not postulate a higher aspectual little v to account for these semantic facts – plausibly in contrast to aspectual case semantics in e.g. Finnish and Slavic languages).

On this General Shell Approach, all items of at least the major word classes come as shells, with a nucleus and some edge substance (whereas functional elements might be different). This would seem to fit neatly with DP-internal concord, for instance of an adjective and a noun:

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56 As discussed at the end of section 2.1.4, inherent case-marking of ‘complements’ is, for instance, an agreement relation, where the case selection feature of a verbal or a prepositional nucleus matches the case feature of a DP. – A similar (albeit a more specific) approach to Merge is pursued by Contreras and Masullo 2001, and Frampton and Gutman 2000 develop an approach to agreement (as feature sharing) that bears some resemblance to the approach advocated here.

57 Chomsky’s Probe-Goal Approach, based on Icelandic data, allows for a more general matching strategy, head-X matching, where X is the closest possible candidate for matching with the head (observing minimality). See further below.

58 For a conceptually related approach to particle verbs, where the particle is a head within the complement of the verb, see Svenonius 1996.

59 Perhaps, all phonological material is edge substance, ‘surrounding’ a silent nucleus (consider Cinque 1999 on lexical adverbs as ‘specifiers’ of silent ‘heads’).
The nucleus $H$ is then not invisible, as in (95), but instead visible as an Agr element in a structure like (97):

\[
(97) \quad [ \text{HP A, H}_{\text{AGR}} \, \text{[FP N, F]} ]
\]

However, I shall not speculate further here. The important generalization is this: Whenever two linguistic objects $X$ and $Y$ merge, they agree by necessity, making up a **featural bond** $X$–$Y$. A featural bond may or may not be made visible in PF. That is, whenever Merge applies, the possibility of agreement arises, and a language has to make a choice whether or not to morphologically ‘signal’ it.

Only by viewing Agree as being a condition on and an integrated part of Merge itself can we begin to understand the extreme variability of agreement across languages: Merge is the only process that is general enough to encompass all the variation observed within even such a limited and a closely related group of languages as the Germanic ones.

The relations between syntactic Merge/Agree and morphological agreement are almost chaotically heterogeneous, being conditioned by syntactic as well as morphological (PF) factors. Probably by far the most common strategy is not to signal or visualize Merge/Agree at all, as in the English example in (92a) (and as, for instance, for merger of prepositions and DPs in all Germanic). The underlying Merge/Agree relation is evidently visible and making it ‘extra’ visible by morphological means is costly. Uneconomical strategies of this sort are obviously not banned in language, but there is a tendency to avoid them.

As has been discussed by many, there is a strong relationship between movement and agreement in many constructions across languages. See for instance the overview in **Van Gelderen 1997** and some of the facts discussed in sections 2.1.2 and 2.2.2 above. Many cases of this sort can be understood in terms of visibility and economy. The typical pattern is as in (98), where morphological non-agreement is indicated by ‘Ø’, and where $a$ is a feature or a property that attracts $Y$ (the copy of $Y$ is shown as a trace):

\[
(98) \quad \begin{align*}
\text{a. } \quad a \ldots X-Ø \, [ Y ] \\
\text{b. } \quad Yt\,t \ldots X-\text{AGR}_t \, [ t_t ]
\end{align*}
\]

Given our understanding of Agree, the merger of $X$ and $Y$ in (98a) turns them into a featural bond $X$–$Y$, which is ‘locally visible’. Movement of $Y$ across $X$, as in (98b), makes the structural relationship opaque, but this is compensated for by agreement of $X$, that is, agreement makes the relationship ‘non-locally visible’.

An alternative way of looking at this issue is to view Move or ‘external Merge’ as leading to a ‘reinforced Agree’. Recall, from the discussion around (10), that Move is predestined by Merge,
that is, it is ‘triggered’ by some property or feature that has already been merged, such as a in (98). However, the merger of the triggering property in the first place is an instance of Merge/Agree in the present approach, that is, a in (98a) agrees with the rest of the structure and the visible agreement of X in (98b) can thus be seen as an instance of Nucleus-Edge Matching, where a is the nucleus and X is the edge (with respect to a, simultaneously as being a nucleus with respect to the rest of the structure).

There are many instances of non-reduced rightward, local agreement, but there is however a clear tendency to avoid such ‘extravagance’. Many such seemingly ‘unmotivated’ cases of agreement might in fact be motivated by movement. Consider Icelandic participle agreement:

(99)  það voru skrifðar þrjár bækur.
     it were.PL written.N.F.PL three books.N.F.PL
     ‘There were three books written.’

Suppose that the predicate is embedded under an Event Phrase, EP, containing Event Tense, $E_T$ (as in Sigurdsson to appear; $E_T$ resembles the low T in Plat Zack 2001, 2002). Assume also that the EP in turn contains a gender and a number nuclei, Gend and Num (distinct from the higher Num of the finite verb complex), serving the purpose of specifying potential event participants:

(100)  $T \ldots [E_P \ldots E_T [\text{GendP three books.N.F.PL} \ldots [\text{NumP written.N.F.PL} \ldots$

The underlying object, þrjár bækur ‘three books’, has been moved to (or ‘internally merged’ in/at) Edge,GendP, thereby motivating morphological agreement of the participle skrifðar ‘written’ in NumP. Subsequently, the verb moves to Edge,EP, where it enters into Nucleus-Edge Matching with T (which, in turn, must match or link to Speech Tense, $S_T$).

Compare (99) to the Swedish (79c), repeated here in a slightly simplified form as (101):

(101)  Det blev skrivet tre böcker.
     it were written.N.SG three books
     ‘There were three books written.’

Swedish, like other mainland Scandinavian varieties, has a much reduced gender agreement system, as compared to Icelandic. That is:

I.  **Singular:** neuter vs. non-neuter, e.g. skrivet vs. skriven ‘written’

II. **Plural:** no gender distinction, e.g. skrivna ‘written’

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60 In lack of a better term, and a deeper understanding, the triggering property is often referred to as ‘EPP’.

61 Notice that I am abstracting away from the question of where the auxiliary ‘be’ in (99) is merged.
Suppose, therefore, that the Swedish Gend is weak in the sense that GendP cannot contain any phonological material.\footnote{On this approach, the question of whether a feature is strong or not boils down to lexicalization, including movement, rather than exclusively to movement.} If so, the DP ‘three books’ does not raise to Edge,GendP, across the participle, and hence participle agreement is unmotivated.\footnote{However, when the DP raises across the participle, as in (79a,b), it triggers agreement of the participle. The intermediate position it raises to, as in (79b), is presumably a higher position than Edge,GendP, but I shall not pursue the issue here.}

Reconsider the problems raised by Reverse Agreement facts, that is, facts of the sort that lead to the development of the Probe-Goal Approach in the first place. Late Subject Agreement is a case in point. Consider the derivation of the simple (102).

\begin{equation}
\text{it came.PL three linguists.N.M.PL.}
\end{equation}

‘There arrived three linguists.’

Let us tentatively assume that the EP here differs from the structure in (100) in that it contains neither GendP nor PartP. The nominative then raises to the (low) NumP of the EP, the verb raises to Edge,EP and T is merged, giving roughly the structure in (103):

\begin{equation}
\text{T–^[EP came.PL [NumP three linguists.N.M.PL …]]}
\end{equation}

The number feature of the verb matches the number feature of the nominative, but this is obviously not the end of the derivation. Tense relates the event tense, $E_T$, to the speech tense, $S_T$, hence to the speaker, but additional speaker related features must be merged as well, or else the predication gets no truth value nor would it be interpretable in other respects (as it would not be anchored in any center of deixis and consciousness). The features in question are minimally mood, (higher) number and person. After merger of M(oood) and (the higher) Num, and after raising of the verb to Edge,MP, we have the following structure. The two number features are distinguished as Num/ev (event related number) and Num/sp (speech situation related number):

\begin{equation}
\text{Num/sp–^[MP came.PL … [Num/evP three linguists.N.M.PL …]]}
\end{equation}

Num/sp and MP agree abstractly, or else they could not have merged, and, in addition, the plural value of Num/sp enters into a local Nuclear-Edge Matching relation with the verb (which subsequently raises further, to Num/spP and PersP). It follows the morphological agreement relation of the finite verb and the ‘late subject’ is only apparently non-local. The same is possibly true of more complex structures, as in (105), although it is a non-trivial task to find evidence in favor of that suggestion:

\begin{equation}
\text{it came.PL sennilega [MP hafa komið brír málvisindamenn].}
\end{equation}
Alternatively, one could relativize the notion of edge with respect to individual features, such that the nominative argument counts as being the edge element of MP with respect to number (being its ‘outermost’ element containing number), hence entering into a local Nucleus-Edge Matching with Num/sp. In this case, then, our Nucleus-Edge Matching would be empirically non-distinct from the Probe-Goal Approach, augmented or conditioned by the Minimal Link Condition.

It is, by the way, a remarkable property of compositionality that Merger/Agree of X and Y, resulting in the bond X–Y, need only involve local matching of a single feature of Y, even in case Y is a highly complex structure.

Finally, notice that formal features are neither interpretable nor uninterpretable in any absolute sense. Clausal derivation is not driven by inherent uninterpretablity of some defect features, such as the structural cases. Rather, the computation crucially relates features of the Event Phrase to (necessarily silent) features of the Speech Phrase. Informally put: We need to be able to say e.g. ‘She hit me’ and ‘They hit us’ instead of merely saying ‘The hitter hit the hittee’. Person, as partially also number and gender, is a ‘device’ for this purpose of relating the event participants to the speech situation, thereby making the proposition interpretable and giving it a truth value. This relating of event features to speech situation features is brought about by Merger/Agree and Move.

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See SIGURDSSON to appear on the relative interpretability of the structural cases.


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