Fanselow on Minimality and Case Agreement

Gereon Müller*

Abstract

The concept of feature-based minimality was first discovered in Fanselow (1991), which develops a comprehensive approach to syntax based on minimalist principles before these were formulated by Chomsky. Against this background, the present paper highlights Gisbert Fanselow's discussion of case agreement constructions, and addresses their relevance for cyclic Agree, and for distinguishing between syntactic and morphological case.

1. A Minimalist Programme for Syntactic Theory

Arguments based on the poverty of the stimulus give rise to what has become known as Plato's problem (cf. Chomsky (1979)): How can we know so much, given that we have so little evidence? Plato's problem is often taken to show that the building blocks of grammar (i.e., rules, constraints, principles, etc.) cannot be learned in the course of language acquisition. A classical instance of this dilemma is subject-auxiliary inversion in English: It has been argued that the most important restriction on this construction – viz., that only the structurally highest auxiliary can be fronted – cannot be learned from the data because there is not a sufficient amount of positive empirical evidence available to the child. If some building block can be shown to be present in a grammatical system – like, arguably, the minimality principle underlying the highest auxiliary restriction – but can also be shown not to have been learned, then the classical Chomskyan conclusion is that it must be *innate*.

However, this reasoning does not per se imply an argument for a *language-specific* status of grammatical building blocks – in principle, a building block of grammar could be innate without qualifying as language-specific. For concreteness, Chomsky's traditional argument for the innateness of grammatical building blocks relies on three tenets: [A] The ability to acquire language is innate. [B] Grammatical building blocks cannot be functionally

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motivated; they need to be abstract formal principles. [C] The formal principles underlying grammar are strictly grammar-internal; they cannot be justified outside of grammar. Standardly, classical, pre-minimalist Chomskyan syntax was called into question based on denying either [A] or [B]. In contrast, Fanselow (1991) calls into question [C], and replaces it with a version of the Strong Minimalist Thesis, years before Chomsky actually proposes this thesis as an integral part of his minimalist program. (1) is the Strong Minimalist Thesis as it can be found in work like Chomsky (2001; 2005; 2015) and Berwick and Chomsky (2016); and (2) is the closely related version in Fanselow (1991).

(1) *Strong Minimalist Thesis* (Chomsky):
   a. Grammatical building blocks are of type (i) or (ii).
      (i) principles of efficient computation (local economy constraints)
      (ii) interface conditions (constraints imposed by phonological and semantic interfaces)

(2) *Strong Minimalist Thesis* (Fanselow):
   Grammatical building blocks must be justified grammar-externally.

With respect to (2), Fanselow (1991) focusses on two central grammatical building blocks for which he assumes a grammar-external motivation. The first such building block is the constraint Full Specification in (3).

(3) *Full Specification* ('Vollständige Spezifikation', VS):
   A phrase must be specified for all features that are associated with it.

This is essentially like postulating probes in need of valuation by a goal via Agree (cf. Chomsky (2001)). As observed by Fanselow (1991, 5), "(3) is not a principle inherently related to grammar since it only demands that representations (of essentially any kind) must be complete".[1] Satisfaction of Full Specification is subject to Feature-based Relativized Minimality (see below).

The second important building block for which a language-independent motivation is postulated in Fanselow (1991, 272) is the Proper Inclusion Principle in (4). This building block presupposes a competition of grammatical

[1] Strictly speaking, this reasoning presupposes that the constraint is really about "complex objects that are complete" rather than "phrases".

forms. In its most general form, it states that if some operation can in principle take place either in a small domain or in a larger, more comprehensive domain, it must apply in the former, more inclusive domain. More formally, the Proper Inclusion Principle is defined as in (4).

(4) *Proper Inclusion Principle* (PIP):
In the structure Σ, $\Sigma = [_{\phi}$ .... α_i ... β_i ...], referential index (rI) derivation cannot be applied to δ with respect to the pair $<\alpha,\beta>$ if (a) and (b) hold (where all grammatical constraints are respected):
   a. rI derivation on ψ is possible with respect to $<\alpha,\beta>$.
   b. The set of environments where rI derivation on δ is possible is a proper superset of the environments that permit rI derivation on ψ.

Here, the principle is restricted to syntactic operations that involve the derivation of a referential index (rI) on some category δ (where δ = {anaphoric, person, number, gender, case, ±phonetic matrix, etc.}) from some other category that bears it inherently. But again, the core of the constraint is just about selecting the narrowest possible operation in a given structure, and thus as such independent of language. Among many other things, (4) derives the blocking of non-anaphoric pronouns by anaphoric pronouns where the latter are licensed. And of course, the rI derivation operations postulated here are direct precursors of probe/goal-based Agree operations as they have later been suggested for empirical phenomena involving binding indices, like reflexive binding (see Reuland (2001), Fischer (2004), Hicks (2009), Murugesan (2022)). As Fanselow notes, the Proper Inclusion Principle is conceptually related to similar principles of optimization, like the Subset Principle, the Elsewhere Principle, the Blocking Principle, Pānini's Principle, etc.; cf. Reinhart (1983), Di Sciullo and Williams (1987), Burzio (1991), Richards (1997), Williams (1997), and Reuland (2011).

2. The Minimal Link Condition

As a third non-language-specific grammatical building block, Fanselow (1990; 1991) discovers *feature-based minimality*, which is subsequently introduced in Ferguson (1993), Ferguson and Groat (1994) and in Chomsky (1995; 2001),

and a version of which is standardly assumed as the Minimal Link Condition nowadays; see (5).[2]

(5) *Minimal Link Condition* (Chomsky (1995; 2001)):
In a structure $\alpha_{[F']}$... [... $\delta_{[F]}$ ... $\beta_{[F]}$ ...] ..., a syntactic operation involving [F′] and [F] cannot affect [F] on β if δ is closer to α than β.

For syntactic representations, closeness can be understood as follows: β is closer to α than γ if α c-commands or dominates β and β c-commands or dominates γ (see, e.g., Fitzpatrick (2002)). The earlier version of the Minimal Link Condition proposed in Fanselow (1991, 143) is given in (6).[3]

(6) *Feature-based Relativized Minimality*:
In [... α ... [$_\Sigma$ ... δ ... β ...]], α cannot F-govern β if (a)–(c) hold:
   a. Σ excludes α and includes β.
   b. δ is the head closest to β that is a potential F-governor.
   c. Σ is the maximal projection of the highest head that is government-subjacent to δ.

Whereas (6-ab) express the feature-based minimality requirement via the concept of f(eature)-government, (6-c) incorporates the well-known observation that locality domains can be extended by head movement (see Baker (1988), den Dikken (2007)); cf. the concept of government-subjacency in (7).

(7) *Government-Subjacency*:
   a. A head assigning F is government-subjacent to itself with respect to F.
   b. Suppose that α, β, and δ are heads that potentially govern F, and that

[2]Relativized Minimality as developed by Rizzi (1990) is a very different kind of constraint empirically and also conceptually (see Müller (2011)); it is originally centered around *positions* rather than *features*, even though features were eventually introduced into it (see Starke (2001) and Rizzi (2004)). That said, there is a possible qualification to the claim that Fanselow (1991) is the first published source of feature-based minimality: Versions of the Superiority Condition and the A-over-A Principle in Chomsky (1973) can arguably be interpreted as precursors of the Minimal Link Condition; cf. Müller (2021).

[3]It seems that Rizzi and Fanselow had independently come up with the notion of "relativized minimality" for the two related, but distinct concepts in the late 1980s (see the previous footnote); for better or worse, the term is maintained in Fanselow (1991) (even though a pre-publication version of Rizzi (1990) is in fact discussed here).

β is government-subjacent to δ. Then, α is government-subjacent to δ iff (i)–(iii) hold:

(i) α and β govern the feature F (potentially) in the same way.
(ii) α m-commands δ.
(iii) There is no head γ that m-commands β and is m-commanded by α, and that assigns F distinctly from δ.

Abstracting away from government-subjacency, there is one interesting difference between Chomsky's Minimal Link Condition on the one hand and Feature-Based Relativized Minimality (and the related concept in Ferguson (1993)) on the other: The item δ acting as a potential intervener for the dependency involving α and β that needs to obey minimality is a dependent item in the first case (in (5)), and an assigner/governor in the the latter (in (6)).

3. Case Agreement

Against the backdrop of a model of syntax encompassing these constraints, Fanselow (1991) introduces the phenomenon of *case agreement* into the contemporary syntactic discourse. Here a given DP derives its case from a c-commanding DP that it is in a predication relation with. Case agreement is subject to *minimality*. Like standard instances of case assignment (where a DP gets its case probe feature valued by a higher category like T, v, or V that bears a matching goal case information), the operation is arguably best viewed as an instance of *upward Agree* (see, e.g., Baker (2008), Bjorkman (2011), Zeijlstra (2012) and Bjorkman and Zeijlstra (2014), Himmelreich (2017), Murphy and Puškar (2018), Bárány and van der Wal (2021), and Schwarzer (2021)).

Examples illustrating case agreement in German are given in (8). Here, DP_2 derives its case feature from the c-commanding DP_1 (which, in turn, got it as lexical accusative case from V in (8-a), as structural accusative case from v in (8-b), as nominative case from T in the copula construction in (8-c), and as accusative case from matrix v in the raising to object construction in (8-d)); DP_1 and DP_2 are in a predication relation.

(8) a. Sie nennt [$_{DP_1}$ ihn] [$_{DP_2}$ einen Idioten]
she calls him$_{acc}$ an idiot$_{acc}$

b. dass die Professorin [$_{DP_1}$ die Studenten] [$_{DP_2}$ einen nach dem
that the professor the students$_{acc}$ one$_{acc}$ after the
anderen] prüfen muss
other examine must

c. dass [$_{DP_1}$ er] [$_{DP_2}$ ein Esel] wird
that he$_{nom}$ a donkey$_{nom}$ becomes

d. dass sie [$_{DP_1}$ ihn] [$_{DP_2}$ einen Esel] werden lässt
that she him$_{acc}$ a donkey$_{acc}$ become lets

Note that the case of the lower DP cannot be assigned by the matrix predicate; if that were the case, it would be expected to persist under passivization, as in (9-ab), where there is no predicative relation between the two DPs, and DP_2 separately gets lexical case from V.

(9) a. dass sie [$_{DP_1}$ die Kinder] [$_{DP_2}$ den Text] abhört
that she the children$_{acc}$ the text$_{acc}$ tests on

b. dass [$_{DP_1}$ die Kinder] [$_{DP_2}$ den Text] / [$_{DP_2}$ *der Text]
that the children$_{nom}$ the text$_{acc}$ the text$_{nom}$
abgehört werden
tested on are

As shown in (10-ab), no such effect shows up with case agreement constructions under passivization: DP_1 gets nominative case from T, and DP_2 is also marked nominative (rather than accusative).[4]

(10) a. Wieder wird [$_{DP_1}$ er] [$_{DP_2}$ ein Idiot] / [$_{DP_2}$ *einen Idioten]
again is he$_{nom}$ an idiot$_{nom}$ an idiot$_{acc}$
genannt
called

b. dass [$_{DP_1}$ die Studenten] [$_{DP_2}$ einer nach dem anderen] / [$_{DP_2}$
that the students$_{nom}$ one$_{nom}$ after the other
*einen nach dem anderen] geprüft werden
one$_{acc}$ after the other examined are

[4] Another alternative might be to assume that there is only one case feature on the case-assigning head, which can be accessed twice, by both DP_1 and DP_2. However, on the one hand this would be in violation of strict locality (with DP_2 being far away from the case-assigning head); and on the other hand, there is evidence that a given case-assigning feature of a head can only be accessed once; cf., e.g., the Case Uniqueness constraint in Müller (2024, Ch. 1).

From a current, Agree-based perspective, Fanselow's analysis of case agreement can be depicted schematically as in (11). Initially, there are two case probes on the two DPs that need to be valued by an Agree operation (see (11-a)).[5] First, DP_1 values its case probe by undergoing upward Agree with the goal feature on the case-assigning head X; as a consequence, the valued probe feature on DP_1 now acquires goal status (see (11-b)). Finally (see (11-c)), DP_2 undergoes Agree with DP_1, thereby valuing its case feature.[6]

(11) a. $[_{XP} \dots [_{\psi} \dots DP_{1[*case:\square*]} \dots [_{\gamma} \dots DP_{2[*case:\square*]} \dots] \dots] \dots X_{[case:\omega]}]$
b. $[_{XP} \dots [_{\psi} \dots DP_{1[case:\omega]} \dots [_{\gamma} \dots DP_{2[*case:\square*]} \dots] \dots] \dots X_{[case:\omega]}]$
c. $[_{XP} \dots [_{\psi} \dots DP_{1[case:\omega]} \dots [_{\gamma} \dots DP_{2[case:\omega]} \dots] \dots] \dots X_{[case:\omega]}]$

From a derivational perspective in an incremental, bottom-up approach to structure generation, as it is standardly assumed in minimalist syntax, the derivation in (11) qualifies as *counter-cyclic*. The reason is that Agree in (11-b) affects the XP domain, whereas the subsequent step in (11-c) exclusively affects ψ, which is a proper subdomain of XP; this is at variance with concepts of strict cyclicity. However, this kind of problem has independently been shown to arise in the same way with DP-internal nominal concord (cf. Danon (2011)), where nominal items (A, N) within a complex DP can derive their case feature from D only after a matrix case assigner has provided it for DP. Hence, similar solutions to the case/cyclicity dilemma with concord may be available for the case/cyclicity dilemma with case agreement (cf. Müller (2024)).[7]

This analysis makes a number of interesting predictions. First, case agreement into adjuncts should be possible, assuming that there is no locality constraint that would classify non-complements as barriers. This prediction is borne out for German. In (12-a), DP_2 can derive accusative case from DP_1 even though it is part of a PP headed by *als* ('as'); and case agreement takes place in a similar way across *als* with nominative case in the passive construction in (12-b), and with dative case in the double object construction in (12-c). Note that this presupposes that the P item *als* ('as') does not qualify as

[5] A few remarks on the notation used here: □ signals an unvalued feature; * * indicates probe status of a feature; and ω stands for some feature value copied by Agree.

[6] As with the Agree-based approaches to binding (see above), this presupposes that XPs can act as probes. See, e.g., Clem (2022).

[7] That said, it can be noted that Fanselow's (1991) original approach does not face the particular problem at hand since it is inherently representational in nature, not derivational.

a potential case governor, and therefore does not intervene for case agreement (cf. (6)) – and indeed, *als* can never assign case in German.

(12) a. dass wir [$_{DP_1}$ ihn] [$_{PP}$ als [$_{DP_2}$ unseren Freund]] ansehen
that we him$_{acc}$ as our friend$_{acc}$ consider

b. dass [$_{DP_1}$ er] [$_{PP}$ als [$_{DP_2}$ unser Freund]] angesehen wird
that he$_{nom}$ as our friend$_{nom}$ considered is

c. dass wir [$_{DP_1}$ ihm] [$_{PP}$ als [$_{DP_2}$ dem Retter des
that we him$_{dat}$ as the saviour$_{dat}$ of the
Vaterlandes]] die Rente nicht verweigern
fatherland the pension not refuse

A second, related prediction is that if the intervening P head is a potential case assigner, case agreement is blocked. This is corroborated by the examples in (13). The P item *für* ('for'), unlike *als* ('as'), assigns accusative case; consequently, (13-a) is not an instance of case agreement, despite accusative showing up on both DP_1 and DP_2. Accordingly, under passivization, accusative case is maintained on DP_2 in (13-b) even though v cannot assign case here, and DP_1 gets nominative case from T.

(13) a. Ich halte [$_{DP_1}$ ihn] [$_{PP}$ für [$_{DP_2}$ den größten Linguisten
I consider him$_{acc}$ for the greatest lingust$_{acc}$
aller Zeiten]]
of all times

b. Darum möchte [$_{DP_1}$ er] [$_{PP}$ für [$_{DP_2}$ *der größte
therefore wants he$_{nom}$ for the greatest
Linguist aller Zeiten]] / [$_{PP}$ für [$_{DP_2}$ den größten Linguisten
linguist$_{nom}$ of all times for the greatest linguist$_{acc}$
aller Zeiten]] gehalten werden
of all times considered be

A third prediction of the analysis is that whereas case agreement *within* a DP is possible, case agreement *into* a DP is not because D will act as an intervener in the sense of the minimality constraint in (6). Again, this is correct, as shown by the German data in (14-a) (case agreement within DP_0, with DP_2 deriving genitive from DP_1) vs. (14-b) (blocked case agreement of DP_2 with DP_1 across DP_0).

(14) a. (i) [$_{DP_0}$ die Ehrung [$_{DP_1}$ des Kanzlers] [$_{PP}$ als [$_{DP_2}$
the distinction the chancellor$_{gen}$ as
eines großen Politikers]]]
a great politician$_{gen}$

(ii) [$_{DP_0}$ die Ermordung [$_{DP_1}$ der Männer] [$_{DP_1}$?eines nach
the killing the men$_{gen}$ one$_{gen}$ after
dem anderen] / [$_{DP_2}$ *einer nach dem anderen]]
the other one$_{nom}$ after the other

b. (i) *dass [$_{DP_1}$ den Kanzler] [$_{DP_0}$ die Ehrung [$_{PP}$ als
that the chancelor$_{acc}$ the distinction$_{nom}$ as
[$_{DP_2}$ einen großen Politiker]]] überrascht
a great politician$_{acc}$ surprises

(ii) *dass wir [$_{DP_1}$ der Rektorin] [$_{DP_0}$ eine Auszeichnung [$_{PP}$
that we the rector$_{dat}$ a distinction$_{acc}$
als [$_{DP_2}$ bester Vermittlerin]]] verleihen
as best intermediary$_{dat}$ give

A further consequence of the analysis concerns reflexive pronouns (see Fanselow (1991) and Alexiadou and Schäfer (2014)): Since it can transfer case to a lower DP argument, it would seem that the German reflexive pronoun *sich* ('self') must be able to bear case itself. In the examples involving case agreement in (15-ab), accusative case is transferred.

(15) a. dass Hans [$_{DP_1}$ sich] nicht [$_{PP}$ als [$_{DP_2}$ einen Idioten]]
that Hans REFL$_{acc}$ not as an idiot$_{acc}$
bezeichnet
calls

b. ?dass die Leute [$_{DP_1}$ sich] [$_{DP_2}$ einen nach dem anderen]
that the people REFL$_{acc}$ one$_{acc}$ after the other
einladen
invite

This would a priori seem to be incompatible with, and thus potentially argue against, the hypothesis that *sich* does not have to have case in passives (see Müller and Sternefeld (1994)), which is motivated by the fact that it appears to be immune against accusative case absorption under passivization; see (16-a). Indeed, case agreement is apparently possible in this environment, with DP_2

showing up with nominative; see (16-bc). The analytical options that suggest themselves are that object *sich* does in fact bear nominative case in German passives (which is then transferred from the reflexive DP_1 to DP_2), or that *sich* is caseless, and DP_2 gets default nominative.

(16) a. dass [$_{DP_1}$ sich] hier nicht angespuckt wird
that REFL here not spat at is

b. dass [$_{DP_1}$ sich] hier nicht [$_{PP}$ als [$_{DP_2}$ ein Idiot]] bezeichnet wird
that REFL here not as an idiot$_{nom}$ called is

c. dass [$_{DP_1}$ sich] jetzt bitte [$_{DP_2}$ einer nach dem anderen] angestellt wird
that REFL now please one$_{nom}$ after the other queued up is

Another consequence of Fanselow's (1991) approach has been pointed out in Pitteroff (2014): Case agreement can, given additional assumptions, act as a diagnostic for the presence of an internal argument. (17-a) is a so-called *lassen* passive construction: The matrix verb *lassen* ('let', with a causative or permissive interpretation) embeds a clausal structure in which passivization has applied (without a morphological reflex), thereby demoting the external argument which would otherwise have been case-marked by matrix v associated with *lassen* to an optional *by*-phrase. Here, an embedded direct object DP_1 *sich* (which is bound by the matrix subject) receives accusative case from matrix v, and can transfer the case to a lower second DP_2 of the infinitive. In contrast, Pitteroff observes that case agreement is not easily availble in the *lassen* middle construction in (17-b) (altough the data might not be crystal-clear for all speakers), which can then be taken to imply that *sich* does not function as a DP argument here that can transfer a case feature.

(17) a. dass er [$_{DP_1}$ sich] (von ihr) [$_{DP_2}$ einen Idioten] / [$_{DP}$ *ein Idiot] nennen lässt
that he REFL$_{acc}$ (by her) an idiot$_{acc}$ an idiot$_{nom}$ call lets

b. dass der Vorschlag [$_{DP_1}$ sich] leicht [$_{DP_2}$ *einen Angriff
that the proposal$_{nom}$ REFL easily an attack$_{acc}$
auf die Privatsphäre] nennen lässt
on privacy call lets

4. Cyclic Agree

To handle istances of seemingly non-local agreement in the world's languages that seem to traverse independently motivated local domains, *cyclic Agree* has been proposed as an analytical option (cf. Legate (2005), Keine (2008), Preminger (2009), Lahne (2012), Müller (2024), among many others). On this view, an unvalued probe β that is too far away from a goal α to undergo Agree with α directly, undergoes local Agree with a mediating, locally accessible feature δ that acts as a goal for β, and as a probe for α. The operation can be iterated, so that cyclic Agree becomes potentially unbounded, and can in principle account for all known instances of long-distance agreement.

As we have seen, Fanselow's (1991) analysis of case agreement is essentially already an instance of cyclic Agree: DP_2 derives its case feature (β) from DP_1 (δ), which in turn derives it from the case-assigning head X (α; see (11)). However, in these cases, DP_1, the intermediary, clearly shows the presence of the case feature that DP_2 eventually (indirectly) derives from X (unless, that is, it fails to do so for purely morphological reasons, as with syncretism in non-masculine declensions of German, or as with *sich*, which does not bear overt case morphology). Crucially, many of the constructions for which cyclic Agree has been invoked are not like this. In these constructions, some β needs to derive its value from some non-local α across an intervening δ that does *not* overtly signal the presence of this value. Now, interestingly, Fanselow (1991) may also be the first work to postulate *cyclic Agree* of this less obvious kind in order to account for apparent cases of long-distance agreement.

To see what the relevant construction looks like, consider first the German example in (18-ab), which shows that long-distance case agreement into control infinitives is blocked in this language: DP_3 cannot derive accusative from DP_1 because there is an intervening case governor T (assigning, by assumption, nominative to the embedded PRO subject DP_2, which may thus transfer this latter case to DP_3).

(18) Wir baten [$_{DP_1}$ die Männer$_1$] [$_{TP}$ [$_{DP_2}$ PRO$_{1[case:nom]}$] [$_{DP_3}$ *einen / one$_{acc}$
einer nach dem anderen] durch die Sperre zu gehen T$_{[case:nom]}$]
one$_{nom}$ after the other through the gate to go
we asked the men$_{acc}$

However, the kind of non-local case agreement that is blocked in German is an option in Icelandic; both accusative and nominative are possible on the embedded adjective in (19).

(19) Ég bað [$_{DP_1}$ hann] að [$_{DP_2}$ PRO] vera [$_{AP_3}$ góðan / góður]
I asked him$_{acc}$ COMP be good$_{acc}$ good$_{nom}$

Fanselow accounts for this by assuming that Icelandic T tolerates the simultaneous presence of two case features, whereas German T does not. His analysis of the occurrence of accusative on the embedded adjective in (19) consists of four separate steps: First, the matrix accusative DP_1 gets case from the verb (or v); second, T gets accusative case from DP_1; third, DP_2 (PRO) gets accusative case from embedded T (which gets added to its own nominative case); and fourth, the predicative AP_3 gets accusative case from PRO.

More generally, then, this suggests that Fanselow (1991) should be considered as a (or, perhaps, the) locus classicus for cyclic Agree.

5. Case Exponent Variation: Syntax or Morphology?

Case agreement constructions can be used as a further test to determine whether some instance of *case exponent variation* is syntactic (such that two different cases are present) or morphological (such that there is only one case, realized by two allomorphs).

In addition to tests that revolve around the selective suppression of syntactic cases in certain environments (see, e.g., Legate (2008) on infinitival clauses in Warlpiri), a number of tests have been devised that rely on two nominal categories being part of one and the same DP (given that a DP can only have one case). Relevant constructions involve *DP coordination* (where two coordinated DPs must have the same syntactic case assigned to their mother DP; see, e.g., Kalin and Weisser (2019) on Hebrew), and *DP-internal concord* (where determiners, modifying adjectives, and the head noun within a given DP must have the same syntactic case; see, e.g., Legate (2008) on Djapu, Müller and Thomas (2017) on Kham and Dyirbal). These tests typically support the morphological approach (e.g., a DP-internal zero exponent can be

shown to be a realization of a non-absolutive/non-nominative case C because other material in the same DP signals the presence of C).[8]

Given Fanselow's (1991) approach, case agreement constructions, where DP_1 and DP_2 are independent categories, and DP_2 (or some other nominal category) acts as a predicate-like category deriving a syntactic case feature from the subject-like DP_1, can and should be added to these kinds of tests discriminating between morphological and syntactic case.[9]

To end this paper, let us look at four potential case studies that invoke case agreement in order to determine whether a given case marking phenomenon is syntactic or morphological in nature.

First, in Russian, masculine nouns of the first declension and agreeing determiners and adjectives have what looks like a *genitive* exponent in *animate accusative* environments (see DP_1 in (20-a)), and what looks like a *nominative* exponent in *inanimate accusative* environments (see DP_1 in (20-b)). It is not entirely straightforward to account for this by morphological underspecification alone (with nom/acc and acc/gen both emerging as natural classes). However, the case agreement test shows clearly that the phenomenon is purely morphological: In both (20-a) and (20-b), accusative case must be transferred in the syntax to the lower DP_2 participating in the case agreement construction (which is unambiguously marked as accusative because the noun belongs to the second declension).[10]

(20) a. Ja znaju [$_{DP_1}$ ėt-*ogo* poėt-*a*] [$_{PP}$ kak [$_{DP_2}$ mužčin-*u*] / [$_{DP}$
I know this$_{acc}$ poet$_{acc}$ as man$_{acc}$
*mužčin-*y*]]
man$_{gen}$

b. Ja znaju [$_{DP_1}$ ėt-*ot* gorod-*Ø*] [$_{PP}$ kak [$_{DP_2}$ derevn-*ju*] / [$_{DP}$
I know this$_{acc}$ town$_{acc}$ as village$_{acc}$
*derevn-*ja*]]
village$_{nom}$

A second case study employing case agreement can be found in Kushnir (2019).

[8]However, also cf. Deal (2014) for the opposite conclusion, based on conflicting evidence from Nez Perce (based on DP-internal modifiers and coordination).

[9]In addition, see Morgenroth and Salzmann (2013) on topic-chaining in Dyirbal, where the two DPs are also independent from one another but must bear the same syntactic case – albeit not as a consequence of ultimately sharing one and the same case assigner.

[10]I am grateful to Masha Privizentseva for the data.

(21-a) illustrates case agreement with *kā* in Latvian. Latvian prepositions assign either *accusative* or *genitive*, but in plural environments the complement always shows up with what looks like a *dative* exponent (this is indicated by square brackets in the glosses); see (21-b). Again, evidence from case agreement shows that this phenomenon is morphological rather than syntactic.

(21) a. Dievin-u [$_{DP_1}$ Dienvid-francij-*u*] kā [$_{DP_2}$ lielisk-*u* viet-*u*
adore-1sg south-france$_{acc.sg}$ as great$_{acc.sg}$ place$_{acc.sg}$
atvaļinājum-am]
vacation$_{dat.sg}$

b. Iemācījos to no [$_{DP_1}$ man-*as* komand-*as*] kā [$_{DP_2}$
learned this from my$_{gen.sg}$ team$_{gen.sg}$ as
vienīg-*ajiem* cilvēk-*iem* kur-i mani
only$_{gen.pl}$-[dat.pl] human$_{gen.pl}$-[dat.pl] REL$_{nom.pl}$ me
saprot]
understand

The third example is not actually about morphological exponents of case, but about (missing) morphological exponents of gender. Gender is never morphologically marked in the plural in German. Case agreement as in (22-a) (with a masculine noun in DP_1 and a matching masculine determiner in DP_2) and in (22-b) (with a feminine noun in DP_1 and a matching feminine determiner in DP_2) shows that this is a purely morphological phenomenon; syntactically, gender information is present on the plural noun, and is passed on to DP_2 in tandem with the case feature.

(22) a. Kirke hat [$_{DP_1}$ die Gefährten] [$_{DP_2}$ einen / *eine
Circe has the fellows$_{masc.acc}$ one$_{masc.acc}$ one$_{fem.acc}$
[$_{PP}$ nach dem anderen]] in Schweine verwandelt
after the$_{masc.dat}$ other$_{masc.dat}$ into pigs turned

b. Odysseus hat [$_{DP_1}$ die Sirenen] [$_{DP_2}$ eine / *einen
Ulysses has the sirens$_{fem.acc}$ one$_{fem.acc}$ one$_{masc.acc}$
[$_{PP}$ nach der anderen]] angehört
after the$_{fem.dat}$ other$_{fem.dat}$ listened to

A fourth and final case to be mentioned here also comes from German. Nominative/accusative syncretism with neuters and dative/genitive syncretism with feminines shows that exponents in the pronominal declension of German

(i.e., with determiner expressions like *dies* ('this')) can be underspecified (as [–obl(ique)] and [+obl(ique)], respectively, where [–obl,+gov(erned)] and [+obl,+gov(erned)] are the full specifications for accusative and dative; see Bierwisch (1967)). Thus, if one only looks at the forms of the DP_1 categories in (23-ab), the underspecification with respect to case features that is required to account for the syncretic forms *dies-es* (nominative/accusative) and *dies-er* (dative/genitive) could in principle either be morphological (with the syntax providing the full case specifications) or syntactic; the latter approach would eventually amount to claiming that verbs can govern underspecified cases.[11] However, case agreement shows that the phenomenon must be morphological: Verbs cannot govern underspecified cases on DP_1 because a complete case specification can be transferred from DP_1 to a lower DP_2 in (23-ab), which may realize it faithfully (i.e., by exponents that are not underspecified with respect to case information).[12]

(23) a. Wir betrachten [$_{DP_1}$ dies-*es* Buch] als [$_{DP_2}$ ein-*en*
we consider this$_{acc}$-[–obl] book as a-[–obl,+gov]
Erfolg]
success$_{acc}$

b. Man dankte [$_{DP_1}$ dies-*er* Frau] als [$_{DP_2}$ ein-*em*
one thanked this$_{dat}$-[+obl] woman as a-[+obl,+gov]
gut-*en* Mensch-*en*]
good human being$_{dat}$

6. Conclusion

To sum up, I have focussed on five observations emerging from the investigation of case agreement in Fanselow (1991). First, this work postulates a version of the Strong Minimalist Thesis years before it was actually proposed by Chomsky. Second, feature-based minimality is first discovered here. Third, case agreement constructions are introduced into contemporary syntactic theory. Fourth, long-distance agreement is for the first time accounted for

[11] This is the kind of approach that suggests itself if one assumes that there is no separate morphological component of grammar; see, e.g, Manzini and Savoia (2010) (but also see Collins and Kayne (2023) for an alternative approach to syncretism in a model without a morphological component, which relies on the postulation of various kinds of empty categories).

[12] Also note that unlike the *ein- nach d- ander-* construction, the *als* construction (see (12)) permits gender mismatches; this fact is essential to make this argument.

by cyclic Agree. And fifth, case agreement can be used to decide whether variation with morphological exponents is syntactic or morphological in nature.

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