

David Pesetsky, *Russian case morphology and the syntactic categories*. Cambridge, MA: MIT Press. 2013. 173 pp.

reviewed by Éva Dékány

1 Introduction

While the theory of Case played a prominent role in Government and Binding (Chomsky's 1981 Case Filter), Minimalism takes Case to be a side effect of Agree, with no distinguished place in grammar (Chomsky 2000). David Pesetsky's LI monograph *Russian case morphology and the syntactic categories* takes the Minimalist approach one step further: by claiming that cases are realizations of different parts of speech, it eliminates Case as an independent notion from grammar entirely. The proposal is developed on the basis of one of the thorniest aspects of Russian grammar: the case pattern of quantified noun phrases.

2 The data and the core hypothesis

Russian quantified noun phrases exhibit a puzzling case and number pattern in Nominative case environments. Firstly, the quantified noun bears Genitive case instead of the expected structural case, and secondly, inflectable nominal modifiers do not show concord with the noun's case and number features in the expected way.

If the quantified noun phrase involves a paucal element (*dva* 'two' *oba* 'both' *tri* 'three' *četyre* 'four' and some expressions of fractional quantity), then the noun is Genitive singular. All modifiers, however, are inflected for plural (number mismatch), and while an adjective sandwiched between the paucal and the noun shows Genitive case, the paucal as well as noun modifiers preceding it bear Nominative case (case mismatch). Compare (1) and (2), both featuring noun phrases in a Nominative environment, differing only in the presence or absence of the paucal.

- (1) èt-i posledn-ie krasiv-ye stol-y
these-nom.pl last-nom.pl beautiful-nom.pl table-nom.pl
these last beautiful tables (ex. 1a)
- (2) èt-i posledn-ie dv-a krasiv-yx stol-a
these-nom.pl last-nom.pl two-m.nom beautiful-gen.pl table-gen.sg
these last two beautiful tables (ex. 1b)

If the quantified noun phrase involves a non-paucal element (numerals *pjat'* 'five' through hundred and some non-numeral quantifiers), then the noun is Genitive plural. In this case the numeral and noun modifiers preceding it still show a case mismatch, but there is no number mismatch (all inflectable noun modifiers show the expected plural number).

- (3) èt-i posledn-ie pjat' krasyv-yx stol-ov
these-nom.pl last-nom.pl five-nom beautiful-gen.pl table-gen.pl
these last two beautiful tables (ex. 2)

In oblique environments all quirks disappear. Whether the quantifier is a paucal or non-paucal element, the quantified noun is inflected for plural number and the expected oblique case, and all nominal modifiers show regular case and number concord with the noun.

- (4) èt-im posledn-im dvu-m krasiv-ym stol-am
 these-dat.pl last-dat.pl two-dat.pl beautiful-dat.pl table-dat.pl
 to these last two beautiful tables (ex. 3b)
- (5) èt-im posledn-im pjat-i krasiv-ym stol-am
 these-dat.pl last-dat.pl five-dat beautiful-dat.pl table-dat.pl
 to these last five beautiful tables (ex. 3c)

The chief theoretical proposal of the book is that "Russian cases are not independent categories, but are actually affixal realizations of the various *parts of speech*" (p. 7, original emphasis), that is, cases are part-of-speech affixes or categorizing morphemes. Specifically, Genitive is a categorizing morpheme for N, Nominative is a categorizing morpheme for D, Accusative is a categorizing morpheme for V, and Oblique is a categorizing morpheme for P.

Pesetsky argues that roots and categorizing morphemes combine already in the lexicon (pace standard DM). Thus nouns, verbs, determiners, and adpositions come from the lexicon as composite forms: nouns take the form [root [N_{GEN}]], verbs take the form [root [V_{ACC}]], etc.¹ This means that nouns are born with Genitive case on them (dubbed as the "Primeval Genitive Conjecture" in the book), verbs are born with Accusative case on them, determiners are born Nominative, and adpositions are born Oblique.

When two syntactic objects are merged in narrow syntax such that one object is a feature assigner for the other, the assigner's grammatical features (including its part-of-speech features) are copied onto and spelled out as morphology on the assignee.

(6) Feature Assignment

- a. Copying: When α merges with β , forming [$_{\alpha} \alpha \beta$], if α has satisfied its complementation requirements and is designated as a feature assigner for β , its grammatical features are immediately copied onto β ...
- b. Realization: ... and are realized as morphology on all *accessible* lexical items dominated by β . (p. 88)

As a result of Feature Assignment, categorizing morphemes also combine with words in narrow syntax. Consider the derivation of adpositional phrases, for instance. Nouns come from the lexicon with Genitive case on them ([root [N_{GEN}]]); Russian *lamp* 'lamp', for instance, enters syntax in the form of *lamp-y* 'lamp-gen.sg'. When the NP merges with D in syntax, D's part-of-speech features are copied onto the NP and are spelled out as Nominative case on NP's terminals, producing *lamp-y-a* 'lamp-gen.sg-nom.sg', a *case stacking* configuration. If DP is next merged with a Dative P, then P's part-of-speech features are copied onto the DP and are spelled out as Oblique (Dative) case on DP's terminals, yielding *lamp-y-a-e* 'lamp-gen.sg-nom.sg-dat.sg'. Russian, of course, is not a case-stacking language on the surface; the Dative singular of *lamp* is *lamp-e* 'lamp-dat.sg', not *lamp-y-a-e* 'lamp-gen.sg-nom.sg-dat.sg'. This is due to the so-called One-Suffix Rule, which deletes all but the outermost case suffix.

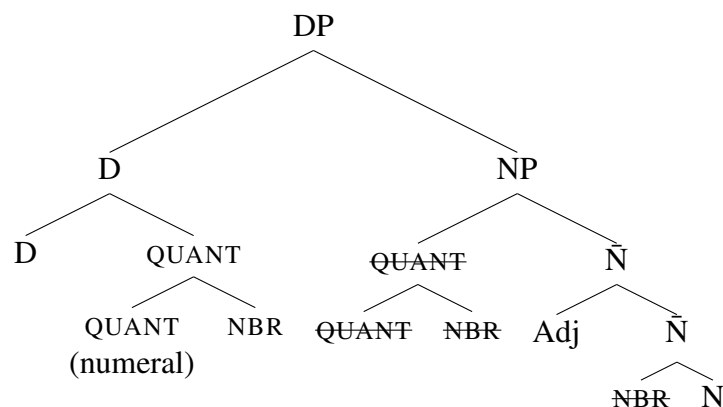
Non-paucal constructions exhibit a case mismatch but no number mismatch. Pesetsky suggests that the number (NBR) feature is merged very low in the noun phrase: NBR is a non-projecting head merged below all adjectives. Non-paucals do not instantiate NBR, however, rather they belong to a higher category, QUANT, which is merged above adjectives but below D. Nouns can only merge with other elements if they are already marked for NBR, so the non-paucals sitting in QUANT will merge with a projection of N that already has number features.

¹N_{GEN}, V_{ACC}, D_{NOM}, and P_{OBL} are Pesetsky's labels for cases, which combine the traditional case names with the names of the parts-of-speech that they realize in his proposal.

Specifically, they merge with a noun phrase containing –SING NBR, because it is this feature value that is compatible with the semantics of non-paucals. Since in quantified phrases with a non-paucal all nominal modifiers show this –SING NBR, nothing further needs to be said about number with non-paucals.

The account of the case mismatch is as follows. The noun enters syntax with Genitive case on it. Since NBR is a non-projecting head, adjectives that merge above NBR still merge with a projection of N, and so get Genitive from N via Feature Assignment. In the next step of the derivation QUANT is merged. QUANT receives Genitive case from NP via Feature Assignment, and NBR-to-QUANT movement takes place. The next element to be merged is D. D subcategorizes for two complements: N(P) and QUANT. When D merges with NP, D has not yet satisfied its complementation requirements completely (it is still in need of a QUANT complement). Therefore Feature Assignment (i.e. assignment of Nominative) from D to NP is blocked, and so the noun, adjectives below D, and QUANT continue bearing Genitive case. In the next step of the derivation D’s subcategorization requirement for QUANT is satisfied by QUANT-to-D movement (head movement is argued to be a complement creating movement). Since at this point all of D’s complementation requirements are met, Feature Assignment (i.e. Nominative assignment) takes place between D and QUANT hosting the non-paucal. This results in both Genitive and Nominative on the non-paucal, but the One Suffix Rule suppresses Genitive in favour of Nominative. It is, however, too late now for D to assign Nominative to its other complement, the NP: Feature Assignment can take place only upon Merge, and since the noun and adjectives below D do not raise to D, they remain Genitive. Adjectives and demonstratives that merge above D straightforwardly receive Nominative from (a projection of) D via Feature Assignment.

(7)



In oblique environments there is no case mismatch because upon merger of a P, P assigns Oblique case to the DP, and via the One Suffix Rule the Oblique case suppresses Nominative on the non-paucal and noun modifiers preceding the non-paucal as well as Genitive on adjectives following the non-paucal and on the noun. The reason why there is no number mismatch either is that P has an unNBR feature that is valued by Agree with the closest bearer of NBR; in this case it is valued as –SING the NBR head. Since Russian case endings distinguish between singular and plural number, Feature Assignment will copy a –SING Oblique case from P onto the DP.

While quantified noun phrases with non-paucals and with paucals are similar in many respects, the latter also exhibit a number mismatch in structural case environments. Pesetsky argues that while the noun in paucal constructions looks singular, it is in fact numberless. Paucals themselves are not genuine numerals or QUANT elements, but morphologically free exponents of –SING NBR (specifically, *dva*, *tri*, and *četyre* are markers of dual, trial, and quadral number respectively). As only nouns already marked for NBR may merge with other NP-internal elements, a numberless noun must merge with the paucal before the merger of adjectives can

take place. When the structure [Adj [paucal N]] is created, adjectives agree with the –SING number of the paucal (and get Genitive case from the noun). Number mismatch is thus only apparent in these constructions: the noun is merged without a value for number, it gets –SING number in the course of the derivation, and adjectives agree for number in the usual way.

After this point the derivation proceeds as in the case of non-paucals. QUANT is merged and it attracts NBR. This movement reverses the order of the adjective and the paucal and creates the surface order paucal > adjective(–SING) > N. When D is merged with the NP, Feature Assignment cannot take place between D and NP because D has not yet satisfied its complementation requirement for QUANT. When the complex QUANT-NBR head moves to D, D assigns Nominative case to this complex head. The paucal, sitting in NBR, now has both Genitive and Nominative case, but the former is suppressed by the One Suffix Rule. The noun and adjectives following the paucal remain Genitive because Feature Assignment cannot happen between D and the NP any more, but adjectives and determiners merged above D get Nominative from D.

3 Quantified noun phrases in Accusative environments

Above we have seen Pesetsky's analysis of quantified noun phrases in Nominative and Oblique environments. As far as Accusative environments are concerned, the consensus view of the literature is that here, too, quantified nouns (and noun modifiers following the paucal/numeral) bear Genitive case (see Babby 1987, Corbett 1993, Franks 1994; 1995, Rakhlin 2003, Rappaport 2002, Bailyn 2004, Bošković 2006 among others). In other words, the 'Genitive of Quantification' prevails in all structural case contexts.

Within Pesetsky's framework, however, all lexical items of quantified object DPs are expected to bear Accusative case. This is because the verb assigns V_{ACC} to the DP upon merge, and this Accusative should suppress the Nominative case on the paucal/numeral and noun modifiers preceding the paucal/numeral, as well as Genitive case on the noun and noun modifiers following the paucal/numeral. Pesetsky argues that once some quirks of the Russian Accusative case are taken into consideration, the data conform to the pattern predicted by his analysis.

The book proposes that both the assignment and the morphological realization of Accusative case is subject to language-specific constraints in Russian. The constraint on Accusative assignment is the following: a verb assigns Accusative case to β if and only if β is [+FEMININE] and not [-SINGULAR], or β is [+ANIMATE], or β is [+PRONOMINAL]. If a DP that does not meet these criteria merges with V, then V does not assign Accusative and the DP remains Nominative. When Accusative case is assigned, its realization is subject to the following rule: on class 2 elements V_{ACC} is realized as *-uju* (adjectives) or *-u* (other elements), while on class 1 elements it is syncretic with Genitive case. In all other environments V_{ACC} is not realized morphologically. The lexical items falling into the latter class thus will "look Nominative" but have in actual fact been assigned Accusative.

On the basis of these rules, the book proposes that some lexical items in object quantified noun phrases bear Accusative case that is syncretic with the Genitive, others have been assigned Accusative but cannot realize it morphologically, and the rest have not been assigned Accusative because they belong to the class of lexical items that resist Accusative assignment (i.e. they are neither [+PRONOMINAL], nor [+ANIMATE], nor [+FEMININE] and not [-SINGULAR]).

4 Prototypes

The last substantive chapter introduces the notion of prototype. The prototype of α , $\alpha\bullet$, is a reduced feature matrix of α , "whose part-of-speech features are valued, but whose other features

are unvalued" (p. 97). The prototype has a role to play in Feature Assignment: Pesetsky suggests that it is actually the prototype of α rather than α itself that is responsible for morphology assignment.

(8) Feature Assignment (final version, p. 99)

- a. Copying: When α merges with β , forming $[\alpha \alpha \beta]$, if α has satisfied its complementation requirements and is designated as a feature assigner for β , its prototype $\alpha\bullet$ is immediately merged with β , forming $[\alpha \alpha [\beta \alpha\bullet \beta]]$.
- b. Realization: A prototype $x\bullet$ is realized adjacent to the smallest available element dominated by its sister.

Pesetsky suggests that prototypes are useful beyond the analysis of Russian quantified noun phrases, too. In particular, "little words" such as English *of*, French *de*, Spanish *a*, the Genitive on adnominal PPs in Japanese and the so-called linker in Den Dikken's work (e.g. Den Dikken 2006, Den Dikken and Singhapreecha 2004) are in-situ realizations of prototypes.

The theory of prototypes, however, remains unconvincing. Prototypes are a highly technical tool with relatively little empirical gain. They are a truly useful for Pesetsky only in the analysis of Russian quantified noun phrases in nominal complement position. "Little words" could easily fit into the system without positing prototypes, too. What is most striking about prototypes is that α 's prototype merges with β *after* α has merged with β : $[\alpha \alpha \beta] \rightarrow [\alpha \alpha [\beta \alpha\bullet \beta]]$. The book does not comment on the fact that this is *counter-cyclic external* merge, a very powerful tool that cannot be left unconstrained (if it is used at all).² A discussion of why prototypes can (in fact, always do) but ordinary heads cannot merge in this unusual way would have been welcome.

5 Consequences

The book's central claim "that syntactic categories and cases are one and the same" (p. 75) makes strong predictions not just for the structure of Russian quantified noun phrases, but for the whole grammar of the language. Accusative case is assigned only in the presence of the category V, so prepositions that appear to assign Accusative case are argued to co-occur with a null verb, with the case coming from the latter. Genitive is a diagnostic for the presence of N, therefore Pesetsky suggests that apparently Genitive assigning PPs have a null nominal in their structure that assigns this case. The well-known Genitive of Negation construction, in which the verb's internal argument bears Genitive case in negative sentences (subject to some constraints that need not concern us here) is also argued to contain a null N, a silent nominal negative polarity item or a minimizer that is sister to the object and assigns Genitive case to it at some point in the derivation. Oblique cases do not materialize without a P in the structure, so verbs whose complements bear oblique cases are suggested to subcategorize for a PP complement, with the oblique case assigned by the silent P head. Similarly, the Dative case of infinitival subjects is tentatively suggested to be assigned by a *to*-like P element that heads the non-finite T in question.³

²Note that it is crucial for the analysis that $\alpha\bullet$ c-commands β but not α , so the counter-cyclic problem could not be easily patched by assuming that $\alpha\bullet$ merges with α instead.

³The underlying idea behind the analysis of (apparently) Accusative or Genitive assigning PPs and the Genitive of Negation construction is that the presence of a particular case always and automatically means the presence of the corresponding part-of-speech in the structure (Nominative always means the presence of D, Accusative always means the presence of V, etc). This is not true the other way around, however: the presence of a specific part-of-speech does not automatically mean that the corresponding case has to be present, too. In several cases

A further consequence of the proposal, not explored in the book, concerns the amount of structure in nominal phrases and the nature of default case. Russian is an articleless language, and it is subject to some debate whether or not it has a DP projection (see Bošković 2005 et seq. for the view that articleless languages have no DP). Pesetsky subscribes to the DP-analysis. He further argues that the reason why Nominative is the default case for noun phrases is that a DP that has not been assigned morphology by an external case assigner bears the Nominative case coming from D.

However, the existence of a D node does not mean that all nominals have to be closed off by a DP layer. It is entirely feasible that some indefinite, non-referential noun phrases such as *students* are NPs without a D projection of top. This position is taken, for instance, in Franks (1995), Franks and Pereltsvaig (2004), Pereltsvaig (2006). Pereltsvaig calls such DP-less noun phrases ‘small nominals’. Now if small nominals exist, it is predicted that their default case is Genitive rather than Nominative – nominals are born with Genitive, and in absence of a D on top or an external case assigner, they will continue to bear Genitive. On the other hand, if apparently small nominals bear Nominative case in default case environments, then (according to the logic of the book) they cannot be all that small: they have to have a DP layer.

Nouns in the subject position provide a good test case to find out how much structure ‘small nominals’ have. According to Pesetsky, finite T in Russian does not assign any morphology. Differently put, raising to spec, TP in finite clauses does not change the case of the subject, the subject bears the same case as in its base position. If ‘small nominals’ are indeed DP-less, then in subject position they are predicted to bear the Primeval Genitive case (as default case) because i) nouns are born with this case, ii) in absence of a D head this Genitive is not suppressed by Nominative, and iii) there is no external case assigner either. However, small nominals have Nominative case in the subject position.

- (9) Studenti su bili tamó.
 students-masc.nom.pl aux-3.pl were-pl.masc there
 Students were there. (Bailyn and Nevins 2008: 268)

In the theory of case advanced in the book, then, small nominals like *students* cannot be bare NPs (at least not in the subject position); they must be topped off by a DP layer, which is the source of Nominative case. This raises the question of where referentiality is encoded in the structure. Referentiality (in DP-languages) is normally tied to the D head (see Stowell

Pesetsky has to posit a particular part-of-speech in the structure for one reason or another, but the case that this part-of-speech is supposed to assign upon merger is not (visibly) there. He deals with such situations in various ways.

As already mentioned above, the book makes use of language-specific constraints on Feature Assignment; this allows for the presence of V in the structure without the assignment of Accusative case. Secondly, it is well known that DPs have a special licensing requirement (traditionally called abstract *case*, but the book refers to it as Vergnaud-licensing): DPs can occupy certain positions but not others. Feature Assignment is argued to apply to DPs only in such licensing positions. DPs that merge with a particular part-of-speech in a non-licensing position are not assigned the case expected from that part-of-speech (cf. the discussion of unaccusative and passive constructions). Thirdly, the book argues for the existence of special lexical items that idiosyncratically fail to assign morphology, even though they belong to a part-of-speech category that generally does assign morphology (see the discussion of *v* in expressions of "assuming a role" on pp. 78–79). Fourthly, the book espouses non-projecting heads. Such heads are suggested not to assign any morphology, even if projecting heads belonging to the same part of speech are morphology assigners (see spatial prepositions in directional PPs and Ps in some idiomatic uses). In the four cases mentioned above, a head that belongs to a morphology assigning part of speech is present in the structure but genuinely fails to assign morphology. In addition to these cases, the monograph also proposes language-specific morphological realizational rules for Russian, which give rise to situations in which Accusative case *is* assigned, but cannot be realized on the surface.

1991). If non-referential noun phrases like *students* also have a D layer, then either D comes in different flavours (referential and non-referential), or referentiality is encoded in a nominal projection higher than D, or DP should be split into multiple layers as in Zamparelli (2000). As referentiality is not discussed in the book, Pesetsky's position on this question is not revealed.⁴

6 Primeval cases on parts-of-speech other than N

In the mainstream view noun phrases and cases have a special relationship. In the view advocated in the book, however, this special relationship does not exist. Cases are affixal realizations of parts-of-speech, which merge with roots in the lexicon, so Ns, Vs, Ps, and Ds all enter syntax bearing a particular case (Gen for N, Acc for V, Obl for P, Nom for D). While the Primeval Genitive case that nouns are born with features prominently in the monograph, it is expected in this system that we should find instances of the 'Primeval Accusative' on verbs, the 'Primeval Oblique' on adpositions, and the 'Primeval Nominative' on determiners. Such cases are not presented in the book, however.⁵ Pesetsky is aware of this problem, and claims that in the case of Ps, for instance, it is hard to find evidence of the 'Primeval Oblique' case because Ps are uninflectable and mostly monomorphemic. This reasoning, however, could not be extended to verbs: verbs in Russian are eminently inflectable, and it is not the case that they are typically monomorphemic either. Yet not a single example is shown either from Russian or any other language where a verb bears the 'Primeval Accusative' case.

One could claim that the 'Primeval Accusative' is generally suppressed by other, zero case morphology that is assigned to verbs later on in the derivation. This would beg the question of which head assigns this morphology (in Russian, it cannot be T, because T is claimed not to be a morphology assigner in this language), and why this zero morphology does not suppress the case of the verb's DP complement, too.

Pesetsky argues that movement and Spell-Out "freeze for our inspection earlier stages of the derivation" (p. 8), and as a result of these processes, cases assigned early on in the derivation avoid suppression by other morphology assigned later on.⁶ In light of this, one expects Accusative to survive on verbs at least in a few languages and in a few instances. One could claim that this does not happen because for some reason verbs are generally incapable of morphologically realizing the Accusative case they are born with, but such a proposal would hardly be explanatory.

Related to the above point is the fact that any discussion of adjectives and adverbs is conspicuously absent from the book. In Pesetsky's approach roots are categorized in the lexicon and hence born with (case) morphology. Therefore adjectives and adverbs are also formed in the lexicon and must be born with some Primeval morphology. What kind of morphology would this be? Could it be equivalent to some case? Do we ever see this morphology in Russian (or any other languages), or is it always suppressed by some other morphology assigned by a higher head? It would perhaps have been worth raising these questions even if they cannot be answered on the basis of Russian-internal evidence.

⁴However, no further head is assumed between D and P, so one can conjecture that Pesetsky would not embrace the referentiality-above-D option.

⁵Admittedly, in a language with a morphologically unmarked Nominative case, one does not expect to be able to tell whether Ds enter syntax with no case or bearing the 'Primeval Nominative', but this task should be possible in a languages with a morphologically marked Nominative.

⁶Movement has this ability because "by altering the structural relation between α and β , [it] may block feature copying (case assignment) from α and β ". Spell-Out has this ability because it "establishes and fixes the pronunciation of the terminal elements of a phase" (p. 8).

All in all, when it comes to morphological realization, nothing in the book leads us to have second thoughts on the standard position that case has a tighter relationship with nouns than other parts of speech. Furthermore, there is something special about noun phrases and cases on the theoretical side, too: morphology assignment applies to noun phrases only in distinguished positions (the so-called Vergnaud-licensing positions of the book). Such a constraint on Feature Assignment does not apply to VPs or PPs, and the monograph does not discuss why nominal phrases should be different in this regard. Even the inclusion of such a discussion, however, would not change the fact that when it comes to case, nouns are different from other parts of speech.

7 The cross-linguistic view on case and 'case assigning' numerals

The book's title is *Russian case morphology and the syntactic categories*. However, the monograph is much more interesting than a parochial study of the Russian case system. While on p. 7. Pesetsky writes that "*Russian cases ... are actually affixal realizations of the various parts of speech*" (first emphasis by this reviewer, second emphasis is original), the proposal that Genitive is a reflection of merger with N, Nominative is a reflection of merger with D, Accusative is a reflection of merger with V, and Oblique is a reflection of merger with P is suggested to have validity beyond Russian. On occasion, the volume also touches upon aspects of Lardil, French, English, Bosnian/Croatian/Serbian, Japanese and Spanish grammar, and analyzes data from these languages with the same tools, i.e. views cases in these languages as affixal realizations of parts of speech. One might venture to conclude that Genitive=N, Accusative=V, Nominative=D, and Oblique=D have *universal* validity. While this strong statement is not made explicitly in the volume, the text sometimes leads one to think that this is indeed what Pesetsky may have in mind. For instance, on p. 81 he suggests that "the most prominent use of genitive case *cross-linguistically*: as a marker of adnominal DPs" (emphasis mine) is straightforwardly explained by the proposal the N is the assigner of Genitive case.

Notwithstanding the possible universality of equating cases with parts of speech, it is also clear that there is room for some cross-linguistic variation within the system. Firstly, there is the obvious variation between case-stacking and non-case-stacking languages. The monograph proposes that the One Suffix Rule is operative in both types of languages; the source of the difference is that case-stacking languages have special non-deletable case suffixes. Secondly, there is variation in whether a certain syntactic category assigns morphology or not. For instance, finite T is suggested to be a morphology assigner in Lardil (where it assigns future morphology) but not in Russian. In Pesetsky's framework one could plausibly argue that in the well-known case stacking language Kayardild Mod and C are also case assigners (assigning the TMA indicator modal ablative case and the so-called complementizing oblique case respectively, see Evans 1995). Thirdly, there is variation in whether the morphology assigned by Feature Application appears on all lexical items in an XP or just once, on the phrase level. The former types of languages feature DP-internal case concord, while languages belonging to the latter type have case-like "little words" like English *of* or French *de*. Finally, as we have seen above, Feature (and hence morphology/case) Assignment by a particular part-of-speech may be subject to language-specific constraints. In Russian the assignment of Accusative case happens only under very specific circumstances, but this isn't the case in all languages.

At the same time, the discussion also raises the question of whether cases with the same name are genuinely comparable across languages. In a short and admittedly speculative remark about English, Pesetsky writes that "although the English pronominal series traditionally called "accusative" (*me, him, her, etc*) appears to be a morphological default, as Schütze argues, the

pronominal series traditionally called "nominative" (*I, he, she*, etc.) might reflect the assignment of morphology under FA by T" (p. 74). This would explain why "nominative" pronouns appear in the subject of finite sentences but not in the focus of a cleft or in conjunctions (in the latter cases no merger with T has taken place). If this is taken literally, it would mean that in Russian Nominative = D and Accusative = V, but in English (what is traditionally called) Nominative = T and (what is traditionally called) Accusative = D.⁷

In the mainstream approach quantified nouns in Russian are *assigned* Genitive case by a piece of structure higher up in the noun phrase (either the numeral or the head introducing the numeral). In Pesetsky's approach, on the other hand, the Genitive is the noun's *original* case that has not been overwritten. Russian, however, is not the only language in which quantified noun phrases bear a special case. As is well known, the 'quantificational case' phenomenon is also attested in Bosnian/Croatian/Serbian, Ukrainian, Polish and Czech.⁸ In these languages, too, quantified noun phrases bear Genitive case in Nominative environments and oblique case in oblique environments. Pesetsky's analysis appears to be easy to extend to these cases. Explaining the quantified noun's case in Accusative environments, however, will require more work. According to conventional wisdom, the noun's case is Genitive here, too. Pesetsky, however, would expect Accusative case (as V_{ACC} should overwrite the Primeval Genitive). As we have seen, this problem also arises in Russian, and its solution is fairly complex: in addition to recourse to Genitive-Accusative syncretism, it also requires positing language-specific constraints on Accusative assignment as well as language-specific rules of Accusative morphology realization. A full analysis of the other Slavic languages with 'quantificational case' would probably have to use similar tools to fold Accusative environments into the analysis.

Non-Slavic languages featuring the 'quantificational case' phenomenon make another interesting case for future study with the book's toolbox. This is because the special case of quantified nouns in these languages is not (always) Genitive. For instance, Arabic numerals quantified by three through ten (as well as hundreds and thousands) bear Genitive case, but nouns quantified by eleven through ninety-nine have Accusative case (Dada 2007, Elsaadany 2007).

- (10) a. xams-at-u rija:l-in
 five-fem-nom men-masc.pl-gen-ind
 five men (Elsaadany 2007: 21)
- b. najaħa wa:ħid-un wa-ħiħr-u:na tillmi:ħ-an
 succeed-pst-3-masc one-masc.sg.nom and-twenty-nom pupil-masc.sg-acc.ind
 21 male pupils succeeded (Elsaadany 2007: 24) Arabic

In Sami, numerals quantified by two through six bear Accusative case, while numerals with other quantifiers are Partitive (Nelson and Toivonen 2000).

- (11) a. Nelji poccuu ruottii mâtât.
 four reindeer.ACC.3SG ran.3PL away
 Four reindeer ran away. (Nelson and Toivonen 2000, ex. 6a.)
- b. Čiččâm poccud láá tobbeen.
 seven reindeer.prt.sg are.3pl there

⁷The Accusative = D conclusion follows because in the discussion of Russian Pesetsky argues that default case is case assigned internally to the noun phrase, i.e. case assigned by D. Pronominal forms traditionally called "accusative" are also found in object position in English. Here one might speculate that the cases assigned by English V and D are syncretic.

⁸There is some variation within the quantificational phrases of these languages, but this need not concern us here. The interested reader is referred to Gvozdanović (1999).

Seven reindeer are there. (Nelson and Toivonen 2000, ex. 7a.)

Sami

Finally Finnish and Estonian quantified nouns bear Partitive case (Sakuma 2008, Brattico and Leinonen 2009, Brattico 2010; 2011; 2012, Rutkowski 2001).

- (12) Nuo kaksi pien-tä auto-a varastettiin.
those.pl two-sg small-sg.prt car-sg.prt were.stolen
those two small cars were stolen. (Brattico 2012, 36)

Finnish

Assuming that cases with the same name *are* comparable cross-linguistically, the Genitive=N, Accusative=V, Nominative=D, and Oblique=D analysis leads to some interesting conclusions for these languages. Since Accusative case is assigned only in the presence of V, Arabic noun phrases with three through ten and Sami noun phrases with two through six have to have a V in their structure (unless these Accusatives can convincingly be shown to be Genitives that are syncretic with Accusative). Partitive case does not fit into the book's system entirely smoothly. Within the assumptions of the monograph it would be straightforward to take it to be assigned by a type of P, which would make it a type of oblique case. However, Partitive in Finnish is often argued to be a structural case (see Brattico 2010 and references cited therein). Assuming that Partitive *is* assigned by P, Finnish and Estonian quantified noun phrases as well as Sami noun phrases with a numeral above six have to contain a P. Whether these conclusions can be supported with independent arguments remains to be confirmed,⁹ and it also remains to be seen why V and P are detectable in the quantified noun phrases of these particular languages but not others.

8 The book's position on debated issues

The book's results bear obliquely on several currently debated issues. For instance, Pesetsky defends head movement in its original form, qua adjunction, and embraces tucking in. The book supports Noonan's (2010) view that the Dir (aka Path) head of directional PPs is actually a verb, and argues that DP can be a phase (in particular, Genitive marked DPs in Russian and Lardil are phases but other DPs are not). Pesetsky also takes a stance on the timing of phase spellout and the amount of spelled out material: it is argued that once a phase has merged with its selecting head and Feature Assignment has taken place between that head and the phase, Spell Out applies immediately and to the whole phase (i.e. not just what Chomsky calls the phase domain).

As far as the functional structure of the nominal phrase is concerned, NP is assumed to be directly dominated by DP and no further nominal phrase is assumed above DP. As for the functional hierarchy in general, contra Cinque (1999) but in line with Den Dikken (2010) the book supports the view that functional heads can be missing from the syntactic structure. It must be noted, though, that this issue arises in the discussion of NBR, QUANT and the Russian feminizing head, none of which project in the analysis, so this conclusion might be limited to non-projecting heads.

The analysis also dovetails with Preminger's (2009, 2011) view that Agree is a 'fallible operation': Agree must be attempted, but the derivation does not crash if no matching goal is found as long as a default value can be assigned to the probe. While I am sympathetic to Preminger's approach to Agree, the argument for this view presented by Pesetsky is not entirely

⁹Accusative environments will be especially challenging in these languages, for the consensus view is that 'quantificational case' prevails on quantified nouns in object position, while Pesetsky's system would predict Accusative case here.

convincing. Recall the proposal that the Russian D head subcategorizes for two complements: NP and QUANT. The subcategorization requirement for QUANT is crucial in the analysis, as this guarantees that D does not assign Nominative case to the NP and the case mismatch arises. Now Pesetsky suggests that in noun phrases without a paucal or numeral, QUANT is missing. In this case, then, D cannot satisfy its complementation requirement for QUANT in the usual way, by Agree. The book proposes that this does not cause a crash, however, because the relevant probing feature on D is assigned a default value (p. 54: "whatever feature of D probes for QUANT and attracts it to D when it is found does not crash the derivation if QUANT is not found, but receives a default value"). In other words, one of the subcategorizational features of D can be satisfied by a default value. This obviously cannot be true of subcategorizational features in general, so this conclusion would require an explicit discussion of how or why D's subcategorization feature for QUANT is any different, and what other subcategorization features can be satisfied by a default value. This discussion is missing from the book.

9 Conclusion

In summary, Pesetsky's book offers a fresh, detailed look at the empirical data of Russian quantified noun phrases, an analysis of these data that challenges accepted wisdom and is radically different from any previous proposal, as well as a new 'theory of case'. Anybody interested in case theory, noun phrase structure, or the morphosyntax of Russian must be familiar with the proposals made in this monograph.

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