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Against some approaches to long-distance agreement without AGREE

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Abstract

With the introduction of AGREE into Minimalism by Chomsky (2000), the relationship between the two elements in an agreement relationship went from being strictly local (Specifier-Head) to being unbounded (c-command with no intervening strong phase boundary) in order to accommodate long-distance agreement phenomena. Concern over the less restricted nature of the new approach led researchers to propose alternatives that eschewed the unbounded reach of AGREE, in the hope that a more restrictive theory might yet be salvaged. This paper scrutinizes some of the most widely cited and fully developed of these alternative proposals (employing predicate inversion of expletives, restructuring, covert movement), applied to extensively studied spheres of data (English existentials, Icelandic agreement), and concludes that they are deeply, perhaps fatally, flawed. While Chomsky's version of AGREE is far from providing a complete and satisfactory theory of agreement, it has yet to be shown that it can be eliminated.

Keywords: AGREE, Minimalism, long-distance agreement, Spec(ifier)-Head, Icelandic, existentials, predicate inversion, expletives, restructuring, covert movement

1 Introduction

1.1 Motivation

Within Chomsky's work under the heading of the Minimalist Program there have been two proposals for the structural configuration under which a relationship of agreement can be established: in early Minimalism that configuration was the Spec(ifier)-Head configuration; beginning with Chomsky (2000), that was abandoned in favor of AGREE, arguably for empirical

reasons: instances of long-distance agreement seem to demand it. But AGREE is obviously less constrained than Spec-Head, allowing the distance between probe and goal to be unbounded as long as no strong phase boundary intervenes, so it is worth asking whether this weakening of the theory is unavoidable. Since its introduction, several authors have attempted to argue that long-distance agreement can be captured without appeal to AGREE. Whether that ultimately turns out to be possible will obviously depend, among other things, on exactly what other syntactic mechanisms the theory makes available and what the constraints thereon are. These are matters of ongoing development and debate, so I do not believe the question can be definitively settled at this point. What is currently both possible and worthwhile, I suggest, is to scrutinize the details of the specific proposals of this type that have been made, in order to assess whether they are empirically viable and theoretically desirable.

1.2 Definitions and debates

I take the Spec-Head relation to require no further elaboration. As for AGREE, the definition in (1) captures the relevant properties introduced by Chomsky (2000):

(1) AGREE (α, β) can be established, where α is a probe and β is a goal, if the uninterpretable features of α and the interpretable features of β "match" (i.e., are nondistinct: "same feature, independently of value"), α c-commands β , there is no closer matching goal γ (unless β and γ are equidistant), and β is "active" (i.e., has an (undeleted) uninterpretable feature).

Subsequent to Chomsky's introduction of AGREE, some authors, e.g., Béjar and Rezac (2009), have suggested that under some circumstances the features of a probe could find themselves on (what we would traditionally call) an X-bar, whence they could probe Spec-XP under c-

Like most "new" ideas in syntax, AGREE had long been anticipated in the literature. For instance, Sigurðsson (1990) proposed that "long-distance" Case assignment to NOM objects in Icelandic is accomplished by "chaingovernment," whereby in (i) Infl governs *have* which governs *been* which governs *sold* which governs *some boats*. Cf. also Raposo and Uriagereka (1990).

⁽i) Það hafa verið seldir nokkrir bátar. there have.3PL been sold some boats.NOM.PL 'There have been some boats sold.'

Icelandic

On the question of whether this is a problem for the Phase-Impenetrability Condition and what might be done about it, see Richards (2012). See also §5.4.

command as a valid instance of AGREE. However, Chomsky himself has repeatedly explicitly excluded this possibility, as demonstrated in the following passages:

"Continuing with Agree, (52c) requires that the matched goal G must be easily located. We want to identify a domain D(P) of the probe P, such that G is within D(P). There are two candidates for D(P): the smallest and the largest of the categories labeled by the label containing P. The former includes only the complement of P; the latter its specifiers as well. Search space is more limited if D(P) is the smallest category, as so far assumed ... There is substantial evidence that G must be in the complement of the probe P, not its specifiers." (Chomsky 2000: 135)

"Apparent SPEC-H relations are in reality head-head relations involving minimal search (local c-command) ... Call H a *probe* P, which seeks a *goal* G within XP; P = H c-commands G ... there is a relation Agree holding between probe P and goal G, which deletes uninterpretable features if P and G are appropriately related ... The SPEC-head relation does not exist." (Chomsky 2004)

"It is impossible ... for an agreement relation to be established between [a probe] W and an element within its SPEC." (Chomsky 2007)

"For minimal computation, the probe should search the smallest domain to find the goal: its c-command domain. It follows that there should be no m-command, hence no SPEC-head relations." (Chomsky 2008)

Minimalist textbooks have likewise been unequivocal on this point: "A probe is a head with [-interpretable] features ... a given probe peruses its c-command domain in search of a goal" (Hornstein et al. 2005: 317); "Agree ... hold[s] between (elements in) a head and some other element down its c-command path" (Lasnik and Uriagereka 2005: 233). Therefore, throughout this paper, I will follow the original definition of AGREE, under which it and Spec-Head are mutually exclusive.³

The purpose of this paper is most definitely not to endeavor to settle any of the active debates that the introduction of AGREE and subsequent attempts to apply and refine it have prompted, including but not limited to the question of whether agreement in natural language actually operates upwards, downwards, in either direction (as a parametric choice), in both directions (depending on the feature/phenomenon involved, or simultaneously), etc., etc. These

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It is worth noting that there are empirical results in the literature that have relied crucially on this narrow definition, for example, McCloskey's (2002) analysis of the interactions between A-bar extraction, resumption, and complementizers in Irish: "This [incorrect outcome], however, will not be possible if we maintain that the agreement relation can only hold between a head and an element within its c-command domain" (p. 204).

debates involve a wide range of empirical phenomena spanning a large number of typologically diverse languages and often hinge on highly technical assumptions about how the mechanical operations of the syntax should be defined and implemented—see e.g. Baker (2008), Wurmbrand (2014), Bjorkman and Zeijlstra (2014), Preminger and Polinsky (2015), Schneider-Zioga (2017), among many others. This paper will have none of those properties. Its goals are narrower and, in a sense, more concrete.

It will accept, for the sake of discussion, the conceptual point that AGREE is a relatively powerful, relatively unconstrained mechanism (by comparison with Spec-Head) the need for which ought therefore to be challenged. It will then examine in depth some of the most carefully worked-out proposals in the literature for re-analyzing phenomena that motivated the introduction of AGREE and ask whether those proposals are successful.

1.3 Empirical domains: Long-distance agreement

I focus on two phenomena where AGREE has frequently been employed: English existential (and unaccusative) *there*-constructions (2), and Icelandic long-distance number agreement in the presence of a quirky subject (3); in both cases, the number of intervening nonfinite clauses between the Probe (the agreeing head) and the Goal (the agreement trigger) is in principle unbounded (Sigurðsson 2000). For perspicuity I will identify the Probe and Goal with single and double underscoring, respectively.

- (2) a. There <u>seem(3PL)</u> [to have been <u>many horses</u> in the stable].⁴
 - b. There seem(3PL) [to have been believed [to be many horses in the stable]].

In the survey reported by Koopman (2004), 15 out of 17 English speakers preferred a plural over a singular verb in such long distance environments without an experiencer. When a singular experiencer intervenes (e.g., *There seem(s) to Bill to be three men in the room*, considerable variation emerged, with some speakers preferring the singular, some the plural, and some expressing no preference. Thus, while more data collection is certainly warranted, Boeckx (2008: 36) is almost certainly wrong when he presents as "facts which ... have gone unnoticed in the literature" that the plural form is "*?" and the singular receives no diacritic.

- (3) a. Jóni virðast [hafa likað þessir sokkar].⁵

 John.DAT <u>seem.3PL</u> to.have liked <u>these socks.NOM.PL</u>

 'John seems to have liked these socks.'
 - b. Jóni virðast [vera taldir [líka hestarnir]]. *John.DAT seem.3PL* to be thought to like <u>the horses.NOM.PL</u>

 'John seems to be thought to like the horses.'

I will structure the discussion around one prominent analysis of each of these phenomena, in order to have as much concrete detail to work with as possible: Moro's analysis of existentials (§3) and Koopman's analysis of Icelandic (§4). These choices are not arbitrary: recent work arguing against Chomsky's version of AGREE has appealed to them as providing viable counter-analyses. For example, Zeijlstra (2012) cites Moro (1997) and Koopman (2006) with approval. (For arguments that AGREE is genuinely necessary for some other long-distance agreement phenomena, see Boeckx (2009) i.a.) Before delving into those analyses, I suggest a way of classifying approaches to long-distance agreement in general (§2). Afterwards I turn to consideration of a more general claim by Hornstein that counter-analyses avoiding AGREE are always guaranteed to be available as a matter of principle (§5). I conclude with a brief discussion of some issues concerning variation (§6).

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Sigurðsson (1990–1991, 1996) reports considerable interspeaker variation as to whether agreement here is preferred, optional, or dispreferred, versus default (3sG) inflection. Obviously what is relevant here is that agreement is possible. He notes that cross-clausal agreement is "weaker" than clause-internal agreement with NOM objects, as in (34) below, which is obligatory for most speakers with most verbs. (For the most part, 1st and 2nd person NOM objects cannot trigger any agreement, but see the references in this note for exceptions.)

⁶ Zeijlstra (2012) sketches a variation of Koopman's analysis (cf. §4) for one Icelandic example in which he proposes to do away with Koopman's null expletive but retains, i.a., the two TPs.

Zeijlstra (2012: 529) is in error when he states that "after Schütze (2003), Koopman assumes that both T heads are 'compressed' into one finite verb establishing both singular and plural agreement, which is realized as plural agreement." Schütze (2003) crucially did not posit two T heads, but rather that the single T head of the clause attempts to agree both with the subject (which fails when the subject is quirky, yielding default 3sg features) and with the object (when it is NOM), with results depending on the relationship between the phonological forms that would express those two sets of phi-features.

2 Approaches to long-distance agreement

While I do not attempt an exhaustive survey, I would like to suggest that the myriad approaches to the problem of long-distance agreement can be taxonomized into four broad categories, characterized in terms of the AGREE nomenclature.⁸

- **A)** Contrary to appearances, the probe and the goal were actually local, at some (non-surface) stage of the derivation. This is what I call the "clandestine meeting" approach.
- **B)** The probe and the goal were never local, but some element agrees locally with the goal, thereby acquiring its features, then moves to become local to the probe and agrees with it, thereby offloading its/the goal's features onto the probe. This is what I call the "secret courier" approach.
- C) One cannot establish that A or B have happened, so one invents a sui generis technology that connects the probe's and goal's features by fiat. This is what I call the "teleportation" approach.
- **D)** One bites the bullet and admits that the probe and the goal can be far apart, hence AGREE. (This may be regarded as less magical/stipulative than teleportation to the extent that AGREE captures phenomena beyond long-distance agreement *sensu stricto*.)

Some examples from the literature on English *there*-constructions should illustrate what I have in mind with this classification.

First, imagine a transformational rule—an example of the "clandestine meeting" approach: (5) is derived from (4) by rightward movement of the bracketed associate, followed by either insertion of *there* (Burt 1971; Milsark 1974) or pronunciation of the trace of the associate as *there* (Kuno 1971; Dresher and Hornstein 1979); cf. also Harris (1957), Stowell (1978).

- (4) [Many horses] seem to have been in the stable.
- (5) There seem to have been [many horses] in the stable.

An excellent historical tour of approaches to expletive constructions up through its time of writing can be found in Hartmann (2008).

Second, consider appeals to linking, coindexing, or a CHAIN⁹—these are instances of the "teleportation" approach: *there* must be in a particular (representational) relationship with the associate, but the properties of this relationship are not identical to other instances of that relationship (e.g., in (6), *there* does not *refer* to the same entity as the associate, despite being coindexed with it).

(6) There, seem to have been [many horses], in the stable.

Third, consider Expletive Replacement—another instance of the "clandestine meeting" approach: this operation used movement to capture the locality of the expletive—associate relationship, but was quickly rejected because it wrongly predicted possible high scope for the associate. Fourth, consider Expletive Adjunction/Affixation—another instance of the "teleportation" approach: the unique LF configuration (7) is assumed to result in phi-feature sharing/matching without high scope-taking; but one must wonder if the notion "LF affix" (Chomsky 1991) is even coherent.

(7) [[Many horses]_i [there]] seem to have been t_i in the stable.

Fifth, consider a novel application of Affix Hopping—another "teleportation" solution: Bošković (1997) also adopts the proposal that expletive *there* is an LF affix, but rather than the associate adjoining to it, it adjoins to the associate via LF lowering "affix hopping." *There* agrees in a Spec-Head configuration with Infl, but affixation requires the affix's number value to match that of its host (for reasons unclear). Sixth, consider Bobaljik's (2002) single output approach: the associate moves to subject position, where it triggers agreement locally, but for both phonology and semantics it is the lower copy of the associate that is interpreted (see also Preminger 2009); this has superficial attributes of a "clandestine meeting" approach, but when the broader implications are considered I believe it deserves to be seen as a case of "teleportation." (See §5 for further discussion.) Seventh and finally, consider the family of *there*-raising proposals: one of these, predicate inversion, will occupy us in §3. Others have been put forward by, i.a., Richards

⁹ As in Chomsky (1986).

¹⁰ That is, (i)a does not have a reading in which *many men* scopes over negation, whereas (i)b does.

⁽i) a. There are not many men in the garden.

b. Many men are not in the garden.

¹¹ Since this version of affix hopping, unlike its traditional namesake, can cross an unbounded amount of intervening material, "affix long-jumping" seems a more appropriate moniker.

and Biberauer (2005), Deal (2009), and Alexiadou and Schäfer (2010) (though the latter do not deal with existentials); they involve *there* starting out low in the structure, but they employ AGREE, biting the bullet. By contrast, Kayne's (2008) *there*-raising analysis is a "secret courier" approach, because what actually raises is a structure containing a trace of the associate, and hence the relevant features, which then agrees locally with Infl.

3 Predicate inversion

Moro (1997, 2006) proposes a "secret courier" solution: *there* is the predicate of a small clause and originates in a local relationship with the goal, the subject of predication, which it agrees with (conceivably under Spec-Head), ¹² then *there* undergoes predicate inversion to get to subject position, where it triggers agreement with the probe (under Spec-Head), as in (8):

(8) $[_{IP}[_{IP}]$ There are $_{VP}[_{VP}]$ $t_{V}[_{SC}[_{SC}]$ [many copies of the book] $t_{there}]]$ [in the studio.]]

The purported appeal of this approach is that the D-structure position of *there* and its raising to subject position are supposed to be independently motivated on the basis of inverse copular sentences, as in (9):

(9) $[_{IP} [The cause of the riot]_{pred} was_{V} [_{VP} t_{V} [_{SC} [a picture of the wall] t_{pred}.]]]$

But does that parallel empirically pan out? The following four subsections pursue that question.

3.1 Extraction: Contrasts not as expected

First I mention five sets of extraction contrasts that raise problems for the predicate inversion approach.

Moro himself notes that getting *there* to agree (in number) with its "subject" is not trivial, since a predicate need not match its subject in number (i). Perhaps this issue could be circumvented by positing that a predicate must match its subject *when its own number is unspecified*, as *there*'s might be.

⁽i) [The children(PL)]_i are [$_{SC} t_i$ the problem(SG)/*problems(PL)].

- (i) Extraction of the notional subject is possible in canonical copular sentences, in contrast with inverse copular sentences, ¹³ suggesting predicate inversion is responsible for the badness of (10)b:
- (10) a. What provision do you believe *t* was the objection to the bill?
 - b. *What provision do you believe the objection to the bill was t?

Moro claims that existentials pattern with inverse copular sentences, giving the following ungrammatical examples:

- (11) a. *Which wall do you think there was t?
 - b. *Which girls do you think that there are *t* in the room?

From these, Moro (2006) concludes that "there can be no *wh*-movement of the [associate] if the [associate] is headed by *which*." However, the cases in (11) do not appear to generalize; if we use D-linked sets that are easier to accommodate, *which/what*-NP extractions are fine: 14

- (12) a. Which magazines did you say there were *t* in the waiting room?
 - b What options do you think there will be *t* on next year's Prius?
 - c. What kind of cake do you expect there will be *t* at the wedding reception?

In (12), *which/what* seems to be ranging over kinds or types rather than individuals or tokens. This might explain why they sound better than (11). But the same kind/type readings should be available in the inverse copular examples in (13), yet they are still completely out.

- (13) a. *Which magazines did you say the target of the lawsuit was t?
 - b. *What options do you think the cause of the Toyota recall was *t*?
 - c. *What kind of cake do you expect the biggest challenge for the chef will be t?

Thus, the real contrast is between inverse copulars on the one hand and existentials and canonical copulars on the other.

¹³ As Moro notes, this restriction holds only for D-linked *wh*-phrases. (i) is fine, as is its existential counterpart (ii):

⁽i) What do you believe the objection to the bill was t?

⁽ii) What did you see that there was *t* in the bathroom?

See Heycock (1995) for a possible explanation.

¹⁴ The presence of a PP "coda" following the trace position in these examples seems to be an ameliorating factor. Hartmann (2008) found this made a significant difference in a magnitude estimation experiment.

- (ii) The associate of an existential can be extracted as a *how many* DP (14) (e.g., Hoekstra and Mulder 1990), as can the subject of a canonical copular (15)a; these contrast with the inverse copular (15)b:
- (14) How many men do you think there were *t* in the room?
- (15) a. How many nude pictures do you think *t* were the cause of the scandal? b. *How many nude pictures do you think the cause of the scandal was/were *t*?
- (iii) Safir (1985) observes that relativization of "total amounts" is possible in existentials (16); subjects of canonical copulars also allow this (17); these contrast with inverse copulars (18):
- (16) a. The very few books that there are t in the house are all mysteries.
 - b. All the children that there were *t* in the orphanage have finally been adopted.
- (17) a. The very few books that are in the house are all mysteries.
 - b. All the children that were in the orphanage have finally been adopted.
- (18) a. *The very few books that the only source of entertainment is *t* are all mysteries.
 - b. *All the children that the focus of our concern was *t* have finally been adopted.
- (iv) den Dikken (2006) observes other flavors of wh-movement that fail on the notional subject of inverse copulas (19). Again, these contrast with associates of existential there (20), though the latter may not be perfect; canonical copulars are fine (21)a and c, unless the unmoved counterpart is itself ungrammatical, as (22) is for (21)b.
- (19) a. *Whose oversized comforter do you suspect the problem for the washing machine was t?
 - b. *They fixed whatever problem the cause of the first shuttle disaster was believed to be t.
 - c. *How big of a poster would you say that gift to your brother was t?
- (20) a. ?Whose clothes do you suspect there were *t* on your roommate's bed?
 - b. ?They fixed whatever problems there were believed to be t with the shuttle design.
 - c. How big of a poster would you say there was *t* on your brother's wall?
- (21) a. Whose clothes do you suspect *t* were on your roommate's bed?
 - b. *They fixed whatever problems *t* were believed to be with the shuttle design.
 - c. How big of a poster would you say *t* was on your brother's wall?
- (22) *Several problems were believed to be with the shuttle design.

- (v) Extraction from a post-copular DP is possible in canonical copular sentences, but not in inverse copular sentences:
- (23) a. Which riot do you think a picture of the wall was [the cause of t]?
 - b. *Which wall do you think the cause of the riot was [a picture of t]?

As Moro himself notes, inverse copulars contrast with existentials.

- (24) a. Which book do you think there were [many copies of t] in the library?
 - b. Which models do you think there are [pictures of t] in the album?

To summarize this subsection: with respect to extraction, existentials pattern with canonical copulars, but not with inverse copulars.

3.2 QRing out of the post-copular DP: Contrast unexpected

QR out of the postcopular DP is possible in canonical copulars, but impossible in inverse copulars (judgments from Moro 1997):

- (25) a. A picture of the wall wasn't [the cause of many riots].

 ✓ many > not

 = Many riots are such that a picture of the wall wasn't the cause of them.
 - b. The cause of the riots wasn't [a picture of many walls].
 ★ Many walls are such that the cause of the riots wasn't a picture of them.

Moro asserts (contra his theory's prediction) that existentials work differently from inverse copulars—QRing out is possible:

- (26) a. There isn't [a picture of many walls] in the album.

 ✓ many > not

 = Many walls are such that there isn't a picture of them in the album.
 - b. There weren't [copies of many books] in the library.
 ✓ many > not
 = Many books are such that there weren't copies of them in the library.

Assuming the facts are as described, existentials do not track inverse copulars with respect to scope.

3.3 Small clause environments: Contrasts not fully expected

Inside small clauses, canonical copulars are possible, but inverse copulars are impossible, in contrast to full (infinitival) clauses.¹⁵

- (27) a. Mary considers a picture of Stalin (to be) the cause of the riot.
 - b. Mary considers the cause of the riot *(to be) a picture of Stalin. 16

Here Moro is correct that *there* existentials pattern with inverse copulars:

(28) The inspector considers there *(to be) too many people in the elevator.

Moro proposes that what is wrong with the short versions of (27)b and (28) is that a small clause has no "extra space" that would allow the predicate to get above the subject, an explanation based on the idea that the predicate (which is *there* in (28) on his analysis) must originate low.

However, Heycock (1995) observes that predicate inversion across raising verbs is not possible either, as in (29)b and (30)b, ¹⁷ and here the issue cannot be the lack of a landing spot because the upstairs nonthematic subject position is available for that purpose.

- (29) a. %John seems the best man for the job.
 - b. *The best man for the job seems John.
- (30) a. John is considered the best man for the job.
 - b. *The best man for the job is considered John.

(i) If Bill has an alibi for 6 p.m., that makes the murderer John.

To the extent that one can cook up anything vaguely similar with an existential, the copula is certainly not omissible, but the parallel is not very compelling:

(ii) If Bill had an alibi for 6 p.m., that would make there *(be) reasonable doubt.

(i) The best solution became/remained instant retreat.

den Dikken (2006) intriguingly suggests these are good because *become* means 'come to be' and *remain* means 'continue to be', so that *be* is actually present in these sentences, contra appearances. By contrast, *seem* and (*be*) *considered* in (29) and (30) obviously cannot be semantically decomposed into aspectual material plus *be*.

¹⁵ A potential exception, depending on the details of the analysis, could be the following example from Heycock and Kroch (1999):

¹⁶ Contra the standard judgment in the literature, many people seem to accept the small clause version of this sentence, particularly with focal accent on the final DP. Similar accenting does not seem to help (28), however, which only creates another circumstance where existentials and inverse copulars are not parallel.

¹⁷ Heycock (1995) points out the following exceptions:

Nonetheless, existentials are good (for many, especially British, speakers) in this environment. 18

- (31) a. %There was considered insufficient evidence to prosecute the officer.
 - b. ?*The reason for the officer's acquittal was considered the lack of witnesses.
- (32) a. %There is considered inadequate justification for building a hotel on campus.
 - b. ?*The best justification for building a hotel on campus is considered the demands of the parents.

The conclusion is that, with respect to the full range of small clause environments, existentials do not track inverse copulars.

3.4 Optionality: Contrast unexpected

As a final simple but perhaps not trivial point, predicate inversion is optional, but "there-inversion" is obligatory:

- (33) a. There was a book missing *t* from the shelf.
 - b. *A book was *t* there missing from the shelf.
 - c. *A book was missing *t* there from the shelf.¹⁹

3.5 Summary

There is no independent evidence that *there* originates in a local "predication" relation with the associate or that *there* undergoes predicate inversion. Indeed, the evidence overwhelmingly demonstrates that *there* does not have this derivational history, since it does not pattern with inverted predicates. Therefore, a "secret courier" solution that would explain long-

In an acceptability rating task using a 7-point Likert scale (1 = worst, 7 = best) I conducted with 50 American speakers using Amazon Mechanical Turk, the mean ratings for sentences like (i)a and (i)b were almost identical: 5.56 vs. 5.50, respectively. However, sentences like (31)a vs. (31)b differed substantially: 4.76 vs. 3.72. The difference in the effect of "removing" to be from the two sentences types (0.80 vs. 1.78) was significant (F(1, 98) = 4.70, p < .02). Thus, predicate inversion fares much worse than existential *there* in small clauses.

¹⁸ Strictly speaking, the empirical issue is not how good (a) sounds relative to (b) in (31) and (32)a. Rather, it is how degraded each of them sounds relative to its counterpart in which *to be* has been included, e.g., as in (i).

⁽i) a. There was considered to be insufficient evidence to prosecute the officer.

b. The reason for the officer's acquittal was considered to be the lack of witnesses.

¹⁹ It is not relevant that the b and c strings are (relatively) acceptable if *there* is stressed and read as a locative.

distance agreement in English existentials in terms of predicate inversion is no better than any other stipulated solution to the long-distance agreement problem.

This is not to say that Moro's idea might not be right for other languages. In particular, McCloskey (2014: 356) argues that in Irish existentials the superficial counterpart to *there*, *ann*, is actually crucially different from it: "[ann] has semantic content, [there] does not." He notes two further properties of *ann* not shared by *there*: *ann* may be focused and may appear as the (in situ) predicate of a small clause. McCloskey speculates about other languages that may have existential constructions of the Irish type, e.g., those formed in German with *da*.

4 Long-distance object agreement, or How do you solve a problem like Icelandic?²¹

4.1 The data

Icelandic has achieved notoriety for its quirky subjects, such as the datives (DAT) in (34) and (35), which—except for not triggering agreement—behave entirely like subjects; in quirky-subject clauses, a nominative (NOM), if there is one, behaves like an object.²²

- (34) Henni líkuðu hestarnir. her(DAT) <u>liked(3PL)</u> <u>the.horses(NOM.PL)</u> 'She liked the horses.'
- (35) a. Jóni_i virðast [t_i hafa likað þessir sokkar]. *John.DAT.* <u>seem.3PL</u> to.have liked <u>these socks.NOM.PL</u>

 'He seems to have liked these socks.'
 - b. Jóni $_i$ virðast [t_i vera taldir [t_i líka hestarnir]]. John.DAT <u>seem.3PL</u> to.be thought to.like <u>the.horses.NOM.PL</u> 'John seems to be thought to like the horses.'

In (35) the same VP is embedded under one and then two raising predicates, and the DAT raises to become their subject. The finite verb (the probe) at the top of the raising structure cannot agree

²⁰ Thanks to Andrew Carnie for bringing these facts to my attention.

²¹ To the tune of "How do you solve a problem like Maria?" from *The Sound of Music* (Richard Rodgers and Oscar Hammerstein II, 1959).

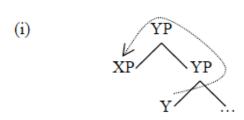
²² Evidence abounds in the literature, including (for subjecthood of DAT) binding of subject-oriented reflexives, being and controlling PRO, deleting and licensing deletion under conjunction reduction, licensing object NPIs, restrictions on extraction, etc.; (for objecthood of NOM) failing subjecthood tests, undergoing Object Shift, etc. See Jónsson (1996) for review.

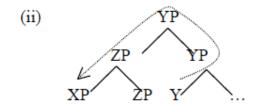
with the DAT, instead it agrees (in number) with the NOM object (the goal) in the lowest clause, as expected under AGREE. How could we get this pattern without AGREE?

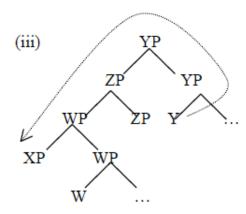
4.2 A Spec-Head analysis

Koopman (2003, 2006) explicitly argues that Spec-Head agreement is up to the task. Since she provides a very detailed proposal, it is worth considering at some length. She advocates for the Strong Agreement Hypothesis: "the Spec-Head agreement configuration... is the only configuration leading to the spellout of agreement" ... "under the strong agreement hypothesis all cases of long distance agreement then are to be reanalyzed as arising at some early point in the derivation under a local Spec-head relationship." This is a clandestine meeting solution.

More technically (Koopman 2006), "If XP agrees with Y, XP is merged with YP, or XP is merged with ZP which is merged with YP (or XP is merged with WP which is merged with ZP which is merged with YP, etc.)." That is, a head agrees with its specifier, or the specifier of its specifier, or the specifier of the specifier of its specifier, etc. (this allows "long distance" agreement to the extent that the distant Goal can pied-pipe structure above it into the specifier of the Probe). This is illustrated in the following diagrams from Chandra (2007).







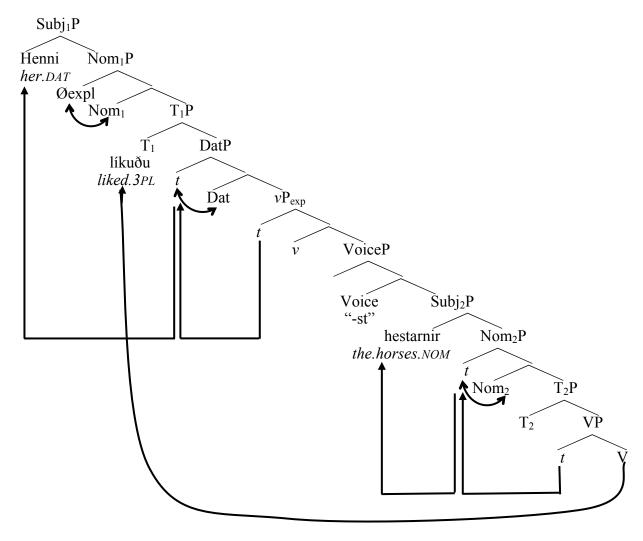
Koopman's structure for a monoclausal Icelandic sentence like (34) above is as given in (36) below (which abstracts away from the crucial intermediate steps of V-raising). In this structure, Subj₁P hosts the EPP feature that derives the surface position of the subject (independent of its case marking); Nom₁P checks subject Nominative case (cf. Cardinaletti 2004 for split subject positions); T₁P hosts canonical tense features; DatP checks Dative case; *v*P introduces the experiencer argument and projects DatP to provide it with inherent Dative case; VoiceP, when it contains the morpheme -*st*, selects a complement containing a NomP^{23,24}; Subj₂P hosts the EPP feature that derives the surface position of the *object* (independent of its case marking); Nom₂P checks object Nominative case; T₂P has no tense semantics (cf. Collins and Thráinsson 1996); and finally, VP introduces the theme (internal argument).

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²³ For DAT-NOM verbs that do not have the -st suffix, like the one in (34), Koopman assumes a silent counterpart.

²⁴ Note the apparent non-locality of selection: Subj₂P intervenes between VoiceP and NomP.

(36)



Five properties of this account merit attention. First, all cases are assigned/checked in a Spec-Head relationship with a case head (curved double-headed arrows in (36)): quirky cases (here DAT) are made available by vPs; NOM cases are made available by TPs. Second, independent of those case positions, both the subject and the object (bearing any case) have their surface position determined by an EPP feature of a Subj head. Third, the NOM case associated with subjects of canonical NOM-ACC clauses (Nom₁) is *not* the same NOM case associated with Nominative objects (Nom₂) of quirky-subject clauses—it cannot be, under the Strong Agreement Hypothesis, ²⁵ because a NOM object never gets as high as T₁; consequently, since subject NOM is assumed to be part of every clause, it must undergo checking with a null expletive (Øexpl) in

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 $^{^{25}}$ But see Schütze (1997 §4.1.1) for extensive argumentation that it *should* be.

Spec-Nom₁P when the subject is quirky. Fourth, it is stipulated that only a Dative-experiencer-assigning *v* can take a VoiceP complement that contains a NomP—this is necessary because otherwise, predicates with two NOM arguments would counterfactually be predicted to be possible in Icelandic;²⁶ this loses the intuition that NOM becomes assignable to the object *just when* it is not assigned to the subject (as in Schütze 1997, i.a.). Fifth, to get long-distance agreement as in (37), the account requires that "a second source for agreement must be assumed, ... 'agreement climbing' i.e. agreement with a plural predicate triggered under complex verb formation."

- (37) a. Jóni_i virðast [t_i hafa likað þessir sokkar]. John.DAT <u>seem.3PL</u> to.have liked <u>these socks.NOM.PL</u>

 'John seems to have liked these socks.'
 - b. Jóni $_i$ virðast [t_i vera taldir [t_i líka hestarnir]]. John.DAT $\underline{seem(3PL)}$ to be thought to like $\underline{the.horses.NOM.PL}$ 'John seems to be thought to like the horses.'

Koopman elaborates on this last point: "A nominative object DP will trigger agreement on all the verbs in a *Restructuring* domain, because of two different processes: regular nominative agreement triggered low in the structure, and copying of agreement features as a by-product of complex verb formation" [emphasis added]. "Complex verb formation always requires a local Spec-head relation between the *restructuring* predicate and the predicate of its complement" [emphasis added]. I believe this is alluding to structures like Chandra's (iii) above, where W was originally the lowest predicate and XP its local NOM argument, then ZP the next higher predicate, and XP the highest predicate, assuming the lower ZP and lower YP each contain a trace.

Thus, in (37)b the complex predicate 'seem to be thought to like' must be formed by moving each predicate into the spec of the next higher one. Subsequent movements, which Koopman does not discuss, must somehow restore the underlying word order of the predicates, which has been reversed, as well as adverbial material, which (38) shows can intervene between

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²⁶ Consistent with this generalization, there is one situation in which a clause can contain two NOM nominals in Icelandic: a copular construction, which as in English can occur in either canonical or inverse word order. The ensuing agreement patterns are complex and show considerable interspeaker variation—see Hartmann and Heycock (2016, 2017).

the predicates in such configurations (presumably excluding a head movement account of complex predicate formation):²⁷

- (38) a. Jóni virðast **einfaldlega** vera taldir líka hestarnir. *John.DAT* <u>seem.3PL</u> **simply** to be thought to like <u>the.horses.NOM.PL</u>

 'John simply seems to be thought to like the horses.'
 - b. Mér mundu **þá** virðast þeir vera hérna. me.DAT <u>would.3PL</u> then seem <u>they.NOM.PL</u> to.be here 'It would then seem to me that they are here.'

4.3 Is there independent evidence for the necessary Restructuring?

Hróarsdóttir (2000) shows that Old(er) Icelandic had three surface patterns typical of (Germanic) Restructuring:

- 1) Short leftward object movement within VP;
- 2) Object scrambling out of VP to the left of nonfinite auxiliaries and sentential adverbs;
- 3) V-raising of non-finite main verbs to the left of non-finite auxiliaries.

These all departed the language at the same time: they were stable from the 14th through the 17th centuries, but declined rapidly in the 18th century and all but disappeared by the 19th. Furthermore, those verbs that were attested with OV order in Older Icelandic fit very well into

Wurmbrand 1998), with only a half-dozen exceptions, for which Hróarsdóttir has plausible explanations. So, we know what Icelandic-cum-Restructuring would look like, it used to be attested, but Modern Icelandic does not have it.

the semantic classes of verbs that license Restructuring in modern West Germanic (cf.

4.4 Summary

Under the Strong Agreement Hypothesis, the following elements are needed but lack independent motivation: a source for NOM other than canonical Tense/C; a stipulation to prevent that second NOM source from overgenerating (to block two NOM arguments in one clause); Restructuring (complex verb formation); operations to undo the word order consequences of

²⁷ My most sincere gratitude to Ásgrímur Angantýsson, Haldór Ármann Sigurðsson, Jóhannes Gísli Jónsson, Þórhallur Eyþórsson and Höskuldur Þráinsson for these Icelandic judgments and discussion; standard disclaimers apply.

complex verb formation, which is what allows agreement to climb long distance; null expletives, whose distribution presumably must be restricted so that they are part of the numeration only when NOM cannot be assigned to a contentful argument;²⁸ a second configuration for agreement, i.e., Spec(-of-Spec)*-Head, apparently violating the Strong Agreement Hypothesis.²⁹

5 Is AGREE redundant?

5.1 The general idea

Hornstein (2009: ch. 6) offers analyses of long-distance agreement in English existentials and Icelandic NOM object constructions as illustrations of a more general claim, namely that AGREE should not be part of Minimalist syntactic machinery, essentially because it is redundant with other components of the theory. He argues that anything that can be achieved with AGREE can be achieved without AGREE, and thus by Okkam's Razor AGREE should be done away with. Hornstein adumbrates three potential schemes for mimicking the effects of AGREE (assuming there is some mechanism for highly local feature checking/valuation, the exact structural configuration for which is not his primary concern—it is the long-distance applicability of AGREE that he argues is superfluous and hence undesirable). I enumerate them before considering their specific application to the constructions discussed in §§ 3 and 4.

The first mechanism is covert movement—in particular, a second cycle of post-SpellOut movement, as in early Minimalism and before, as opposed to simply spelling out lower copies/instances of moved elements in a single-cycle theory. Hornstein suggests that there may well be independent need for an LF cycle separate from considerations of implementing long-distance agreement, and thus it may be wrong to think that adding AGREE to the theory buys us the simplification of a single cycle theory. I take no position on this general architectural point. Hornstein does not propose covert movement in this sense as an analysis for either English *there*-

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Opinions obviously vary widely on whether null expletives have any place in Minimalist syntax. I am inclined to agree with Jane Grimshaw, who said "Null expletives are an abomination" (uttered during the presentation of Grimshaw and Samek-Lodovici 1995). In my view, null expletives are simply an unfalsifiable mechanical device used to force a derivation to proceed differently from how it normally would, typically by blocking otherwise-obligatory A-movement. A more compelling theory ought to *explain* why these operations are blocked in just the situations where they are.

²⁹ I confess it is not entirely clear to me whether Koopman intends that XP can directly trigger agreement on Y in Chandra's (iii), or whether this is a description of an agreement relation that is implemented by XP triggering agreement on W(P), which triggers agreement on Z(P), which triggers agreement on Y(P).

constructions or Icelandic NOM object agreement, with good reason: as the literature on both constructions has established, the DPs that trigger agreement show no evidence of being higher than their surface positions at LF.

The second mechanism is what Hornstein calls "Sportiche-doubling," by which he means a structure in which the agreed-with DP underlyingly consists of two parts, one of which can be split off and moved to a position local to the head (e.g., verb) manifesting the agreement. (This is another example of what I dubbed the secret courier approach in §2.) The inspiration for this moniker is Sportiche's (1988) classic analysis of quantifier float, schematized in (39).

(39) a. *D-structure*: have [VP][DP] all [DP] the children] left] b. *S-structure*: [DP] the children have [VP][DP] all t_i left]

Whatever the merits or challenges of this analysis for quantifier float in particular may be, Hornstein (2009: 131) suggests that the general idea can be taken much further, much more abstractly:

"One can even imagine 'pure' cases of Sportiche-doubling in which there isn't any surface hint of an overt mover...if a DP were paired with a null double...say, for example a null pronominal clitic *pro* agreed with DP (on externally merging with it) and moved to the specifier of α agreeing with it there.

(2)
$$[...[pro_1 \alpha^0 ... [t_1 DP]...]]$$

On the surface this would look like an instance of long distance agreement"

This proposal raises numerous questions for which Hornstein supplies no general answers (though he does make some suggestions for the particular application of this idea to English *there*-constructions—see §5.2). What independent evidence is there for the existence of constituents consisting of an arbitrary DP plus a clitic in the relevant languages?³⁰ What is the structure of a DP that contains these two pieces, and how does that structure allow extraction of *pro* without violating constraints on extraction, e.g., the Left Branch Condition (in languages that enforce it, such as English and Icelandic)?³¹ What mechanism guarantees that their phi-features

³⁰ This question would be particularly relevant if one were to apply the analysis to Icelandic: there are no restrictions on the semantics of NOM objects that trigger agreement; in particular, they are not limited to the kinds of DPs that can be clitic doubled in languages that have (audible) clitic doubling.

³¹ It is worth noting the dissimilarity between the post-movement structures in (39) and Hornstein's (2).

will match?³² How does the Case Filter apply to these DPs, or restated in current terminology, what unvalued / uninterpretable features do they bear? Does *pro* satisfy the EPP requirement of α (if it has one) and block other elements from moving to Spec- α , or if not, why not? Do the answers to these questions follow from any general principles or independently established properties of overtly studiable phenomena?

The third mechanism Hornstein suggests for implementing long-distance agreement is simply movement (a.k.a. Internal Merge) coupled with deletion/nonpronunciation of the higher copy/occurrence. (In most if not all cases, this would additionally require stipulating that the higher copy/occurrence not be interpreted—e.g., as noted above for there-constructions, the associate takes scope in its surface position, not at the height of the expletive.) This is what Bobaljik (2002) refers to as the Lower Right Corner in the matrix of possibilities for privileging copies: movement occurs, but with no consequences for either PF or LF. I believe it is worth pondering rather deeply whether it makes sense to entertain a theory that espouses an operation that says at one time that an element has been dislocated and at the same time that this dislocation has no consequences for the structure at the phonological interface and no consequences for the structure at the semantic interface. What truly is the content of claiming dislocation has taken place under such circumstances? No more or less than that operations that could otherwise not have happened because the element in question was not local to the landing site did in fact take place. (Hence my classifying this approach as "teleportation" in §2.) That certainly seems tantamount to stating that those operations can happen long distance. So I might agree with Hornstein in one sense: if one truly wants to countenance movement that has no consequences at either interface then it indeed seems redundant to have a distinct AGREE operation in the grammar, because both mechanisms achieve the same outcome: features can be checked at a distance. However, this is not the end of the discussion: there are both conceptual and empirical issues that demand further consideration.

Conceptually, it seems to me that there is an issue of transparency in the choice of implementation. If we concur that the theory needs to allow features to be checked long distance with no further consequences, is it better for the theory to include an operation that explicitly checks features at a distance with no further consequences, or instead for it to include an

³² As pointed out above in note 12, a small clause consisting of two DPs does not enforce phi-feature agreement between the DPs, for example.

operation Move (whether or not that is any more than an informal cover term for Internal Merge, however implemented), which in the typical case has the property of actually moving/displacing an element (for pronunciation or interpretation or both, i.e. changing one or both of the LF or PF representations), but which can be stipulated in extraordinary circumstances to do neither, thereby in effect encoding a completely different operation that involves no movement/displacement but simply happens to implement long-distance feature checking? One conceivable tack would be to declare that there can be no such thing as vacuous Move, i.e., Move that has no effect on any interface representation. This would mean Bobaljik's Lower Right Corner is excluded, and AGREE is the only way to achieve "pure" long-distance agreement. The relative appeal of this solution to Hornstein's redundancy problem compared to his own (barring AGREE) will surely vary depending on one's taste.

But I have so far taken for granted Hornstein's empirical claim, namely that any facts capturable using AGREE are also capturable via one of the three alternative strategies. Establishing this is far from trivial. All three alternatives crucially involve movement, which means that those alternatives will have to meet two conditions that their AGREE-based counterpart analyses do not: they must obey the known constraints on the relevant kind(s) of movement in the language in question, and they must rely on the availability of landing sites appropriate for the moving element in that language. As we shall see in §§ 5.2 and 5.3, when Hornstein attempts to use Move to avoid AGREE, his analyses fail to meet these desiderata.

5.2 Proposal for there-constructions

Hornstein proposes a "Sportiche-doubling" account of English *there*-constructions, but does not lay out the structure of the underlying DPs in question. The greatest detail he puts forward comes from the following passage: "We can take it to be similar to genitive DPs like *John's book*. The principal difference between the postulated *there* + associate DP and genitive DPs is that *there* cannot carry genitive case" (p. 143).³³ The best additional hint at the intended

As noted in §5.1, this raises an obvious problem: English does not allow extraction of possessors or other left branches from DPs. While Hornstein does not explicitly address this issue, hints in footnotes suggest he may hope to get around it by stipulating that *there* needs Case and (presumably unlike a possessor) cannot get it within the containing DP, though the latter claim in turn seems problematic in light of the fact, acknowledged by Hornstein in the same context, that *there* is licensed as the subject of ACC-*ing* gerunds in English (e.g., [There being little time left] meant we had to skip lunch).

structure comes from Hornstein's discussion of how he hopes to ensure that the features of *there* will match the features of the associate: "In many languages, Ds (or Spec Ds) agree with their nominal complements ... If *there* is a dummy version of these, then it too could 'agree' with its complement" (p. 140). In the elided portion of this quote he alludes to the fact that determiners can inflect for number and gender according to the features of the NPs they combine with. But *there* cannot possibly occupy the D position since the associate can contain its own determiner. It is not clear what he has in mind with regard to "Spec Ds" agreeing with their "complements," but if we are to think of Spec D as the possessor position, as the previous quote suggests, then it is obviously false that possessors match the phi-features of their possessees: witness *John(SG)* 's *books(PL)*. So Hornstein's proposal faces at least three rather grave obstacles: there is no serious proposal for the underlying doubling structure, no empirical evidence that DPs of the form [*there many horses*] are attested, ³⁴ and no mechanism for ensuring phi-feature agreement between the two pieces of such structures, without which long-distance agreement cannot be implemented.

5.3 Proposal for Icelandic

Hornstein prefaces his discussion of Icelandic (and by implication similar long-distance agreement phenomena) with the following disclaimer: "In contrast to [the discussion of *there*-constructions], my aim here is not to provide alternative analyses of these constructions but to show that a movement account can do as well as an AGREE-based one *regardless of the data involved*" [emphasis in original] (p. 148). Nevertheless, he does then sketch an analysis for an example analogous to (34) in which the NOM object has "tucked in" as a second, lower specifier of TP in order to trigger agreement on the finite verb, while its lower copy is pronounced (and, presumably, interpreted). In a footnote he remarks, "It is a standard assumption concerning Icelandic that it has multiple subject positions. Whether this is coded as allowing multiple specifiers of T or another FP with a specifier ... does not matter here" (p. 149). In other words, his proposal is that the landing site for the movement of the object is whatever the lower subject position of Icelandic transitive expletive constructions is. But that analysis simply cannot work, because that position is not guaranteed to be available: as has long been noted in the literature,

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³⁴ Hornstein seems to commit himself to *there* being the leftmost element in the DP. In this respect he may be slightly worse off than Kayne (2008), who appeals to the existence, in nonstandard English, of DPs like *that there book*, whose order he claims is consistent with a potential analysis he alludes to.

NOM object agreement is possible in transitive expletive constructions, where the notional subject occupies that position:³⁵

- (40) a. Það líkuðu mörgum bessir tómatar. there liked.3PL many(DAT) these.NOM.PL tomatoes.NOM.PL 'Many liked these tomatoes.'
 - Það leiddust sumum bessar ræður. there found.boring.3PL some.DAT these.NOM.PL speeches.NOM.PL 'Some people found these speeches boring.' (Halldór Sigurðsson p.c. to Koopman 2006)
 - Það voru konungi gefnar ambáttir í vetur. there were. 3PL king. DAT given. NOM. PL slaves. NOM. PL in winter 'There was a king given slaves this winter.' (Zaenen et al. 1985: 462)

5.4 Summary

This discussion illustrates, contra the emphasized portion of the above quote, that the details of the data do matter, because movement requires a landing site, while AGREE does not. Movement must also obey all the known constraints on movement in the language under discussion, while AGREE need not (though certain minimality effects are built into it). 36 Thus. the following claim by Hornstein is false: "As virtually every current minimalist theory includes both the Copy Theory of Movement and the option of pronouncing lower copies, AGREE accounts cannot empirically cover cases that movement accounts cannot ... Thus, as a point of logic, the empirical coverage of AGREE-based accounts cannot be superior to Move-based ones" (p. 149). On the following page the audacity of this program is made more explicit: "Every AGREE-based analysis can be mapped into one involving movement. Here's the recipe: in cases of I[nverse]-agreement assume that the 'goal' has moved to a specifier of the 'probe' in overt syntax and that the lower copy of the goal is pronounced (rather than the higher copy in the specifier position of the Probe)" [emphasis added] (p. 150).

³⁵ Superficially one might wonder why there is no "defective intervention" effect in these examples: the DAT subject might be expected to block AGREE between V+T and the NOM object. In reality, Icelandic bað is a "topic" (Spec-CP) expletive, not a subject expletive (Vikner 1995), these are V2 structures, and the relevant AGREE relationship was established prior to T-to-C. Icelandic's two subject positions are Spec-CP and Spec-TP. The problem for Hornstein remains the same.

³⁶ In fact, Bošković (2007) argues that AGREE, in contrast to Move, is not subject to the Phase-Impenetrability Condition at all.

6 Concluding remarks

6.1 Variation

This paper has focused on cases where AGREE seems to be required in order to explain the presence of long-distance agreement. Even if the line of argumentation embarked upon here continues to hold up and AGREE turns out to be the best—even only—way to capture the phenomena discussed, more will need to be said in order to deal with cross-linguistic and cross-dialectal variation. One dimension of variation mentioned in §3.5 involved the possibly different status of words superficially corresponding to *there* in, for example, Irish versus English. A complete theory of how natural language agreement works will also need to explain why, alongside the varieties of English described above, there are English dialects all over the world that have invariant singular agreement with *there* across the board (Rupp 2005), in contrast to the pattern in (2), e.g.,

(41) There was pits everywhere.

West Midlands English

Similarly, variation with regard to the Icelandic object agreement facts was alluded to in note 5. And in Faroese, which shares a great many properties with Icelandic, the predicates that take NOM objects in Icelandic often take ACC objects, and these objects never trigger agreement (Thráinsson et al. 2004), nor does the DAT subject, as (42)b shows:

- (42) a. Honum nýtist fleiri bókahillar heima hjá sær. Faroese him.DAT needs.3SG more bookshelves.ACC.PL at.home with self 'He needs more bookshelves in his home.' (Barnes 1986: 19)
 - b. Mær dámar børn.

 I.DAT likes.3SG children.ACC

 'I like children.'

(Höskuldur Thráinsson p.c.)

On many people's assumptions, case is a reflex of agreement; if correct, the reason that these objects are not NOM is because they are not agreed with, rather than vice versa.³⁷ Thus, it

³⁷ Icelandic speakers show no propensity to turn NOM objects into ACC ones even when the verb fails to agree with the object. This suggests that there must be a difference between a language making a parametric choice to exclude the possibility of agreement with the object versus a speaker of a language that allows such agreement failing to exercise that option. (Perhaps, as suggested below, we need to entertain the possibility that syntactically valued features need not always be morphophonologically expressed.)

appears that just because a syntactic configuration arises in which AGREE could in principle apply, that does not necessarily mean it will apply. (One tack that has been suggested for dealing with such variation is to parameterize the direction of the probe-goal relation, as alluded to in §1.2.)

One subcase of this problem was remarked upon by Chomsky himself soon after the introduction of AGREE: as Kayne (1985, 1989) had noted long before with regard to Romance participle agreement, it is not uncommon to find that a predicate realizes morphophonological agreement with its argument only if that argument has (overtly) moved to a position higher than the predicate. Such observations were among the motivations for claiming that the Spec-Head configuration was required for establishing an agreement relation. Kayne showed that in French, perfect participles never agree with following direct objects; rather, these objects only (can) trigger agreement when they have moved leftward across the participle (in his analysis, to/through the specifier position of an AGR projection that contains the participle): (43)a shows lack of agreement with an in situ object, while (43)b shows agreement when the object is cliticized and (44) when it is questioned or relativized. (45)a shows agreement when the underlying object is passivized and moved to subject position; (45)b shows an impersonal passive where agreement is blocked if the underlying object remains in situ and subject position is occupied by an expletive (which in French, perhaps importantly different from English there, is a pronoun fully specified for phi-features). Finally, (46) shows agreement in an ECM small clause of which the underlying object has become the subject.

(43) a. Ils ont repeint/*repeinte la table. they have repainted.M/*F the.F table 'They have repainted the table.' French

- b. Ils l'ont repeinte. they it.F=have repainted.F 'They have repainted it.
- (44) a. Je sais combien de tables ils ont repeintes.

 I know how.many of tables.F.PL they have repainted.F.PL

 'I know how many tables they have repainted.'
 - b. les chaises que Paul a repeintes the chairs. F.PL that Paul has repainted. F.PL 'the chairs that Paul has repainted'

- (45) a. Cette table a été repeinte par Marie. this table.F has been repainted.F by Marie 'This table has been repainted by Marie.'
 - b. Il a été repeint(*es) quelques tables.

 it.M.SG has been repainted.M.SG/*F.PL some tables.F.PL

 'There have been some tables repainted.'
- (46) Je croyais ces tables repeintes. *I believed these tables.F.PL repainted.F.PL*'I believed these tables to (have) be(en) repainted.'

The situation in Italian is somewhat different: like in French, the in situ direct object does not trigger agreement (47) while cliticization thereof does (48), but *wh*-movement thereof does not (49):

- (47) Paolo ha visto/*viste le ragazze.

 P has seen.M.SG/*F.PL the girls

 'Paulo has seen the girls.'
- (48) Paolo le ha viste.

 P them.F.PL has seen.F.PL

 'Paulo has seen them.'
- (49) le ragazze che Paolo ha visto/*viste the girls that P has seen.M.SG/*F.PL 'the girls that Paulo has seen'

Furthermore, unlike in French, there is at least one counterexample to the generalization that participles do not agree with objects that follow them: this occurs in an absolute construction described by Belletti (1981):³⁸

(50) Conosciuta Maria, Gianni è cambiato del tutto. *met.F.SG M.F.SG G is changed completely* 'Having met Maria, Gianni has completely changed.'

Alluding primarily to the French pattern, Chomsky (2001: note 39) remarks, "Among unresolved questions are the reasons for Romance-style participial agreement contingent on

³⁸ Of course, one might hope to determine whether the object ever raised across the participle during the derivation of (50).

movement, as discussed in Kayne 1989 and subsequent work. It is simple enough to state the parameter ('Spell out φ -features of Prt-goal only if probe induces Move'), but there should be a more principled account, perhaps related to the manifestation-move correlations discussed by Guasti and Rizzi ([2002])" (p. 46). Of course, the Italian facts show that it would not suffice even descriptively to state a language-wide parameter of the sort suggested by Chomsky, however stipulative that might be—different constructions must be independently parameterizable. Moreover, while stating the parameter might be simple, implementing it would appear to require that some diacritic be attached to the phi-features of the participle indicating that they are not to be spelled out, and then some additional mechanism must be posited such that if a higher probe with an EPP feature subsequently AGREEs with the same goal that the participle previously AGREEd with, the diacritic will be erased. (No doubt more modern technologies could offer alternative implementations.)

The facts mentioned in this subsection are of course just the tip of a vast descriptive iceberg. While there are broad tendencies both within and across languages for DPs to be more likely to trigger agreement and to trigger richer agreement when they are higher, exceptionless generalizations in this domain seem hard to come by. There is no doubt that Chomsky's version of AGREE faces serious empirical challenges within the narrow domain of predicate-argument agreement, let alone when it comes to the much broader range of phenomena that researchers have suggested it could/should be applied to.

6.2 The bottom line

Nonetheless, I believe that the serious, arguably fatal problems identified in the particular analyses of long-distance agreement in English existentials and Icelandic NOM object constructions scrutinized above cannot be easily dismissed. The question I take to be open is whether there are any minimalist analyses of these phenomena that do not rely on AGREE that fare better when examined in similar detail. Until such analyses are promulgated, AGREE must remain as part of the minimalist arsenal.

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