

The (lack of) Case for A-movement*

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Abstract. Nominals assigned non-structural Case in English are prohibited from undergoing certain kinds of A-movement, in contrast to nominals assigned structural Case which are not so restrained. To account for the observed asymmetries, I propose that non-structural Case on a nominal undergoing A-movement must be suppressed and that non-structural Case suppression requires a locally c-commanding, lexically specified licensing head. I show that the inventory of heads licensing Case suppression can vary between idiolects and across non-structural Cases being suppressed, demonstrating the need for a lexically driven approach. I argue that non-structural Case suppression is accounted for with *Remove* (Müller 2017): certain heads can eliminate the non-structural K(ase)P shells projected above nominals, thereby allowing those nominals to A-move and to be assigned structural Case.

Keywords. non-structural Case; Case suppression; A-movement; P-stranding; passive; affectedness; Remove

1 A-movement and non-structural Case in English

Structural *C*/case, e.g. nominative or accusative, is permutable under A-movement.¹ For instance, direct objects of transitive verbs in English predictably bear structural accusative case, as in (1).

(1) Specialists treated {him / *he}.

However, when the direct object undergoes A-movement to [Spec, TP] in a verbal passive ((2)) or in a middle ((3)), it obligatorily switches to structural nominative case.

(2) *Verbal passive*
 ↓
{He / *Him} was treated ___ by specialists.

(3) *Middle*
 ↓
{He / *Him} probably won't treat ___ easily.

*For valuable discussion and feedback, thanks to Elena Anagnostopoulou, Karlos Arregi, Dan Brodtkin, Chris Collins, Claire Halpert, Heidi Harley, Stefan Keine, Zach Lebowski, Jason Merchant, Gereon Müller, Andy Murphy, Yining Nie, Charlotte Sant, Peter Svenonius, Gary Thoms, Erik Zyman, and attendees at BCGL 15.

¹I follow the precedent in the literature in using uppercase *Case* to refer to nominal licensing in the sense of Vergnaud (2008[1977]) and Chomsky (1981), *et seq.*, and in using lowercase *case* to refer to noun phrase morphology.

Similarly, whereas postnominal direct object internal arguments of complex event nominals ((4a)) and of deverbal *-ing* nominals ((5a)) derived from transitive verbs in English are obligatorily marked by *of*, A-movement of the internal argument to a prenominal position—which I will refer to as *genitive preposing* (though it has also often been called ‘nominal passive’ in the previous literature)—forces it to appear in the genitive case without *of* ((4b), (5b)).

(4) *Genitive preposing in a complex event nominal*

a. It was [the specialist’s treatment of him] that surprised us most.

b. It was [his treatment ___ by the specialist] that surprised us most.

(5) *Genitive preposing in a deverbal -ing nominal*

a. It was [the specialist’s having treated him] that surprised us most.

b. It was [his having been treated ___ by the specialist] that surprised us most.

Such predictable alternations are often considered a hallmark of structural cases.

But that is not the whole story. Nominals which would otherwise bear non-structural Case—or more specifically *lexical* Case, according to Woolford’s (2006) subdivision of Case types—can also undergo A-movement in certain contexts. In English, this is famously borne out in the pseudopassive (also called ‘prepositional passive’). Assume that the complement of a preposition is assigned a Case distinct from structural accusative in English (see also Hornstein and Weinberg 1981: 60–61; contra Chomsky 1981: 292–300, citing Kayne 1979 and 1981b: esp. §4)—an assumption which I will justify presently. Call this ‘oblique’ Case. It is consequently striking that the nominal complement of a preposition, which bears non-structural oblique Case, can undergo A-movement to [Spec, TP], stranding P, and get assigned structural nominative Case, as in (6).

(6) *Verbal P-stranding passive/pseudopassive*

a. Specialists operated on him.

b. {He / *Him} was operated on ___ by specialists.

To reiterate, the non-structural oblique Case assigned to a nominal by P can be suppressed under passive A-movement and be replaced by structural nominative Case.

There is good reason to think that the Case assigned by P is distinct from structural accusative Case. Unlike the replacement of structural accusative by structural nominative/genitive Case, the

suppression of non-structural oblique Case is only licensed by certain kinds of A-movement in English. Take middle formation: while non-P-stranding middles are unremarkable ((3)), P-stranding middles (or *pseudomiddles*) are, for many speakers, completely unacceptable ((7); see e.g. Roberts 1987: 222, Fagan 1988: 194–195, Postal 2004: 260, (70a), and Merchant 2017: 16).²

(7) * *P-stranding middle/Pseudomiddle*

* He probably won't operate on very easily.

The marked contrast between pseudopassives, which are acceptable, and pseudomiddles, which are not, demonstrates that the suppression of oblique Case assigned by P does not come for free in A-movement, unlike the suppression of structural accusative Case (see Drummond and Kush 2015: 458 for a similar observation). While the passive Voice head (i.e. Voice[Pass]) can suppress (or, to use an earlier term, *absorb*) any Case assigned to a nominal within VP, whether structural accusative or non-structural oblique, the middle Voice head (i.e. Voice[Mid]) can only suppress structural accusative Case. As I show in section §2, this contrast reflects a broader asymmetry among two types of A-movement in English: those which allow P-stranding and those which do not, as summarized in (8).

(8) *P-stranding reveals two kinds of A-movement in English*

	non-P-stranding (suppresses structural accusative Case)	P-stranding (suppresses non-structural oblique Case)
a. <i>Verbal passive</i>	✓	✓
b. <i>Adjectival passive</i>	✓	✓
c. <i>Concealed passive</i>	✓	✓
d. <i>Middle</i>	✓	✗
e. <i>-able</i>	✓	✗
f. <i>Genitive preposing</i>	✓	✗
g. <i>Object shift</i>	✓	✗
h. <i>Unaccusative</i>	✓	✗

While previous literature has recognized many such restrictions on P-stranding A-movement in isolation, the full suite in (8) has not, to my knowledge, been brought together and given a uni-

²I will return to idiolectal variation regarding the acceptability of pseudomiddles in section §4.1.

fied analysis before (though see Keyser and Roeper 1984: 408, Postal 2004: 260ff., Drummond and Kush 2015, and Wilson 2021: 111–130 for important contributions). I also present novel data from Norwegian—another language permitting P-stranding A-movement—which bears out a remarkably similar bifurcation among A-movement types.

This asymmetry highlights the largely overlooked role that lexical identity plays in licensing certain kinds of A-movement. It is claimed here for the first time that nominals bearing non-structural/lexical Case can only undergo A-movement when locally c-commanded by lexically specified heads. I propose that this is because some movements cannot affect elements bearing non-structural Case (analyzed in section §5 as a KP shell encasing the nominal). Importantly, certain heads are able to suppress non-structural Case on nominals, thereby enabling them to undergo A-movement. I argue in section §3 that the key factor differentiating the two types of A-movement in (8) is the presence or absence of Voice[Pass]: A-movement of a nominal assigned oblique Case by P, stranding P, is possible if and only if there is a locally c-commanding Voice[Pass] head, because Voice[Pass] suppresses oblique Case. Thus, I contend that there is a relationship between Case and movement, though not of the sort typically discussed in prior literature (i.e. whether or not A-movement is driven by a nominal’s need to be Case licensed, as in Chomsky 1981): many types of movement can only apply to Case-less nominals. I return to this point in section §7.

Two additional strands of evidence support my claim that Voice[Pass] enables P-stranding A-movement via Case suppression. First, the overt presence of a passive auxiliary inside nominals licenses otherwise unacceptable P-stranding genitive preposing, demonstrating that Voice[Pass] is necessary for P-stranding (section §3.1). Second, I show that an independent diagnostic for non-active Voice, dubbed *Perlmutter’s Generalization* by Merchant (2017) after proposals by Perlmutter (1978) and Perlmutter and Postal (1984), by and large distinguishes the same two types of A-movement that P-stranding does (section §3.2). The convergence of these two tests supports a linkage between Voice[Pass]—one flavor of non-active Voice—and P-stranding A-movement.

My lexically driven, Case-based account of P-stranding A-movement makes at least two additional predictions which I argue are borne out in section §4. The first derives from the lexical

nature of the account. Given that suppression of oblique Case is a lexical property of heads, we expect to find variation in the inventory of heads bearing this property. This, I argue, is what accounts for the fact that there is a set of English speakers who accept (at least some) pseudomiddles.

- (9) *Pseudomiddles are acceptable for some speakers*
(?)This board doesn't write on easily. (Newman 2020: Appendix A, 3, (5c))

We can straightforwardly account for this fact if the property of suppressing oblique Case has been extended from Voice[Pass] to Voice[Mid] in these idiolects. The second prediction of my account is that oblique Case should not be unique among non-structural Cases. Specifically, other non-structural Cases are expected to be lexically suppressable, thereby feeding A-movement and structural Case assignment. This, I argue, is what accounts for restrictions on A-movement of non-affected direct objects in English as famously observed by Anderson (1978, 1979) and Tenny (1992, 1994). I propose that non-affected direct objects are lexically assigned a Case distinct from structural accusative Case in English and that this non-structural Case, like oblique Case, can only be suppressed in the presence of a local licensing head. I show that the non-structural Case assigned to non-affected objects can be suppressed by both Voice[Pass] and *A_{able}*.

Section §5 sketches an account of non-structural Case suppression using Müller's (2016; 2017; 2018; 2020; 2021) *Remove* operation, which is feature-driven and eliminates structure. My lexically driven analysis, in a nutshell, is this: adopting the hypothesis that non-structural and structural Case are assigned differently (see Baker and Vinokurova 2010) and syntactically represented differently, I propose that certain heads can be lexically specified to Remove non-structural Case, which is projected above the nominal as KP. By stripping away non-structural KP, these nominals are freed up to undergo A-movement and to participate in Case and agreement relations once again.

In section §6, I compare my analysis to conceivable alternatives and argue that the Remove-based approach faces fewer hurdles in accounting for the data. Section §7 summarizes and considers future directions.

2 An asymmetry: A-movement with(out) P-stranding

The core data supporting my claim that the lexical identity of functional heads is implicated in the suppression of non-structural Case come from (non-)P-stranding A-movement. As I will show, the environments which allow non-P-stranding A-movement form a proper superset of the environments which allow P-stranding A-movement. I will begin in section §2.1 by discussing types of A-movement where P-stranding is allowed in all idiolects of English. I then move on in section §2.2 to those contexts which ban P-stranding for at least some speakers. Part of my aim in this section is also to establish that all constructions under investigation plausibly involve A-movement.

2.1 Where P-stranding A-movement is allowed

English A-movement with and without P-stranding is canonically found in verbal *be* and *get* passives (see Couper-Kuhlen 1979 and Davison 1980 for additional examples and discussion):

(10) *Verbal be/get passive*

- a. The patient was/got treated by specialists.
- b. That idea is/gets cited often by experts.
- c. The plan was/got authorized by the general.
- d. The wall was/got defaced by someone with a talent for graffiti.
- e. The safe was/got broken by a demolition crew.

(11) *Verbal be/get pseudopassive*

- a. The patient was/got operated on by specialists.
- b. That idea is/gets referred to often by experts.
- c. The plan was/got signed off on by the general.
- d. The wall was/got written on by someone with a talent for graffiti.
- e. The safe was/got broken into by a burglar.

Adjectival passives behave like verbal passives in this respect (see, e.g., Emonds 1970: 80, (84), Siegel 1973, Wasow 1977: 349–352, Baltin 1978: 103, (109)–(114), Bresnan 1982: 51, Maling and Zaenen 1985: 160, (13), Pesetsky 1995: 24–25, and Bruening 2014: 374): both non-

P-stranding ((12)) and P-stranding variants ((13)) are acceptable.^{3,4}

(12) *Adjectival passive*

- a. That patient appears treated by a specialist.
- b. That idea remains frequently cited by experts to this very day.
- c. The plan appears authorized by the general.
- d. The wall looks defaced by someone with a talent for graffiti.
- e. The safe appears broken by a demolition crew.

(13) *Adjectival pseudopassive*

- a. That patient appears operated on by a specialist.
- b. That idea remains frequently referred to by experts to this very day.
- c. The plan appears signed off on by the general.
- d. The wall looks written on by someone with a talent for graffiti.
- e. The safe appears broken into by an expert burglar.

I adopt the proposal from Bruening (2014: esp. 385–387) that adjectival (pseudo)passives contain a null operator which undergoes A-movement from a phrase-internal position to [Spec, AP], inducing λ -abstraction and creating a predicate of individuals:

- (14) That idea remains $[\text{AP } \overbrace{Op_i \text{ frequently referred to } \underline{\quad}_i}^{\lambda x \dots}]$ by experts] to this very day.

³Postal (2010: 221–229) (and also Postal 1986: 217–220) argues that, contrary to appearances, acceptable adjectival pseudopassives are the exception, rather than the rule. According to Postal, many verbal pseudopassives do not have an acceptable corresponding adjectival pseudopassive. However, the English speakers I have consulted find all of the adjectival pseudopassives he cites as being unacceptable to be perfectly well-formed. I henceforth focus on the idiolects which systematically allow adjectival pseudopassives.

⁴The existence of adjectival pseudopassives arguably presents a challenge to recent analyses of adjectival passives (also called ‘stative’ passives) as complex heads lacking phrasal verbal structure (e.g. vP), as have been proposed by Embick (2023) for English and by Paparounas (2023) for Greek. Such analyses predict that arguments and adjuncts within stative passives must not be introduced in the complement of the stativizing head Stat^0 (i.e. must not be introduced by the root or by any verbal functional head like v^0 or Voice^0), since the complement of Stat^0 is hypothesized to be non-phrasal. Instead, arguments and adjuncts must be introduced at or above StatP .

The problem for a complex head analysis of adjectival pseudopassives is that the identity of l(exically)-selected prepositions like *on* in (13a) crucially depends on the identity of the root $\sqrt{\text{OPER}}$ (and depends in many other cases on higher functional heads, see Merchant 2019 and Hewett 2023) and never on Stat^0 (or whatever the putative higher selecting head is). Rather, the identity of the preposition is always the same as that found in the verbal passive:

- (i) That patient appears operated $\{\text{on}/*\text{of}/*\text{to}/*\text{from}/*\text{with}/*\text{in}/*\text{at}/*\text{by}/*\text{for}/*\text{off}\}$ by a specialist.

This systematic correspondence is not necessarily expected on a complex head analysis where the heads responsible for introducing l-selected arguments are distinct in verbal and adjectival pseudopassives—the root (or categorizing head) in the former case and Stat^0 in the latter case. By contrast, the correspondence is straightforwardly accounted for on phrasal analyses of adjectival (pseudo)passives (e.g. Kratzer 2000, Anagnostopoulou 2003, Embick 2004, and Bruening 2014) where the complement of Stat^0 is a phrase containing at minimum the verbal root and its (possibly l-selected) arguments. I therefore adopt the phrasal analysis in this article.

Furthermore, both non-P-stranding and P-stranding A-movement are found with *-ing* and *-ed* complements of predicates like *need*, *want*, *require*, *could use*, *could stand*, etc. (which Clark 1985: 42ff. calls ‘predicates of requirement;’ see also Jespersen 1940: 112, Safir 1991: 104–105, and Authier and Reed 2008: 9–11).⁵ I will henceforth focus on the *-ing* complements, which I label *concealed passives* following Huddleston (2002b).⁶

(15) *Concealed passive*

- a. That patient needs treating immediately by a specialist.
- b. That idea needs citing more frequently by experts.
- c. The plan needs authorizing immediately by the general.
- d. This wall could use defacing by someone with a talent for graffiti.
- e. The safe needs breaking by a demolition crew.

(16) *Concealed pseudopassive*

- a. That patient needs operating on immediately by a specialist.
- b. That idea needs referring to more frequently by experts.
- c. The plan needs signing off on immediately by the general.
- d. This wall could use writing on by someone with a talent for graffiti.

⁵Concealed passives can also appear with an overt determiner as in (i), in which case they appear to display all the same properties as the determinerless concealed passives discussed in the main text:

- (i) This budget needs {a good / some} looking at by the CFO.

See Safir (1991: 102–105) on *-ing* complements of evaluative predicates like *deserve*, *merit*, *repay*, and *warrant*, which, when accompanied by a determiner, behave identically to *-ing* complements of predicates of requirement.

⁶That concealed (pseudo)passives involve A- and not \bar{A} -movement is shown by at least two facts. First, they fail to license parasitic gaps (see also Safir 1991: 105 and Authier and Reed 2008: 10, (36)–(37)):

- (i) This paper_i needs revising ____i [before you send {it_i / *pg_i} back].

Second, concealed pseudopassives license secondary depictive predicates ((ii)). As pointed out by Pylkkänen (2008: 35–40), depictives are licensed by A-movement, for instance in verbal pseudopassives ((iii)), but not by \bar{A} -movement ((iv)). Crucially, depictives cannot be predicated of in situ complements of prepositions ((v)).

- (ii) That patient needs operating on half-awake so that they can tell us if something is wrong.
(‘That patient needs to be half-awake when operated on so that they can tell us if something is wrong.’)
- (iii) That patient needs to be operated on half-awake so that they can tell us if something is wrong.
(‘That patient needs to be half-awake when operated on so that they can tell us if something is wrong.’)
- (iv) Who do we need to operate on half-awake so that they can tell us if something is going?
(*‘Who needs to be half-awake when we operate on them so they can tell us if something is wrong?’)
- (v) We need to operate on that patient half-awake so that they can tell us if something is wrong.
(*‘That patient needs to be half-awake when we operate on them so they can tell us if something is wrong.’)

See Bruening (2014: 388, fn. 13) and van Urk (2017: 536–537) on depictive licensing under pseudopassivization.

- e. The safe needs breaking into by a good old-fashioned burglar.

As Huddleston (2002b: 1199–1200) notes, the concealed passive complements of predicates of requirement are interpreted similarly to passive infinitival clauses. Thus, (15a) is roughly semantically equivalent to: *That patient needs to be operated on immediately by a specialist.*

My analysis of concealed passives follows the basic contours of the one presented in Safir (1991: 105–108): in particular, concealed passives contain verbal, phrasal structure⁷ (which I argue to be a passive VoiceP in section §3) selected by N_{-ing} and N_{-ing} is (indirectly⁸) selected by verbs of requirement like *need*. Furthermore, I follow Hantson (1984) in taking concealed passives to involve A-movement of PRO within the gerund, with PRO being obligatorily controlled by the subject of the predicate of requirement, rather than raising of the subject of the predicate of requirement (*pace* Huddleston 1971: 153–154).

- (17) That patient_i needs [PRO_i operating on _i immediately by a specialist].

Standard tests favor the control analysis over the raising alternative. For instance, idiomatic meaning is not preserved in this construction (on idioms as a diagnostic tool for raising in general, see Postal 1974). Thus, the idiom in (18) is not licensed in a concealed passive (thanks to Erik Zyman for suggesting this line of inquiry to me; see also Hantson 1984: 102–103, n. 3).

- (18) # The cat needs letting out of the bag. (cf. ‘The cat needs to be let out of the bag.’)

Moreover, expletive *there* is not licensed in the concealed passive:

- (19) * There {need / needs} being more substantive changes in the department.
(cf. ‘There need to be more substantive changes in the department.’)

Expletives are only licensed as arguments of raising predicates and not as arguments of control predicates (see Perlmutter 1970 and Postal 1974: 369). Therefore, if (19) involves control, its

⁷Supporting evidence comes from the fact that concealed passives support *by*-phrases and manner adverbials:

- (i) This NDA is dense and needs reading carefully by a good lawyer.

⁸Given that overt determiners can appear in concealed passives (see footnote 5), DP must be able to intervene between the verb of requirement and N_{-ing}P. I tentatively propose chains of selection to mediate these seemingly non-local relationships: verbs like *need*, etc. select a particular D head which selects N_{-ing}.

unacceptability is accounted for.⁹

To briefly summarize, there is empirical support for the following generalization for English:

(20) **P-stranding A-movement generalization, part 1**

Both non-P-stranding and P-stranding A-movement are possible in verbal *be* and *get* passives, in adjectival passives, and in concealed passives.

If direct objects of transitive verbs are assigned structural accusative Case, and if complements of P are assigned non-structural oblique Case, as proposed in section §1, then we can translate (20) into a generalization about Case suppression under A-movement in English:

(21) **Case suppression under A-movement generalization, part 1**

Both structural accusative Case and non-structural oblique Case are suppressed under A-movement in verbal *be* and *get* passives, in adjectival passives, and in concealed passives.

2.2 Where P-stranding A-movement is not allowed

This parallelism between P-stranding and non-P-stranding A-movement—and hence between suppression of structural accusative Case and suppression of non-structural oblique Case—breaks down, however, in certain other domains.

2.2.1 *Pseudomiddles

First are middles: unlike DP internal arguments of transitive verbs ((22)), nominal complements of P cannot undergo A-movement to [Spec, TP] in middle formation for many speakers ((23)) (see also Roberts 1987: 222, Fagan 1988: 194–195, Pesetsky 1995: 263, (636), Den Dikken and Sybesma 1998: 17, (35), Blight 2000: 89, Huddleston 2002a: 308, fn. 63, Abels 2003: 231, fn. 137, Postal 2004: 260, (70a), and Postal 2010: 202, (5.10)–(5.13)).

(22) *Middle*

- a. That kind of patient probably won't treat very easily without chemotherapy.

⁹Note that PRO movement in the concealed passive appears to be obligatory, as there cannot be an overt lexical subject inside the complement of the *need*-predicate separating PRO from its binder (see also Clark 1985: 33, (17)):

- (i) * That patient_i needs [a specialist's operating on PRO_i].

This is likely related to the obligatory subjecthood of PRO (for discussion, see Landau 2013: 108–115), though I will not attempt an explanation of either restriction here.

- b. That kind of idea doesn't cite all that easily.
- c. Sketchy plans like that don't authorize very easily.
- d. Walls like this don't deface all that easily.
- e. Our steel safes just don't break all that easily.

(23) **P-stranding middle/Pseudomiddle*

- a. * That kind of patient probably won't operate on very easily without the right kind of surgical tools.
- b. * That kind of idea doesn't refer to all that easily.
- c. * Sketchy plans like that don't sign off on very easily.
- d. * Walls like this don't write on all that easily.
- e. * Our steel safes just don't break into all that easily.
- f. i. This thermostat doesn't {install/*rely (on)} easily.
- ii. Large murals don't {paint/*work (on)} easily. (Merchant 2017: 16, (38)–(39), (41))
- g. i. * Gromit doesn't lie to easily.
- ii. * WW2 doesn't talk about easily. (Newman 2020: Appendix A, 3, (6))

Notably, some idiolects marginally or fully accept certain pseudomiddles, as has been noted in the prior literature (see especially Keyser and Roeper 1984: 400, Den Dikken and Sybesma 1998: 17, fn. 23, Newman 2020: Appendix A, 3, and Wilson 2021: 128). In section §4.1, I will argue that such interspeaker variation is to be expected if P-stranding A-movement is lexically licensed. In a nutshell, in the more restrictive idiolects, only Voice[Pass] licenses P-stranding A-movement via suppression of oblique Case, whereas in less restrictive idiolects which permit pseudomiddles, Voice[Mid] can also suppress oblique Case and license P-stranding. For the time being, however, I will concern myself only with the more restrictive idiolects' judgments and so I continue to mark the examples with a '*' (rather than a '%').¹⁰

¹⁰Note that particle verbs pattern with transitive verbs in permitting middles in all the idiolects I have surveyed (see Bolinger 1971: 180 and Johnson 1991: 591, (35)).

- (i) This PC still backs up (with the right equipment).

This is expected if particles are intransitive Ps that can cooccur with verbal direct objects (e.g. Emonds 1972 and McIntyre 2007).

2.2.2 *P-stranding *-able*

Similar to middles, we also find a ban on P-stranding with A-movement inside *-able* adjectives for many speakers. It has long been recognized that certain *-able* adjectives display ‘passive’ verb-like properties: they can be predicated of a nominal corresponding to the internal argument of the verb which *-able* attaches to ((24a)—though they crucially cannot be predicated of the verb’s external argument, see (24b)), they permit *by*-phrases ((25)), and they can embed transparent verbalizing morphology ((26)) (see Chapin 1967: 61–110, Kayne 1981c: 155–156, Fabb 1984: 219–225, Roeper 1987, Roeper and van Hout 1999, 2009, McGinnis 2010, and Oltra-Massuet 2013).

- (24) a. They teach that enlightenment is attainable by anyone.
 b. * They teach that anyone is attainable ((of) enlightenment).
- (25) a. Such patients are treatable only by specialists.
 b. The metadata of your paper need to be clearly presented for it to actually be citable by other researchers.
 c. Plans this important aren’t authorizable by anyone but the highest-ranking generals.
 d. Such walls are entirely defaceable by anyone with a can of spray paint.
 e. Safes made this cheaply are breakable by anyone with a medium-sized hammer.
- (26) a. These waters are navig-at-able only by seasoned sailors.
 b. That kind of risk needs to be made more easily divers-ifi-able by uninformed traders.

I therefore propose that A-movement is involved in the formation of such deverbal *-able* adjectives.¹¹ In particular, like adjectival passives, I posit null operator movement inside *-able* adjectives creating a predicate of individuals:

- (27) Such patients are [_{AP} $\lambda x \dots$ $\overbrace{Op_i \text{ treatable } __}_i$ only by specialists].

Notably, however, for many speakers, P-stranding *-able* adjectives are totally unacceptable:

- (28) **Pseudopassive -able*
 a. * Such patients are oper(at)able on only by specialists.
 b. * The metadata of your paper need to be clearly presented for it to actually be referable to by other researchers.
 c. * Plans this important aren’t {signable off on/signoffable on/signoffonable} by anyone but the highest-ranking generals.

¹¹Contrast non-verb-derived *-able* adjectives like *fashionable*, which presumably do not involve A-movement.

- d. * Such walls are entirely writable on by anyone with a can of spray paint.
- e. * Safes made this cheaply are breakable into by anyone with a modicum of lock-picking knowledge.

As with (pseudo)middles, however, there is interspeaker variation in this domain (see Hall 1877: 34, Marchand 1969: 230, Quirk et al. 1972: 1006, Fabb 1984: 220, fn. 1, Kayne 1984: 140–141, and Bauer and Huddleston 2002: 1707). In section §3.4, I account for this variation by positing differences in the size of the complement of *A-able* across speakers. Taking P-stranding A-movement (and suppression of oblique Case) to be licensed by Voice[Pass], for those speakers who permit P-stranding *-able* adjectives, *A-able* can embed a structure as large as Voice_[Pass]P, while for all other speakers, the complement of *A-able* is maximally vP. For the time being, I will mark only the judgments of the more restrictive idiolects in the examples for ease of exposition.¹²

2.2.3 *P-stranding genitive preposing (i.e. *nominal ‘pseudopassive’)

We also find a ban on P-stranding with A-movement inside nominals. The internal argument of complex event nominals derived from transitive verbs (and more specifically of *-tion* nominalizations) can appear in one of two positions: in a postnominal position marked by *of*, as in (29), or in a prenominal position marked by the Saxon genitive *'s*, as in (30) (see, e.g., Chomsky 1970,

¹²It is also worth mentioning that the behavior of true stranded prepositions contrasts with the behavior of particles in the formation of *-able* adjectives. For the same speakers who reject all of the examples in (28), particles can (sometimes marginally) be embedded inside *-able* adjectives:

- (i) fix-up-able, take-out-able, piss-off-able (McIntyre 2013b)

Neeleman and Weerman (1993: 439, (13)) present similar data from Dutch, though they judge English *call-up-able* to be ungrammatical (p. 468, (71))—a judgment that I disagree with. Observe further that attaching *-able* directly to the verb and stranding the particle is, in many cases, noticeably more degraded:

- (ii) ??/* fixable up, takeable out, pissable off

Other factors may be relevant, however. For instance, Erik Zyman (*pers. comm.*) points out to me that, in his idiolect, stranding the particle outside of the *-able* adjective is necessary with higher register V+Part combinations such as *lay out* on the meaning ‘set forth, expound,’ yielding the contrast in (iii):

- (iii) a. * lay-out-able b. ? layable out

Interestingly, duplicating the *-able* suffix on both the verb and particle is somewhat in the middle of (i) and (ii):

- (iv) ? fixable uppable, takeable outable, pissable offable

Anderson 1978, 1979, Kayne 1984: 137–138, Borer 2003, 2013, and many others). I assume with Anderson (1978, 1979) *et seq.* (see also especially van Hout et al. 2013: 140ff.), *pace* Grimshaw (1990) and Williams (1994), that the prenominal internal argument undergoes A-movement to its surface position, as shown in (31). I refer to this movement as *genitive preposing*.

- (29) a. the treatment of the patient by a specialist
 b. the citation of that idea by experts
 c. the authorization of the plan by the general
 d. the defacement of the wall by a graffiti artist

(30) *Genitive preposing*

- a. the patient's treatment by a specialist
 b. that idea's citation by experts
 c. the plan's authorization by the general
 d. this wall's defacement by a graffiti artist

(31) *A-movement in genitive preposing*

[DP the patient_i [D' 's [NP treatment ____i by a specialist]]]

Genitive preposing is often described as a kind of ‘passivization’ within the nominal, parallel to verbal passivization as in *The patient was treated by a specialist* (e.g., Hamamatsu 2013). However, unlike verbal passives, genitive preposing is not compatible with P-stranding.¹³ When the nominal has a PP internal argument, the complement of P must remain in situ ((32)); it cannot raise to a prenominal position ((33)) (see also Emonds 1970: 80, (84), Jackendoff 1977: 86, Kayne 1984: 141, (43), Keyser and Roeper 1984: 408, fn. 28, Abney 1987: 142–143, Roberts 1987: 246, Fagan 1988: 194, Den Dikken and Sybesma 1998: 20, (42), and Postal 2004: 261, (70g)).¹⁴

- (32) a. ? the operation on the patient by a specialist
 b. the reference to that idea by experts
 c. the approval of the plan by the general
 d. the reliance on foreign oil by U.S. manufacturers
 e. the abstention from voting by disgruntled workers
 f. the organized reaction to the austerity measures by certain members of the populace (slightly adapted from Borer 2013: 181, (2a))

¹³See Longobardi (2001: 564–566) for other properties distinguishing genitive preposing from clausal passivization.

¹⁴See Williams (1974: 24, 1982: 284) and Emonds (1985: 113) for the possibly related observation that *of* cannot be stranded under A-movement inside the nominal (e.g. **the patient's treatment of ___ by a specialist*).

- (33) **P-stranding genitive preposing*
- a. * the patient’s operation on by a specialist
 - b. * that idea’s reference to by experts
 - c. * the plan’s approval of by the general
 - d. * foreign oil’s reliance on by U.S. manufacturers
 - e. * voting’s abstention from by disgruntled workers
 - f. * the austerity measures’ reaction to by certain members of the populace
 - g. i. * the president’s admiration for (cf. admiration for the president)
 - ii. * Panama’s accord with (cf. accord with Panama)
 - iii. * the university’s allegiance to (cf. allegiance to the university)
- (slightly adapted from Anderson 1978: 16, (7))

The same ban on P-stranding genitive preposing is evident under A-movement of PRO to a prenominal position inside *-tion* nominalizations. Complex event nominals can receive a ‘passive’-like interpretation within the complement of predicative adjectives like *prone*, *subject*, *vulnerable*, *susceptible*, etc., as in the following:

- (34) Such data_{*i*} are [_{AP} prone to [PRO_{*i*} manipulation ____{*i*} by self-serving scientists]].
 (~ ‘prone to PRO_{*i*} being manipulated by self-serving scientists’)
- (35) The patient_{*i*} will be [_{AP} subject to [PRO_{*i*} treatment ____{*i*} for two hours by specialists]].
 (~ ‘subject to PRO_{*i*} being treated for two hours by specialists’)
- (36) That kind of bill_{*i*} is [_{AP} susceptible to [PRO_{*i*} rejection ____{*i*} by the opposing party]].
 (~ ‘susceptible to PRO_{*i*} being rejected by the opposing party’)

These examples are striking because, as Alexiadou et al. (2007: 499–500) observe, the presence of a *by*-phrase forces a complex event reading of the nominal, in the sense of Grimshaw (1990). Internal arguments of such complex event nominals are obligatory and, in the standard case, overt (see also Hornstein 1977: 148–149, fn. 12):

- (37) the destruction *(of the city) by the enemy (Alexiadou et al. 2007: 500, (48b))

For this reason, I propose that the (relevant) internal arguments of the complex event nominals in (34)–(36) are syntactically projected, albeit as null PRO, which is obligatorily controlled by the nominal which the AP is predicated of. Empirical support for the hypothesized A-movement of

PRO to a prenominal position comes from the fact that PRO movement cannot strand P, paralleling genitive preposing with overt nominals: compare (34)–(36) with (38)–(40).

- (38) * Such data_i are [_{AP} prone to [PRO_i interference with ____i by self-serving scientists]].
 (cf. ‘prone to PRO_i being interfered with by self-serving scientists’)
- (39) * The patient_i will be [_{AP} subject to [PRO_i operation on ____i for two hours by specialists]].
 (cf. ‘subject to PRO_i being operated on for two hours by specialists’)
- (40) * That kind of bill_i is [_{AP} susceptible to [PRO_i objection to ____i by the opposing party]].
 (cf. ‘susceptible to PRO_i being objected to by the opposing party’)

PRO A-movement within complex event nominals thus behaves in all respects like overt genitive preposing, and I henceforth assign the two the same analysis.

Finally, note that the ban on P-stranding genitive preposing extends to deverbal *-ing* nominals, as shown by the following examples adapted from Clark (1985: 53, (54), (56)) (see also Stowell 1981: 476, n. 7, (vi)–(vii)):¹⁵

¹⁵It has been claimed in the prior literature that genitive preposing of internal arguments is in general unavailable inside *-ing* nominals (see e.g. Kayne 1981a: 111, fn. 29 and Roeper 1987: 306):

- (i) a. the committee’s formation (by the officials)
 b. * the committee’s forming (by the officials) (slightly adapted from Borer 2013: 185, (14a–b))

I agree that there is a contrast between these examples but I find the difference overstated. Relatively acceptable examples can be formed, as in (ii), and naturally occurring examples are not too difficult to find ((iii)). I use the “Google gamma” (Horn and Abbott 2012; Horn 2013; Tyler and Wood 2019; Zyman 2022a) as a final diacritic on examples found using Google.

- (ii) a. the disassembling of the safe by the robbers
 b. the safe’s disassembling by the robbers
- (iii) a. Most cases of abusive judicial review involve [its wielding by an incumbent regime against the electoral opposition].^γ
 b. This article addresses one dimension of government hacking technology: [its purchasing by state actors].^γ

The unacceptability of (41b) and (42b) therefore cannot solely be attributed to the reduced acceptability of genitive preposing within *-ing* nominals. Their complete ill-formedness must be attributable at least in part to illicit P-stranding.

Note that there is some idiolectal variation in this domain as well. Erik Zyman (*pers. comm.*) remarks that P-stranding genitive preposing inside deverbal *-ing* nominals is possible for him in at least the following examples:

- (iv) a. Your Sharpie-obsessed toddler’s scribbling on that whiteboard is the least of my worries right now.
 b. % That whiteboard’s scribbling on by your Sharpie-obsessed toddler is the least of my worries right now.
- (v) a. The gas station attendant’s tampering with the motor shocked us at first, but that was what ultimately enabled us to make it to the event on time.

- (41) a. Any sleeping in this bed by Washington (will be considered an act of treachery).
 b. * This bed's sleeping in by Washington (will be considered an act of treachery).
- (42) a. Any looking into this problem by Congress (will be considered a serious threat).
 b. * This problem's looking into by Congress (will be considered a serious threat).

Likewise with P-stranding A-movement of PRO inside deverbal *-ing* complements of *prone*, etc.:¹⁶

- (43) * Such data_i are [_{AP} prone to [PRO_i interfering with ____i by self-serving scientists]].
- (44) * The patient_i will be [_{AP} subject to [PRO_i operating on ____i for two hours by specialists]].
- (45) * That kind of bill_i is [_{AP} susceptible to [PRO_i objecting to ____i by the opposing party]].

In summary, although non-P-stranding A-movement is licit under genitive preposing, the same kind of A-movement stranding P is illicit. This asymmetry was shown to hold for genitive preposing of overt and covert (i.e. PRO) nominal arguments in deverbal *-tion* and *-ing* nominalizations.

2.2.4 *P-stranding object shift

The derivation of the 'DP < Part' order with English particle verbs is often analyzed as involving A-movement of the object DP (typically to a specifier of a verbal projection such as vP or μ P; see especially Johnson 1991):

- (46) *A-movement in English object shift with a particle verb*
- a. I looked up the patient. b. I looked the patient_i up ____i.

If we adopt this analysis, it is striking that objects of prepositions can never shift over particles:¹⁷

- b. % The motor's tampering with by the gas station attendant shocked us at first, but that was what ultimately enabled us to make it to the event on time.

Though the precise constraints (whether semantic, lexical, or otherwise) governing (im)possible P-stranding in genitive preposing in such idiolects have yet to be determined, we can straightforwardly account for the variation in one of two ways given my analysis to be proposed in section §5. For speakers for whom all of (iv)–(v) are acceptable, either the relevant *-ing* nominals can embed Voice[Pass]P or else D_s can suppress non-structural oblique Case.

¹⁶Contrast non-P-stranding A-movement of PRO, which is acceptable:

- (i) Those apps render your health data_i [_{AP} susceptible to [PRO_i tracking ____i by all sorts of companies]].

¹⁷And, as is well known (see Kayne 1985: 104–105 and Johnson 1991: 594, (44)), PPs cannot shift over particles:

- (i) * I looked [_{PP} to the patient] up ____{PP}.

(47) *P-stranding object shift

a. I looked up to the patient.

b. * I looked the patient_i up to _j.

This is, to the best of my knowledge, the first time the asymmetry between (46b) and (47b) has been recognized, and it instantiates yet another instance of failed P-stranding under A-movement.

2.2.5 *P-stranding unaccusatives

P-stranding is likewise impossible under A-movement with unaccusative verbs, i.e. there are no *pseudounaccusatives*, though demonstrating this fact requires some care. I reserve the term “pseudounaccusative” for describing A-movement out of a PP internal argument of an unaccusative verb in the active voice. Although a handful of prior works have proposed a similar ban on pseudounaccusatives, the data marshaled in favor of this conclusion have either been misanalyzed or else suffer from independent confounds. For instance, Drummond and Kush (2015: 458, (132)) refer to (48), which involves illegal pseudopassivization with an unaccusative verb, as a “pseudounaccusative” (see also Drummond 2011: 205, (402)).

(48) * This bed was died in.

Taking *die* to be an unaccusative verb, we can attribute the unacceptability of (48) to the much more general ban on passivization of unaccusative verbs (Perlmutter 1978; Perlmutter and Postal 1984; Merchant 2017); see section §3.2 for additional discussion. Crucially, however, (48) does not show that P-stranding unaccusative A-movement is impossible in the active voice.

Furthermore, Keyser and Roeper (1984: 400) cite the following example as evidence for a ban on pseudounaccusatives (see also Fagan 1988: 192, (53b) and Wilson 2021: 115ff.):

(49) * The room broke into.

(Keyser and Roeper 1984: 400, (57a))

The problem is that this and similar examples have a separate, ungrammatical parse as active unergative or causative verbs with illegal P-stranding A-movement. On the confounding parse, (49) is ungrammatical for the same reason that **The food devoured* is (e.g. the θ -criterion, Chomsky 1981: 36). I therefore set aside verbs like *break* which undergo the causative alternation.

Instead, we can detect the ban on P-stranding unaccusatives by examining PP experiencers of raising verbs with finite CP complements, as in the following:

- (50) a. It seemed [to Mike] yesterday [that we were given too much credit].
 b. It appeared [to Joni] then [that they might be spies].

As McGinnis (1998: 203–204) and Nevins (2004: 301–303) observe, P-stranding A-movement of the experiencer of an unaccusative raising verb to [Spec, TP] is impossible:

- (51) **P-stranding unaccusatives*
- a. * Mike_i seemed [to ____i] yesterday [that we were given too much credit].
 b. * Joni_i appeared [to ____i] then [that they might be spies].

By contrast, non-P-stranding A-movement of the DP internal argument of unaccusative verbs to [Spec, TP] is perfectly acceptable:

- (52) Joni_i suddenly appeared ____i to them.

Unaccusatives therefore constitute a fifth context in which P-stranding A-movement is blocked.¹⁸

2.2.6 Summary

We have seen, then, that P-stranding A-movement is in many respects more restricted than non-P-stranding A-movement. This subsection has provided empirical support for the descriptive generalization in (53).

- (53) **P-stranding A-movement generalization, part 2**
 Non-P-stranding A-movement, but not P-stranding A-movement, is possible in genitive

¹⁸Note additionally that the degradation seen in (51) is not due to the *P-CP effect familiar from \bar{A} -movement, on which see e.g. Kuno (1973: 382) (who attributes the observation to Judith Aissen (*pers comm.*)), Langendoen and Pullum (1977), Fodor (1978: 450, (47); 453–454), Stowell (1981: 207–208), Moulton (2015: 322–324), and Lebowksi (2021). Bruening (2018) shows that, in some idiolects, \bar{A} -movement stranding P in front of a *that*-CP improves with an intervening adverbial (see also Rauber 2019: 1–2 and Zyman 2022b: 151, fn. 26).

- (i) Which official does he need to disclose to ??(in writing) that he is married?
 (slightly adapted from Bruening 2018: 383, (44e))

No amelioration is evident with the P-stranding unaccusative A-movement in (51) (thanks to Erik Zyman for pointing out the relevance of this paradigm to me). The unacceptability of these examples must therefore have a separate source.

preposing, object shift, and unaccusatives, and for at least some speakers this asymmetry extends to A-movement in middles and *-able* adjectives.

As with the first part of the P-stranding A-movement generalization in (20), we can translate (53) into Case-theoretic terms, as in (54).

(54) **Case suppression under A-movement generalization, part 2**

Structural accusative Case, but not non-structural oblique Case, is suppressed under A-movement in genitive preposing, object shift, and unaccusatives, and for at least some speakers this asymmetry extends to A-movement in middles and *-able* adjectives.

The results of my findings for differences between P-stranding and non-P-stranding A-movement are summarized in (55).

(55) *P-stranding reveals two kinds of A-movement in English*

	non-P-stranding (suppresses structural accusative Case)	P-stranding (suppresses non-structural oblique Case)
a. <i>Verbal passive</i>	✓	✓
b. <i>Adjectival passive</i>	✓	✓
c. <i>Concealed passive</i>	✓	✓
d. <i>Middle</i>	✓	✗
e. <i>-able</i>	✓	✗
f. <i>Genitive preposing</i>	✓	✗
g. <i>Object shift</i>	✓	✗
h. <i>Unaccusative</i>	✓	✗

In section §3, I will argue that P-stranding A-movement in English, which coincides with the suppression of oblique Case, requires a locally c-commanding lexical licenser; in the standard case, this licenser is Voice[Pass]. Once oblique Case is suppressed, the A-moved nominal can be assigned a different, structural Case (typically nominative or genitive) and can Agree with higher functional heads like T^0 . Consequently, I argue, only those structural environments which permit P-stranding A-movement must (be able to) contain Voice[Pass]. Before detailing this lexical licensing account of non-structural Case suppression, however, I will present novel data from Norwegian—one of the few languages like English to permit P-stranding A-movement—which attest to strikingly similar restrictions on P-stranding.

2.3 Parallel restrictions on P-stranding A-movement in Norwegian

In this section, I report the results of a preliminary investigation into Norwegian demonstrating that, as in English, P-stranding is only available in a subset of A-movement types.¹⁹ My findings are summarized in (56).

(56) *P-stranding A-movement is restricted in Norwegian*

	P-stranding A-movement (suppresses non-structural oblique Case)
a. <i>Verbal periphrastic passive</i>	✓
b. <i>Adjectival passive</i>	✓
c. <i>-able</i>	✗
d. <i>Unaccusative</i>	✗

The English data presented in sections §2.1–2.2 are not, therefore, *sui generis*.

Consider first those environments which license P-stranding A-movement. Norwegian allows P-stranding in periphrastic passives consisting of the auxiliary verb *bli* and the lexical verb in passive participial form, as in (57) (see Åfarli 1992 for details on passives in Norwegian).²⁰ Note that, henceforth, all Norwegian data use the Bokmål writing style.

(57) Den pasienten ble operert på av erfarne leger.
 that patient.DEF BLI.PAST operated on by experienced doctors
 ‘That patient was operated on by experienced doctors.’

Adjectival pseudopassives are relatively acceptable with a pre-adjectival adverb:²¹

(58)

¹⁹All Norwegian judgments not explicitly attributed to a source come from Charlotte Sant (*pers. comm.*), who I am extremely grateful to.

²⁰I set aside so-called ‘*s*-passives’ in Norwegian—non-active verbs formed with a suffixal *-s* morpheme—which are both aspectually and modally marked relative to *bli*-passives. Although Åfarli (1992: 15–16) analyzes *s*-passives as true passive verbs, owing to their compatibility with *by*-phrases headed by *av*, Fábregas and Putnam (2014, 2020) argue that *s*-passives are (or at least can be) middles (and see Ackema and Schoorlemmer 2017 for discussion of other passive-like middles, or, in their terminology, “Type II middles”). As has been noted in the previous literature, *s*-passives permit P-stranding (e.g. Christensen 1986: 156–158; Åfarli 1992: 18–19; Engdahl and Laanemets 2015; Fábregas and Putnam 2020: 62, (24b))—a fact which either reinforces the conclusion that passives permit P-stranding or demonstrates that at least some idiolects of Norwegian, like some idiolects of English, allow pseudomiddles.

²¹The adverb cannot, however, follow the adjective (see Christensen 1986: 156, (66)–(67)):

- (i) a. *et gått ofte på tak
 a walked often on roof
 (int.) ‘a frequently walked on roof’

- a. ? et ofte gått på tak
 a often walked on roof
 ‘a frequently walked on roof’
- b. ? en ofte lyttet til sang
 a often listened to song
 ‘a frequently listened to song’
- c. ? et ofte sett på bilde
 a often looked on picture
 ‘a frequently looked at picture’

In both respects, Norwegian parallels English.

Next, consider those environments which block P-stranding A-movement. ‘Pseudopassive’ *-able* adjectives formed with the suffixes *-lig* and *-bar* are unacceptable:²²

- (59) a. *Dette taket er ikke {på-gåe-lig / gåe-lig på / på-gå-bart / gå-bart på}.
 this roof.DEF is not {on-walk-able / walk-able on / on-walk-able / walk-able on}
 (int.) ‘This roof is not walkable on.’
- b. *Denne sangen er ikke {til-lytte-lig / lytte-lig til / til-lytt-bar / lytt-bar til}.
 this song.DEF is not {to-listen-able / listen-able to / to-listen-able / listen-able to}
 (int.) ‘This song is not listenable to.’
- c. *Dette bilde er ikke {på-se-lig / se-lig på / på-se-bar / se-bar på}.
 this picture.DEF is not {on-see-able / see-able on / on-see-able / see-able on}
 (int.) ‘This picture is not lookable at.’

Furthermore, Norwegian bans ‘pseudounaccusatives’ with PP experiencers of raising verbs:

- (60) a. Det virket [på Marit] [som om Jon var syk].
 there seemed [to Mary] [as if John was ill]
 ‘It seemed [to Mary] [as if John was ill].’
- b. * Marit virket [på ___] [som om Jon var syk].
 Mary seemed [to ___] [as if John was ill]
 (int.) ‘Mary seemed [to ___] [as if John was ill].’

(slightly adapted from Hestvik 1986: 193, (25a–b))

-
- b. * en lyttet ofte til sang
 a listened often to song
 (int.) ‘a frequently listened to song’
- c. * et sett ofte på bilde
 a looked often on picture
 (int.) ‘a frequently looked at picture’

I will not attempt to explain this asymmetry here.

²²The availability of *by*-phrases headed by *av* ‘by’ suggests that *-lig/-bar* adjectives in Norwegian are indeed phrasal and formed via A-movement:

- (i) tekst som er {leselig / lesbar} av personer med fargeblindhet
 text that is {readable / readable} by people with colorblindness
 ‘text that is readable by people with colorblindness’

In summary, while not comprehensive in its coverage, this subsection has demonstrated that Norwegian P-stranding A-movement is restricted in much the same way that English P-stranding A-movement is. It is the goal of the next section to show how such restrictions are plausibly linked to lexical properties of functional heads.

3 Voice[Pass] suppresses oblique Case, licensing P-stranding A-movement

We have now seen that P-stranding A-movement is restricted in English and Norwegian in ways that non-P-stranding A-movement is not, as summarized in (61).

(61) **P-stranding A-movement generalization**

a. (= (20)) **Part 1**

Both non-P-stranding and P-stranding A-movement are possible in verbal *be* and *get* passives, in adjectival passives, and in concealed passives.

b. (= (53)) **Part 2**

Non-P-stranding A-movement, but not P-stranding A-movement, is possible in genitive preposing, object shift, and unaccusatives, and for at least some speakers this asymmetry extends to A-movement in middles and *-able* adjectives.

I contend that the source of this restriction lies in the lexically specified capacity of certain heads to suppress non-structural Case assigned to nominals in their c-command domains:

(62) **Case suppression under A-movement generalization**

a. (= (21)) **Part 1**

Both structural accusative Case and non-structural oblique Case are suppressed under A-movement in verbal *be* and *get* passives, in adjectival passives, and in concealed passives.

b. (= (54)) **Part 2**

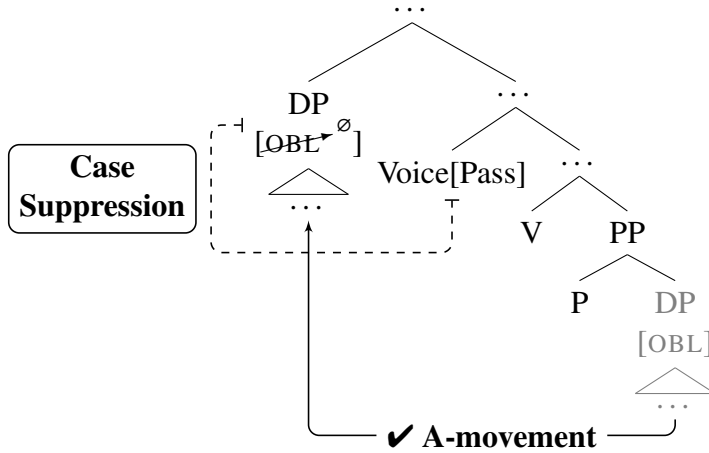
Structural accusative Case, but not non-structural oblique Case, is suppressed under A-movement in genitive preposing, object shift, and unaccusatives, and for at least some speakers this asymmetry extends to A-movement in middles and *-able* adjectives.

In particular, I submit that P-stranding A-movement is possible if and only if P is locally c-commanded by Voice[Pass], due to the fact that Voice[Pass] is the only head lexically specified to suppress the oblique Case assigned by P to its complement. While Voice[Pass] is present in verbal *be* and *get* passives, adjectival passives,²³ and concealed passives, where P-stranding A-movement

²³Contrast many phrasal analyses of adjectival passives which do not posit a passive Voice head in the complement of the adjectivalizer/stativizer, including Kratzer (1994, 2000), Embick (2004), and Bruening (2014: esp. 385, (62)).

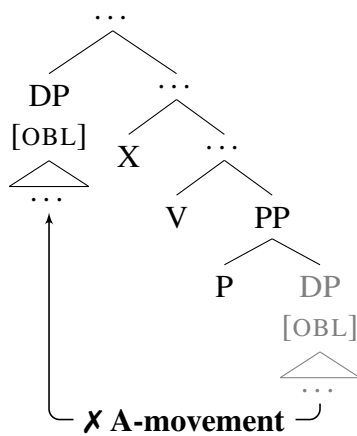
is permitted ((63)), Voice[Pass] is absent in genitive preposing,²⁴ object shift, unaccusatives, middles, and *-able* adjectives, where P-stranding A-movement is blocked ((64)).²⁵

(63) *Structure shared by verbal be and get passives, adjectival passives, and concealed passives*



(64) *Structure shared by middles, -able adjectives, genitive preposing, object shift, and unaccusatives*

, where X is not Voice[Pass].



²⁴Or rather Voice[Pass] *can be* absent in genitive preposing; see section §3.1 for additional discussion.

²⁵This proposal contrasts with previous analyses which posit a syntactically projected passive verb phrase in contexts where P-stranding A-movement is illicit. For instance, Borer (2013, 2020) argues that complex event nominals (in the sense of Grimshaw 1990) whose external argument either is not realized overtly or is contained in a *by*-phrase embed a passive VP; Borer refers to these as “Short Argument Structure Nominals.”

- (i) the formation/forming of the committee (by the dean) (Borer 2020: 111, (2a))

Similarly, McGinnis (2010), Oltra-Massuet (2013), and Alexiadou (2018), among others, argue that *-able* adjectives can embed a passive VoiceP. As putative evidence in favor of such an analysis, they point to, among others, the availability of *by*-phrases in certain *-able* adjectives. However, if my assertion that the impossibility of P-stranding A-movement entails the absence of Voice[Pass] is correct, then Voice[Pass] must be absent in both deverbal nominalizations and *-able* adjectives, *pace* the aforementioned literature. The alleged ‘passive’-like properties of deverbal nominalizations and *-able* adjectives must therefore be accounted for without Voice[Pass]. In section §3.3, I make some progress towards this goal: I argue that *by*-phrases attach to the phrase introducing the external argument (i.e. vP), which is distinct from Voice_[Pass]P, and that nominalizations and *-able* adjectives embed vP rather than VoiceP.

At its core, this proposal embodies the novel claim that A-movement of a nominal previously assigned non-structural Case requires a lexically specified, locally c-commanding head. This is to be contrasted with A-movement of nominals assigned structural Case (e.g. structural accusative), which does not require lexical licensing and hence is unrestricted. My proposal thus differs from many previous approaches which tied the availability of P-stranding A-movement to an optional feature of P(P), such as PP being optionally Case-deficient (see Abels 2003: 233–234, Truswell 2008, and Richards 2017). These previous approaches fail to predict the impossibility of P-stranding A-movement in the absence of Voice[Pass] without additional assumptions.²⁶

The remainder of this section is devoted primarily to marshaling additional evidence in favor of the lexical licensing approach to P-stranding A-movement and suppression of non-structural oblique Case. In section §3.1, I demonstrate that erstwhile unacceptable P-stranding A-movement under genitive preposing becomes acceptable just in case Voice[Pass] appears inside the deverbal nominal. Then, in section §3.2, I show that an independent diagnostic for non-active Voice—namely, *Perlmutter’s Generalization*—supports an analysis in which P-stranding A-movement is only permitted in the presence of Voice[Pass]. This section ends with two excursuses. The first (section §3.3) details the consequences of my proposal for analyses of the attachment site of *by*-phrases and for the sequence of heads in the verbal domain. The second (section §3.4) provides a lexically driven account of some speakers’ acceptance of pseudopassive *-able* adjectives. I postpone providing an explicit analysis of how exactly heads like Voice[Pass] suppress non-structural Case under A-movement until section §5.

3.1 Argument #1 for Voice[Pass] licensing P-stranding A-movement: POSS-ing nominals with overt passive auxiliaries

One strand of evidence pointing to the role that Voice[Pass] plays in licensing P-stranding A-movement comes from a closer examination of genitive preposing. I showed in section §2.2 that

²⁶Baltin and Postal (1996: 134–135, fn. 9) level a similar criticism against ‘reanalysis’ approaches to pseudopassives (e.g. van Riemsdijk 1978 and Hornstein and Weinberg 1981) which rely on a (possibly lexically determined) process of P-into-V incorporation. Without a means to limit incorporation to passive contexts, reanalysis analyses overgenerate and wrongly predict acceptable pseudomiddles, among others.

genitive preposing with many deverbal *-ing* nominals forbids P-stranding. The following provide additional support for this claim:

- (65) a. my operating on the patient (66) a. my breaking into the safe
b. * the patient's operating on by me b. * the safe's breaking into by me

Notably, however, when a verbal passive auxiliary like *be* overtly appears inside the *-ing* nominal, P-stranding is acceptable:

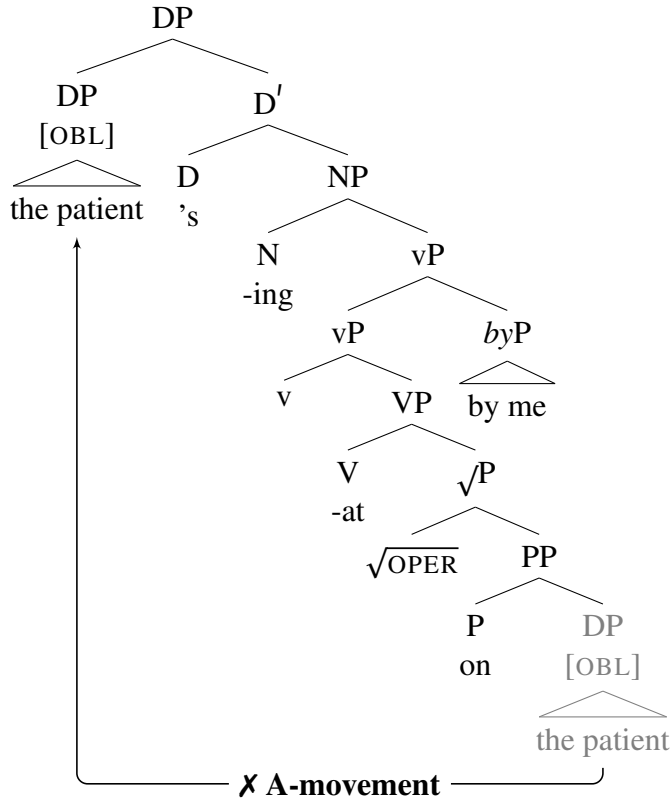
- (67) the patient's being operated on by me (68) the safe's being broken into by me

This asymmetry is straightforwardly accounted for given the following proposals: (i) Voice[Pass] is necessary for P-stranding A-movement, (ii) the auxiliaries *be* and *get* select VoiceP headed by Voice[Pass], and (iii) the N_{ing} selected by possessive D_s does not select VoiceP, but can select vP or $V_{aux}P$.²⁷ Note that, henceforth, I decompose verbs into an acategorial root, a categorizing head V ,²⁸ and one or more argument-introducing v heads.

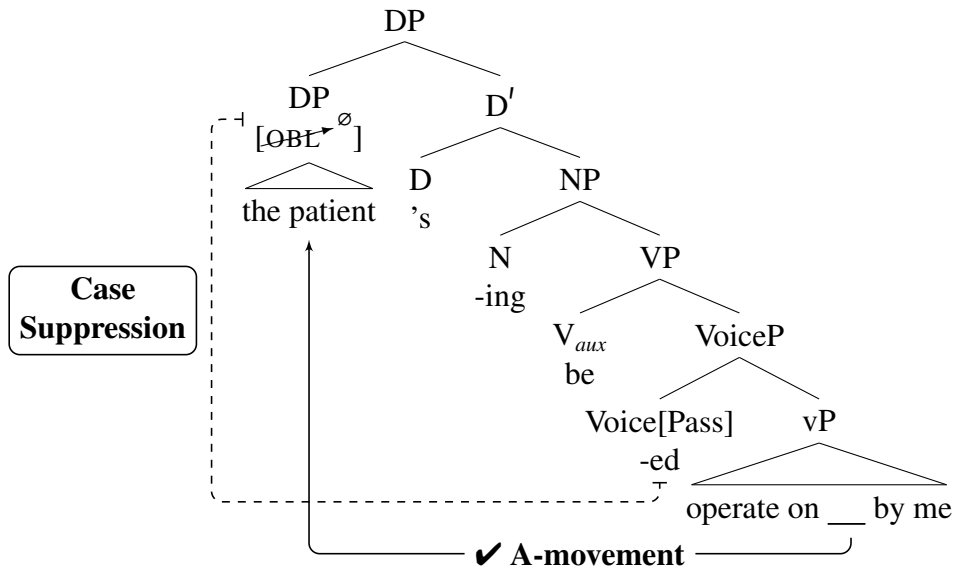
- (69) * *the patient's operating on by me*

²⁷This N_{ing} must be differentiated from the N_{ing} present in concealed passives, since the latter co-occurs with P-stranding and therefore must be able to select Voice[Pass] (see section §2.1). We can account for this difference by positing two homophonous yet distinct *-ing* heads: the N_{ing} which is present in deverbal nominalizations with genitive preposing is selected by D_s , while the N_{ing} which is present in concealed passives is selected (perhaps indirectly, see footnote 8) by verbs of requirement like *need*.

²⁸I follow Arregi and Nevins (2014) and Merchant (2019) in using 'big' N/V/A, not 'little' n/v/a, for categorization.



(70) *the patient's being operated on by me*



3.2 Argument #2 for Voice[Pass] licensing P-stranding A-movement: convergent evidence from Perlmutter's Generalization

Additional evidence that Voice[Pass] is the common denominator underlying P-stranding A-movement and oblique Case suppression comes from *Perlmutter's Generalization* (named by Merchant 2017):

- (71) **Perlmutter’s Generalization** (*to be revised in (87)*)
 In languages with passives of intransitives, at most unergatives can passivize; unaccusatives never passivize (Perlmutter 1978; Perlmutter and Postal 1984).

The following Dutch verbal passives illustrate this generalization: an unergative verb like ‘ski’ can be licitly passivized ((72)), while an unaccusative verb like ‘rot’ cannot be ((73)).

- (72) *Passive of unergative*
 Er wordt hier veel geskied. (Dutch; Perlmutter 1978: 168, (38))
 there is here much skied

- (73) * *Passive of unaccusative*
 * Door de lijken werd al gerot. (Dutch; Perlmutter 1978: 169, (51b))
 by the corpses was already rotted

If we adopt the hypothesis that distinct ‘flavors’ of *v* are present in transitive (v_{trans}), unergative (v_{unerg}), and unaccusative (v_{unacc}) structures, we can provide a provisional, lexically driven account of Perlmutter’s Generalization: it reduces to the selectional restriction in (74), which, though stipulative, suffices for present purposes (see Merchant 2017 for a related, but distinct, idea).

- (74) Voice[Pass] never selects for v_{unacc} .

Now, if Voice[Pass] can never combine with v_{unacc} per (74) and if Voice[Pass] is crucial for licensing P-stranding A-movement, we can formulate the following predictions:

- (75) a. A-movement structures which permit P-stranding contain Voice[Pass] by hypothesis and should therefore be incompatible with unaccusative verbs.
 b. A-movement structures which forbid P-stranding lack Voice[Pass] by hypothesis and should therefore be compatible with unaccusative verbs.

Setting aside middles for the moment, these predictions are borne out, as summarized in (76).

- (76) *Perlmutter’s Generalization supports the hypothesized distribution of Voice[Pass]*

	Voice[Pass] is...	P-stranding?	Unaccusatives?
<i>Verbal passive (be/get)</i>	... obligatory	✓	✗
<i>Concealed passive</i>	... obligatory	✓	✗
<i>Adjectival passive</i>	... optional (w/ Voice[Pass])	✓	✗
	(w/out Voice[Pass])	✗	✓
-able	... absent	✗	✓
<i>Genitive preposing</i>	... absent	✗	✓
<i>Object shift</i>	... absent	✗	✓

Consider first verbal and concealed passives. Both obligatorily contain Voice[Pass] and, consequently, license P-stranding (see section §2.1) and ban unaccusatives with(out) P-stranding.

(77) *Verbal passives...*

a. ... *without P-stranding ban unaccusatives*

* Er werd door de kinderen in Amsterdam gebleven.
 there was by the children in Amsterdam remained

(Dutch; Perlmutter 1978: 169, (54b))

b. ... *with P-stranding ban unaccusatives*

* The package was accumulated on by dust. (Perlmutter and Postal 1984: 101, (55a))²⁹

(78) *Concealed passives...*

a. ... *without P-stranding ban unaccusatives*

* The kids {could use/could stand} remaining in Amsterdam a few weeks longer.

b. ... *with P-stranding ban unaccusatives*

* This table {needs/requires} accumulating on by a bit more dust before I clean it.

Adjectival passives also license P-stranding, suggesting that they can contain Voice[Pass]P. In line with the prediction in (75a), adjectival pseudopassives cannot embed unaccusative verbs:

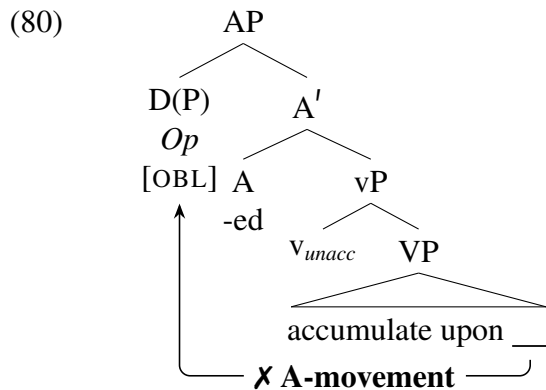
(79) *Unaccusative-based adjectival pseudopassives are impossible*

a. * a much accumulated-upon object

b. * a recently existed-under bridge

(Pesetsky 1995: 25, (56a, d))

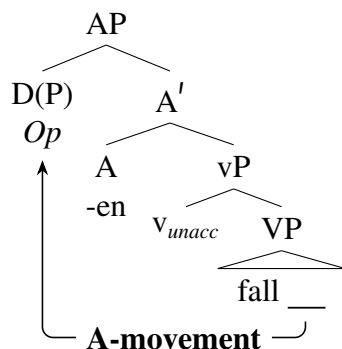
This is because adjectival passives containing v_{unacc} forbid Voice[Pass] per (74) and, without Voice[Pass], the oblique Case assigned by P will not be suppressed and A-movement of P's complement will be impossible:



²⁹See also Emonds (1970: 35–36, footnote).

Unlike verbal and concealed passives, however, adjectival participles need not always contain VoiceP. When A_{-en} selects a smaller-than-VoiceP structure like vP, unaccusative verbs are permitted (see McIntyre 2013a: §4 for additional examples and discussion):

- (81) *Unaccusative-based adjectival participles embed a smaller-than-VoiceP structure*
 a. That train seems recently arrived. (slightly adapted from Bruening 2014: 391, (76))
 b. (see also Bruening 2014: 391, (74))



Next, consider those A-movements where P-stranding is forbidden: *-able* adjectives, genitive preposing, and object shift. According to (75b), unaccusatives should be possible in these environments due to the absence of Voice[Pass], and this prediction is indeed borne out:

- (82) *Non-P-stranding -able adjective with an unaccusative*
 Those tomatoes are perishable.
 (83) *Non-P-stranding genitive preposing with an unaccusative*
 The train's frequent arrival alarmed us.
 (84) *Non-P-stranding object shift with an unaccusative*³⁰
 They turned out to be spies.

Perlmutter's Generalization thus by and large distinguishes the same two types of A-movement that P-stranding does: A-movement with Voice[Pass] can strand P and bans unaccusatives, whereas A-movement without Voice[Pass] cannot strand P and does not ban unaccusatives.

This brings us to middles. As we saw in section §2.2, P-stranding middles are unacceptable for many speakers. Given the formulation of Perlmutter's Generalization in (71) and our provisional, lexically driven account of it in (74), we predict that middles too ought to be able to embed

³⁰That (84) involves object shift as in (i) is admittedly speculative, since the putatively shifted DP undergoes further A-movement to [Spec, TP].

- (i) [TP They_i turned _i out [TP _i to be spies.]]

It remains to be seen whether there is additional evidence that object shift is compatible with unaccusatives.

unaccusatives. But this is not borne out: there are no middles of unaccusatives in languages like Dutch ((85)), despite the fact that (expletive) middles of unergatives are well-formed ((86)).

(85) **Middle of unaccusative in Dutch*

- a. ?? Het bejaardenhuis sterft rustiger dan het slagveld.
the old.people.home dies more.quietly than the battlefield
(int.) ‘The care home is a more peaceful place to die than the battlefield.’
(Ackema and Schoorlemmer 2017: 44, (131))
- b. * Dit boek ontstaat {lekker / als een trein}.
this book comes.into.being {good / like a train}
(int.) ‘This book comes into being {good / very fast}.’
(slightly adapted from Zwart 1998: 118, (34))

(86) *Middle of unergative in Dutch*

- Het loopt lekker op deze schoenen.
it walks comfortably on these shoes
‘These shoes are comfortable to walk in.’ (Ackema and Schoorlemmer 2017: 15, (45a))

The incompatibility of middles with unaccusatives suggests that Perlmutter’s Generalization does not just restrict the distribution of Voice[Pass], but rather restricts the distribution of all heads which suppress the external argument. (87) presents a revised version of Perlmutter’s Generalization whose coverage extends to middles (new text is set in italics).

(87) **Perlmutter’s Generalization** (*revised*)

In languages with passives *or middles* of intransitives, at most unergatives can passivize *or form licit middles*; unaccusatives never passivize *or form licit middles*.

Since both Voice[Pass] and Voice[Mid] prevent the external argument from projecting, neither is compatible with unaccusatives, which lack external arguments. How exactly the external argument is prevented from projecting is orthogonal to the main discussion here; see Bruening (2013) and Kastner (2020) for two recent approaches.³¹

In summary, this section has provided additional evidence that what determines the availability of P-stranding A-movement and oblique Case suppression is the presence or absence of a lexically

³¹Bruening (2013) suggests one way to account for the absence of (pseudo)passives of unaccusatives, using his proposed feature system in which there is syntactic selection for heads bearing selectional features. He proposes that passive Voice selects for a complement that has not yet projected an external argument and therefore bears an unsatisfied selectional feature. Consequently, passive Voice can never select $v_{unacc}P$ since unaccusatives lack an external-argument-introducing feature (p. 28). We can extend Bruening’s analysis to account for the absence of middles of unaccusatives if middles too select for a complement with an unsatisfied selectional feature (see Bruening 2013: 30).

specified head—namely, Voice[Pass]. In all instances of A-movement where P-stranding is permitted, unaccusatives are banned. The systematic convergence of these two diagnostics finds a simple explanation if both P-stranding and Perlmutter’s Generalization are tied to lexical properties of non-active Voice. The table in (88) summarizes my findings for both tests.

(88) *Perlmutter’s Generalization supports the hypothesized distribution of Voice[Pass]*

	Voice[Pass] is...	P-stranding?	Unaccusatives?
<i>Verbal passive (be/get)</i>	... obligatory	✓	✗
<i>Concealed passive</i>	... obligatory	✓	✗
<i>Adjectival passive</i>	... optional (w/ Voice[Pass])	✓	✗
	(w/out Voice[Pass])	✗	✓
<i>-able</i>	... absent	✗	✓
<i>Genitive preposing</i>	... absent	✗	✓
<i>Object shift</i>	... absent	✗	✓
<i>Middles</i>	... absent	✗	✗

Section §4 discusses two correct predictions of my lexically driven account of non-structural Case suppression under A-movement. Before that, I briefly digress into two excursuses: one on the implications of my proposal for the attachment site of *by*-phrases (section §3.3) and the other on accounting for variation in the acceptability of pseudopassive *-able* adjectives (section §3.4).

3.3 Excursus A: *By*-phrases attach to vP, distinct from VoiceP

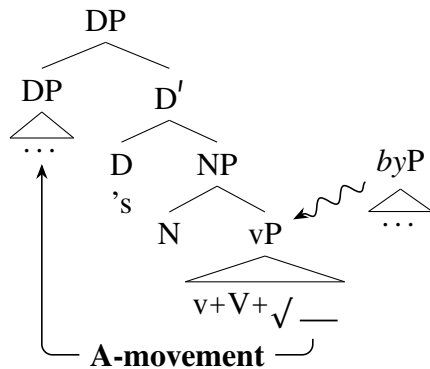
The tight correlation I have identified between P-stranding A-movement and passive Voice also sheds light on two current, interrelated questions about the structure of the passive verbal domain: (i) where do *by*-phrases attach, and (ii) how many verbal functional heads are present in passive verb phrases? While some authors contend that *by*-phrases are introduced at Voice_[Pass]P or its equivalent (e.g. Collins 2005: esp. §4 and Legate et al. 2020: esp. 808–811), others contend that *by*-phrases attach to a phrase which introduces the external argument and which is distinct from Voice_[Pass]P (e.g. Bruening 2013: 24–26); I will label this external-argument-introducing phrase vP, following Collins (2005, Forthcoming: ch. 8), Bowers (2010), Merchant (2013), Zyman (2017: esp. §6.1) Roberts (2019: 395), Angelopoulos et al. (2020), Newman (2020: esp. 6–7), and

Zyman and Kalivoda (2020: §3.1, esp. 8), among others.³² The data discussed in previous sections support the latter approach: *by*-phrases are available in deverbal nominalizations ((89)) and in *-able* adjectives ((90)), despite the fact that neither permits P-stranding A-movement.

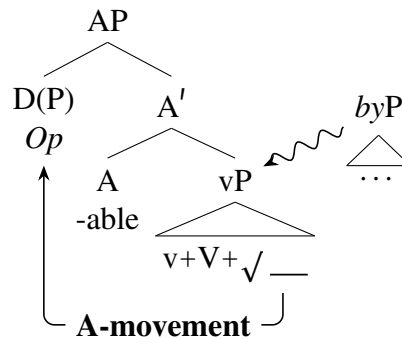
- (89) a. i. the frequent reference/referring to that idea by experts
 ii. the constant reliance/relying on foreign oil by U.S. manufacturers
 b. i. *that idea's frequent reference/referring to by experts
 ii. *foreign oil's constant reliance/relying on by U.S. manufacturers
- (90) a. i. Safes made this cheaply are breakable by anyone with a medium-sized hammer.
 ii. This forest is traversable only by experts.
 b. i. *Safes made this cheaply are breakable into by just about anyone.
 ii. *This forest is travelable through only by experts.

We can account for these facts if *by*-phrases attach to vP, rather than to Voice_[Pass]P, since Voice_[Pass]P must be absent in deverbal nominalizations and in *-able* adjectives (see also footnote 25):

(91) *Genitive preposing*



(92) *-able adjective*



This analysis also demonstrates that the head which introduces the external argument must be distinct from the head associated with diathetic alternations—namely, Voice—*pace* e.g. Harley (2017) and Legate et al. (2020). In other words, I propose that we differentiate at least four heads in the low, verbal domain, each occupying a discrete structural position: an acategorial root ‘√,’ a verbalizer ‘V,’ an argument-introducing head ‘v,’ and a voice head ‘Voice.’

³²Bruening (2013) refers to what I call ‘Voice_[Pass]P’ as ‘PassP’ and to what I call ‘vP’ as ‘VoiceP.’

3.4 Excursus B: Variation in acceptability of pseudopassive *-able* adjectives as variation in the distribution of Voice[Pass]

As mentioned in section §2.2, P-stranding *-able* adjectives are in fact acceptable in some idiolects. For instance, Kayne (1984) judges the following P-stranding *-able* adjectives to be well-formed:

- (93) a. French lessons are dispensable with by most people. (Kayne 1984: 141, (46))
 b. The existence of stranded prepositions is not accountable for under Schwartz's assumptions. (Kayne 1984: 140, (38b), attributed to John Ross)

Hall (1877: 34) cites *learnable from* and Marchand (1969: 230) cites *liveable-with*, *liveable-in*, *unspeakable-to*, and *unget-on-able-with* (see also Quirk et al. 1972: 1006, Fabb 1984: 220, fn. 1, and Bauer and Huddleston 2002: 1707).³³ We therefore appear to be faced with at least two groups of speakers: one permits P-stranding A-movement with *-able* adjectives and one does not.

I propose a lexically driven, selection-based analysis of this variation. Those speakers who allow P-stranding *-able* adjectives have in their lexicons an A_{-able} which selects for Voice[Pass] ((94a)). By contrast, for those speakers who do not accept P-stranding *-able* adjectives, A_{-able} never selects Voice[Pass] ((94b)) but at most merges with vP, accounting for the licitness of *by*-phrases in *-able* adjectives in these idiolects (see section §3.3).³⁴ I use '•'s to designate selectional

³³Examples in which the preposition is embedded inside the adjective are occasionally reported to be possible:

- (i) (un)come-at-able, (un)get-at-able (Marchand 1969: 230)

In general, such examples strike me as concocted or else as intentionally formed in jest, though Claire Halpert (*pers. comm.*) reports to me that she finds %*look-in-able* acceptable (as in *Those clauses are look-in-able*) and Yining Nie (*pers. comm.*) finds %*jump-through-able* acceptable. Still, *-able* adjectives incorporating P seem to be more lexically restricted than *-able* adjectives stranding P (as in (93)), since the examples in (ii) are undoubtedly unacceptable:

- (ii) a. *laughatable b. *dependonable (Keyser and Roeper 1984: 399, (54b, d))

³⁴The distribution of *by*-phrases also diagnoses different attachment sites for A_{-able} . Certain roots like $\sqrt{\text{DEPEND}}$ which obligatorily l-select a PP in their verbal guises ((i)) can appear inside an *-able* adjective with the P omitted ((ii)).

- (i) Just about anyone can {depend on Mike / *depend Mike / *depend}.
 (ii) Mike is dependable.

Other *-able* adjectives permitting P-drop include *reliable*, *danceable*, *listenable*, *walkable*, and, for some speakers, *sleepable*. Moreover, we have seen that there is idiolectal variation in the acceptability of P-stranding *-able* adjectives like %*dependable on*. Crucially, P-omitting *-able* adjectives do not permit *by*-phrases ((iii)), as originally observed

features following Heck and Müller (2007) *et seq.*

(94) *Two idiolect groups to account for %pseudopassive -able*

- | | | | |
|----|---|----|--|
| a. | Idiolect group A:
A _{-able} can bear [•Voice[Pass]•]. | b. | Idiolect group B:
A _{-able} cannot bear [•Voice[Pass]•]. |
|----|---|----|--|

4 Lexical variation in the suppression of non-structural Case

Let me briefly summarize the argumentation thus far. Section §2 presented evidence from a variety of A-movement types in English and Norwegian that P-stranding A-movement is restricted in ways that non-P-stranding A-movement is not. Section §3 argued that the relevant restrictions obtain because P-stranding A-movement, which arises when the non-structural Case assigned to the complement of P is suppressed, requires a lexical licenser. In the standard case, this lexically specified licenser is Voice[Pass].

Nevertheless, the lexically driven nature of my proposal leads us to expect variation from this general picture along at least two dimensions: (i) variation in the inventory of heads which suppress oblique Case assigned by P, and (ii) variation in the non-structural Case which is suppressed. It is the aim of this section to argue that both kinds of variation are attested in English. In section §4.1, I argue that, in addition to Voice[Pass], Voice[Mid] can suppress oblique Case in at least some English idiolects; this is what accounts for these speakers' acceptance of pseudomiddles. Then, in section §4.2, I argue that oblique Case is not *sui generis*: other non-structural Cases can also be suppressed, feeding A-movement and structural Case assignment. In particular, I propose that non-affected objects in English (in the sense of Anderson 1978, 1979, 2017 and Tenny 1987, 1992, 1994) are assigned a non-structural Case distinct from structural accusative Case. This non-structural Case is suppressed only by a locally c-commanding Voice[Pass] or A_{-able} head, by Kayne (1981c: 155–156), though corresponding P-stranding variants do for the relevant speakers ((iv)) (judgments due to Erik Zyman, *pers. comm.*; see also Kayne 2019: 77, (183)–(184)).

- (iii) * Mike is dependable by just about anyone.
- (iv) % Mike is dependable on by just about anyone.

We can make sense of this asymmetry if P-omitting *-able* adjectives embed a very small structure, e.g. the root without any of its arguments. Because *by*-phrases attach to vP, they will not be permissible when A_{-able} attaches very low.

accounting for well-known restrictions on A-movement of non-affected nominals.

4.1 Additional heads can suppress oblique Case: variation in the acceptability of pseudomiddles

Voice[Pass] is not the only head to suppress non-structural oblique Case. As previous authors have noted, some idiolects marginally or fully accept certain pseudomiddles. The following examples are illustrative (judgments are preserved from their respective sources; see also Keyser and Roeper 1984: 400, (56), (57b) and Den Dikken and Sybesma 1998: 17, fn. 23, (ia–b)):

- (95) a. (?) This board doesn't write on easily.
b. (?) *vP*'s don't extract from easily.
c. (?) That shower doesn't walk into easily. (Newman 2020: Appendix A, 3, (5c), (7))
- (96) a. This loose soil digs into easily, making this a great place to gather it.
b. This soft bread cuts into easily, making it great for sandwiches. (Wilson 2021: 128, (84))

The factors influencing the acceptability of pseudomiddles even for these more permissive idiolects are quite complex, so I will set the finer-grained variation aside here.³⁵ I will focus instead on the high-level difference between those idiolects which ban all pseudomiddles (see section §2.2) and those idiolects which permit at least some pseudomiddles. On the present account, this difference can be attributed to variation in the lexical properties of non-active Voice. For the more restrictive idiolects, only Voice[Pass] suppresses non-structural oblique Case ((97a)). In the more permissive idiolects, the property of suppressing non-structural oblique Case has been extended from Voice[Pass] to Voice[Mid] ((97b)).

(97) *Two idiolect groups to account for %pseudomiddles*

³⁵Newman (2020), for instance, claims that negation and a low adverbial are obligatory in (95), as evidenced by the reported unacceptability of the examples in (i), each of which lacks one of the key licensing elements.

- (i) a. ??/* This board writes on easily.
b. * This board doesn't write on. (Newman 2020: Appendix A, 3, (5a–b))

However, Newman's account fails to extend to the other reportedly acceptable pseudomiddles in (96), which have just a low adverbial and no negation. Newman also observes that other predicates cannot form pseudomiddles even when both negation and a low adverbial are present, as in (23g). Thus, variation in the acceptability of pseudomiddles is not entirely reducible to the presence or absence of putative licensing material.

- a. **Idiolect group A:**
Voice[Pass] suppresses non-structural oblique Case.
- b. **Idiolect group B:**
Voice[Pass] and Voice[Mid] suppress non-structural oblique Case.

What this idiolectal variation shows us, I contend, is that an adequate analysis of P-stranding A-movement must rely on the lexical properties of certain heads as licensors. My analysis, which attributes to certain heads the ability to suppress non-structural oblique Case and thereby license A-movement, is well-equipped to account for the facts.

4.2 Restrictions on A-movement of non-affected arguments via suppression of non-structural Case

Just as Voice[Pass] is not the only head to license Case suppression, oblique Case is not the only non-structural Case which can be suppressed. This is evinced by restrictions on A-movement outside the realm of P-stranding. One particularly well-known restriction comes from A-movement of ‘non-affected’ objects. Anderson (1978, 1979) originally proposed the term ‘affectedness’ to describe restrictions on genitive preposing with certain head nouns: the nominal internal arguments of the nouns in (98), which she called ‘affected,’ can undergo genitive preposing, but those of the nouns in (99), which she called ‘non-affected,’ cannot (see also Beavers 2011).

- (98) *Affected direct objects can undergo genitive preposing*
 - a. i. the destruction of the reptile cages by older zoo visitors
 - ii. the settlement of the deserted island by several castaways
 - b. i. the reptile cages’ destruction by older zoo visitors
 - ii. the deserted island’s settlement by several castaways
- (99) *Non-affected direct objects cannot undergo genitive preposing*
 - a. i. the avoidance of the reptile cages by older zoo visitors
 - ii. the inhabitation of the deserted island by several castaways
 - b. i. * the reptile cages’ avoidance by older zoo visitors
 - ii. * the deserted island’s inhabitation by several castaways

Bringing together Anderson’s contrasts with observations from Hale and Keyser (1987) and Roberts (1987), Tenny (1987, 1992, 1994) noted that affected arguments, but not non-affected arguments,

may form middles (see also Keyser and Roeper 1984: 408, fn. 28).

- (100) *Affected direct objects can undergo A-movement in middles*
- a. A reptile cage that big won't destroy very easily.
 - b. A deserted island this inhospitable won't settle very easily.
- (101) *Non-affected direct objects cannot undergo A-movement in middles*
- a. * A reptile cage that big won't avoid very easily.
 - b. * A deserted island this inhospitable won't inhabit very easily.

Nevertheless, we find that non-affected direct objects *can* undergo A-movement in verbal passives, in adjectival passives, and in *-able* adjectives:

- (102) *Non-affected direct objects can undergo A-movement in verbal passives*
- a. The reptile cages were being avoided by older zoo visitors.
 - b. The deserted island was being inhabited by several castaways.
- (103) *Non-affected direct objects can undergo A-movement in adjectival passives*
- a. The reptile cages remain avoided by most older zoo visitors to this day.
 - b. The deserted island remains inhabited by castaways and ghosts to this very day.
- (104) *Non-affected direct objects can undergo A-movement in -able adjectives*
- a. The reptile cages are definitely avoidable by older zoo visitors.
 - b. None of the deserted islands we have discovered are inhabitable by humans.

The table in (105) summarizes the relevant facts: A-movement of non-affected direct objects is restricted relative to A-movement of affected direct objects.³⁶

(105) *A-movement of (non-)affected direct objects in English*

³⁶Concealed passives seem highly degraded with non-affected direct objects:

- (i) a. ??/* The dangerous reptile cages need/could stand avoiding by our more sensitive zoo visitors.
- b. ??/* These woods could use inhabiting by more types of deer.

Erik Zyman (*pers. comm.*) has suggested a possible explanation for this restriction to me. I argued in section §2.1 that concealed passives involve control, rather than (subject-to-subject) raising. Under standard assumptions, the predicate of requirement will assign a θ -role (e.g. Experiencer) to the controller *qua* subject. It seems reasonable, then, to propose that the modal base of the predicate of requirement should be keyed to the intrinsic needs or dispositions of the subject. It is this property of predicates of requirement which is incompatible with verbs taking non-affected arguments: it is not possible that “X needs/could stand/could use V-ing (by Y)” in virtue of X’s intrinsic needs or dispositions if “V-ing” fails to affect X. I leave it to future work to determine if an analysis along these lines is tenable.

	Affected direct object	Non-affected direct object
a. <i>Verbal passive</i>	✓	✓
b. <i>Adjectival passive</i>	✓	✓
c. <i>-able</i>	✓	✓
d. <i>Middle</i>	✓	✗
e. <i>Genitive preposing</i>	✓	✗

Now, although the restricted A-movement profile of non-affected direct objects is reminiscent of the restrictions we previously observed with P-stranding, neither can be completely assimilated to the other. For one, there is no P to strand in (99) and (101)–(104) (at least not an overt one). Furthermore, *-able* adjectives pattern differently for the two kinds of A-movement: P-stranding *-able* adjectives like *%dependable on* are unacceptable for many speakers, while *-able* adjectives formed from verbs taking non-affected direct objects like *avoidable* are perfectly licit.

Instead, I propose that non-affected arguments are assigned a non-structural Case by the verb that selects them that is distinct from both structural accusative Case and non-structural oblique Case.³⁷ Call it *non-affected Case*.³⁸ Verbs like *avoid* lexically assign non-affected Case to their direct objects, while the direct objects of verbs like *destroy* get assigned structural accusative Case in the standard way (see section §5 for possible analyses of structural Case assignment in English). Consequently, A-movement of affected direct objects will be unhindered, while A-movement of non-affected direct objects will require a locally c-commanding licenser to suppress their non-structural Case. As indicated by the patterns summarized in (105), the heads which are able to suppress non-affected Case include Voice[Pass] (present in verbal and adjectival passives) and *A_{-able}*.

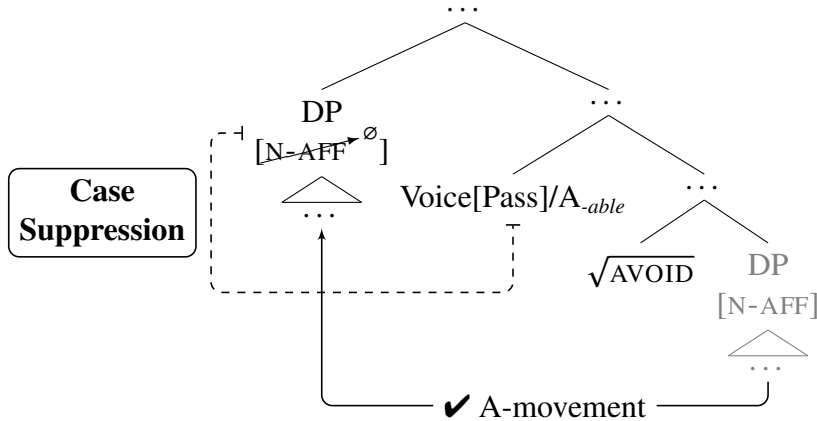
³⁷Though all three Cases map onto the same, syncretic morphological case in English:

- (i) The specialist operated on **him**.
- (ii) The specialist treated **him**.
- (iii) The specialist avoided **him**.

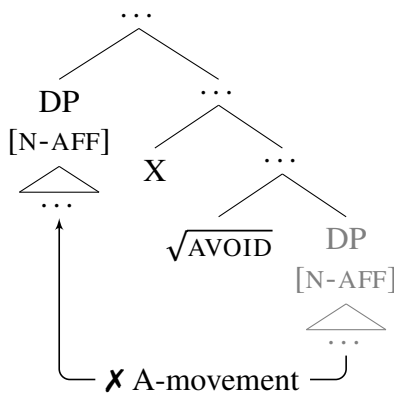
³⁸This is not a serious proposal, but rather a call for a more fleshed out account of (non-)affectedness and its interaction with Case. All that is crucial on my account is that non-affected arguments are assigned some (non-oblique) non-structural Case. There is some cross-linguistic support for a Case-based distinction between affected and non-affected arguments: in Finnish (Kiparsky 1998, 2001) and Estonian (Roberts 2020), affected objects are morphologically marked with structural accusative case while non-affected objects are marked with partitive case. I leave it for future work to determine if the non-structural Case I posit on non-affected arguments in English can be fruitfully analyzed as a kind of ‘partitive’ Case.

(106) and (107) illustrate, respectively, how A-movement of the non-affected direct object of *avoid* is and is not licensed. I represent non-affected Case on DP as the feature [N(ON)-AFF(ECTED)].

(106) *A-movement of non-affected direct objects is licensed by Voice[Pass] and A_{able}*



(107) *A-movement of non-affected direct objects is not licensed without Voice[Pass] or A_{able}, where X is not Voice[Pass] or A_{able}.*



Crucially, as (107) shows, I propose that A-movement of non-affected direct objects is impossible without a locally c-commanding Voice[Pass] or A_{able} head to suppress non-affected Case.

Now, if Case suppression is a lexical property of heads, as I have argued, and if suppression of oblique Case and suppression of non-affected Case are independently varying properties of heads (arguably the null hypothesis), then we can set up a four-way typology of heads based on their capacity to suppress Case.³⁹ As the table in (108) shows, all four types of heads are attested; ‘%’ indicates that the judgments hold only for a subset of speakers.

³⁹Thanks to Erik Zyman for suggesting this possibility to me.

(108)

	Suppresses oblique Case	Suppresses non-affected Case
Voice[Pass]	✓	✓
D _s	✗	✗
Voice[Mid] (%)	✓	✗
A _{-able} (%)	✗	✓

Voice[Pass] suppresses both oblique and non-affected Case and consequently licenses P-stranding A-movement and A-movement of non-affected nominals:

- (109) a. That patient was operated on by a specialist.
b. The reptile cages were avoided by older zoo visitors.

On the other hand, D_s—the head which triggers genitive preposing—does not suppress either type of non-structural Case and therefore does not license either kind of A-movement in (110).

- (110) a. * the patient's operation on by a specialist
b. * the reptile cages' avoidance by older zoo visitors

Finally, Voice[Mid] and A_{-able}, for at least some speakers, suppress one but not the other Case. In idiolects that permit pseudomiddles but do not allow middles with non-affected objects, Voice[Mid] suppresses only oblique Case:

- (111) a. Some patients just don't operate on very easily.
b. * A reptile cage that big won't avoid very easily.

And in idiolects that do not accept P-stranding *-able* adjectives but do allow *-able* adjectives with verbs taking non-affected objects, A_{-able} suppresses only non-affected Case:

- (112) a. * Such patients are oper(at)able on only by specialists.
b. The reptile cages are definitely avoidable by older zoo visitors.

In summary, my analysis gives a unified account of seemingly unrelated restrictions on P-stranding A-movement and A-movement of non-affected nominals: both involve lexically licensed suppression of non-structural Case. I count this success as an argument in favor of the current approach.

5 Non-structural Case suppression via structure removal of KP

An adequate analysis of (restrictions on) A-movement of nominals bearing non-structural Case must account for the facts enumerated in (113):

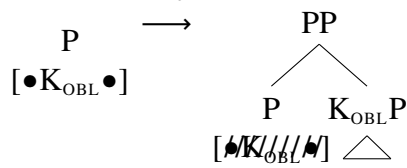
- (113)
- a. A-movement of nominals assigned non-structural Case, unlike those assigned structural Case, does not come for free (section §2).
 - b. Rather, nominals assigned non-structural Case can undergo A-movement only in the presence of a locally c-commanding, lexically specified head (section §3).
 - c. The particular heads which suppress non-structural oblique Case and license P-stranding A-movement can vary across idiolects: only Voice[Pass] in some, both Voice[Pass] and Voice[Mid] in others (section §4.1).
 - d. The particular non-structural Cases which can be suppressed under A-movement include at least oblique Case assigned by P and the non-structural Case assigned to non-affected nominals by the verbs which select them (section §4.2).

This section provides a lexically driven account of these facts based on the following two claims:

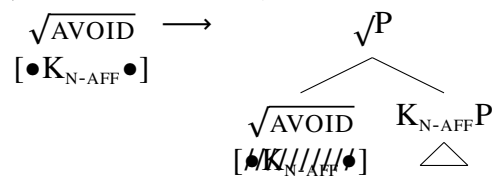
- (114)
- a. Non-structural Case, but not structural Case, is assigned via l-selection of a KP.
 - b. A-movement of KP in English requires KP to be structurally *Removed* (Müller 2016, 2017, 2018), allowing the moved nominal to participate in A-relations once again (e.g. to get assigned structural Case and to satisfy the EPP).

As a first step, I propose that structural and non-structural Case are assigned and structurally represented differently (see also Baker and Vinokurova 2010). Non-structural Case projects as the highest functional layer within the extended projection of N—specifically, as KP (Lamontagne and Travis 1987; Bittner and Hale 1996a,b; Levin 2015). Oblique Case is represented as $K_{OBL}P$ and non-affected Case as $K_{N-AFF}P$. I propose that non-structural Case assignment is more appropriately considered *selection*: Case-assigning heads l-select the relevant flavor of KP. P^0 l-selects $K_{OBL}P$, checking a $[\bullet K_{OBL} \bullet]$ feature on P^0 , while roots like \sqrt{AVOID} l-select $K_{N-AFF}P$, checking a $[\bullet K_{N-AFF} \bullet]$ feature on the root; structure-building and structure-removal features are crossed out once checked.

(115) P^0 l-selects $K_{OBL}P$



(116) \sqrt{AVOID} l-selects $K_{N-AFF}P$



Structural Cases, e.g. nominative, accusative, and genitive, must be assigned in another way. This is to ensure that only the suppression of non-structural Case can be lexically restricted. There are at least two prominent alternatives for analyzing structural Case assignment from the literature which I will not decide between here. Either structural Case could be assigned to nominals under Agree with functional heads like T^0 , v^0 , and (possessive) D^0 (see Chomsky 2000, 2001), or structural Case could be assigned via a dependent case algorithm (see Marantz 1991 and Baker 2015). All that is crucial for my account is that structural Case assignment must *not* involve l-selection of a KP. I will henceforth assume that the highest functional projection of a nominal assigned structural Case is DP, rather than KP, and I will represent structural Case as a valued feature on D(P).

Now, in order for an originally KP-sized nominal to be able to get assigned structural Case, to satisfy the EPP feature (which I take to be a [\bullet D \bullet] selectional feature, deriving the fact that the canonical subject position in English is always occupied by a DP), and to Agree with T, as is necessary, for instance, in pseudopassive clauses like *The patient was operated on by a specialist*, the moving nominal's KP shell will need to be eliminated.⁴⁰ Furthermore, elimination of KP will need to be tied to particular heads like Voice[Pass] in order to correctly account for constraints on A-movement of KPs. Müller's (2016; 2017; 2018; 2020; 2021; see also Zyman 2018 and Murphy 2019) *Remove* operation provides one way of achieving both goals. The following brief primer on Remove closely follows the description given in Zyman (2018: 13).

Müller proffers the operation Remove, which eliminates structure, as a counterpart to Merge, which builds structure. Like Merge, Remove is subject to the *Strict Cycle Condition*:

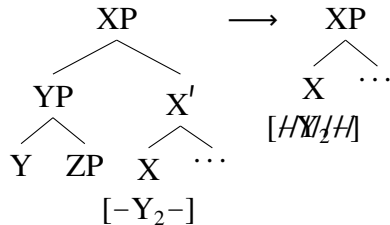
- (117) *Strict Cycle Condition*
 Within the current XP α , a syntactic operation may not exclusively target some item δ in the domain of another XP β if β is in the domain of α . (Müller 2017: 4, (2))
- (118) *Domain*
 The domain of a head X is the set of nodes dominated by XP that are distinct from and do not contain X. (*ibid.*, (3))

Also like Merge, Remove is *feature-driven*. Whereas Merge is triggered by ' \bullet ' features, Remove is

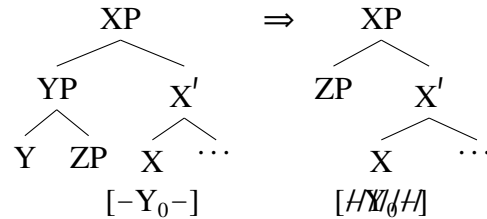
⁴⁰In order to explain why a [\bullet D \bullet] feature on T cannot attract the DP complement of K, it may be necessary to assume that KP is a phase and that KP never attracts its complement to its specifier (possibly due to a violation of [Comp-to-Spec] anti-locality, Abels 2003: 12, (4)); this will ensure that there is no escape hatch out of KP for DP.

triggered by ‘-’ features. The latter come in two variants. A $[-Y_2-]$ feature on a head X targets a maximal projection YP and removes it ((119)). A $[-Y_0-]$ feature on a head X removes the head Y and its projections but leaves intact all dependents of Y(P), which reattach to the main tree ((120)).

(119) $[-Y_2-]$ removes phrases



(120) $[-Y_0-]$ removes heads



My analysis only employs $[-Y_0-]$ features. I also do not differentiate $[\bullet Y_2 \bullet]$ and $[\bullet Y_0 \bullet]$ features.

Because Remove is driven by features of lexical items, we can straightforwardly account for lexical restrictions on A-movement of KPs. I propose that certain heads are specified in the lexicon to (i) attract KPs into their specifiers⁴¹ and (ii) strip away their KP shells by removing K^0 .⁴²

5.1 Deriving verbal pseudopassives

Consider how attraction of $K_{OBL}P$ and removal of its outermost shell works to derive P-stranding A-movement, beginning with the verbal pseudopassive clause in (121):

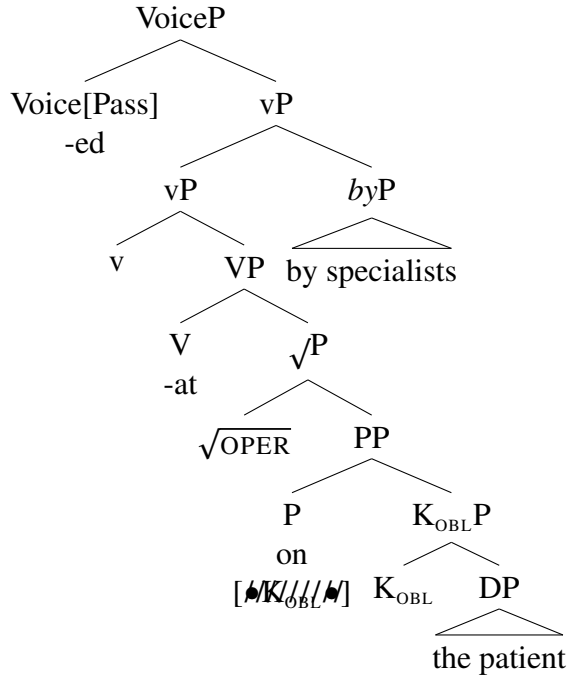
(121) The patient was operated on by specialists.

The preposition *on* will l-select the $K_{OBL}P$ *the patient* and the rest of the clause up to VoiceP will be similarly built up by external Merge (and Adjoin, if the *by*-phrase is an adjunct), yielding the structure in (122). I only explicitly represent structure-building features where they are relevant for my analysis. I also omit orthogonal details like head movement of the root and lowering of T.

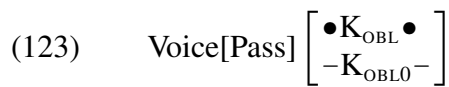
⁴¹KP must move into the specifier of the head which removes K^0 to comply with the Strict Cycle Condition ((117)).

⁴²Pesetsky’s (2021) *Exfoliation* operation eliminates structure like Remove and would therefore seem a plausible alternative for suppressing non-structural Case. According to Pesetsky (2021: 12–14), Exfoliation is triggered as a last resort when a probe locates its goal across a phase boundary. The structural change effected by Exfoliation is to replace the maximal projection of the intervening phase head with the maximal projection of the head whose edge is occupied by the goal. The primary barrier to adopting an Exfoliation-based account of non-structural Case suppression is that Exfoliation is not feature-driven and hence cannot straightforwardly account for the lexical nature of restrictions on A-movement. On an Exfoliation analysis, any A-movement probe that locates its goal across a phase boundary ought to induce Exfoliation and suppress non-structural Case. For this reason, I do not pursue an Exfoliation approach.

(122)

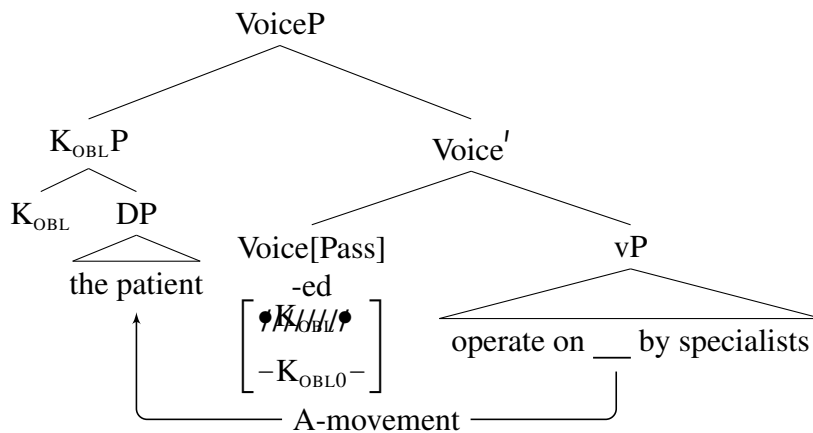


In order to account for the fact that Voice[Pass] licenses A-movement of nominals assigned oblique Case, I propose that Voice[Pass] optionally⁴³ bears the ordered stack of features in (123) (features higher in the stack apply first):



The [$\bullet K_{OBL} \bullet$] feature triggers internal Merge of $K_{OBL}P$ into Voice[Pass]’s specifier:⁴⁴

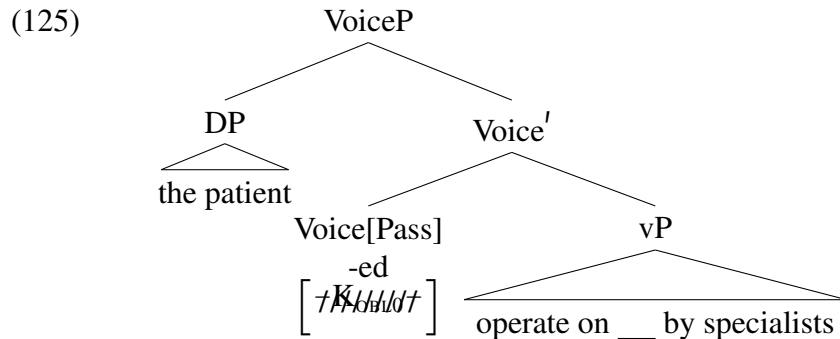
(124)



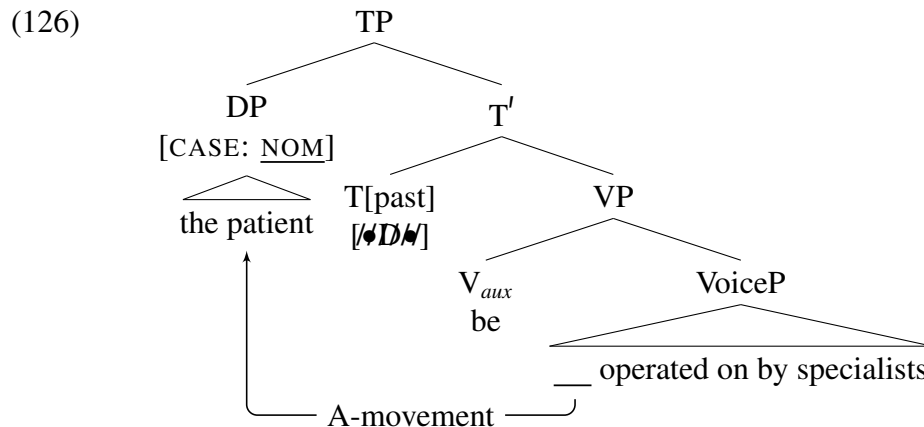
⁴³ A-movement of a DP bearing structural accusative Case or of a KP bearing non-affected Case will require a different stack of features on Voice[Pass].

⁴⁴ See Bruening (2011: 6ff.) for arguments from expletive (pseudo)passives in English that non-expletive passive subjects obligatorily move to the specifier of the passive Voice head. Once there, these nominals either move to [Spec, TP] to satisfy the EPP or else remain in situ, in which case the expletive *there* is merged to satisfy the EPP.

With $K_{OBL}P$ now in an accessible position, the $[-K_{OBL0-}]$ feature on $Voice[Pass]$ triggers Remove of K_{OBL} and its projections, leaving DP to reattach in $[Spec, VoiceP]$:⁴⁵



With all of $Voice[Pass]$'s features satisfied, the rest of the clause can be constructed. In particular, *the patient* will raise to $[Spec, TP]$ to satisfy T's $[\bullet D \bullet]$ feature and will get assigned structural nominative Case like all subjects of finite clauses in English:



In short, my account of English P-stranding A-movement is embodied in the idiosyncratic lexical specification in (123): $Voice[Pass]$ attracts $K_{OBL}P$ and Removes the head K_{OBL} and its projections, leaving the embedded DP behind. Remove thus allows DPs to participate in A-relations once more.

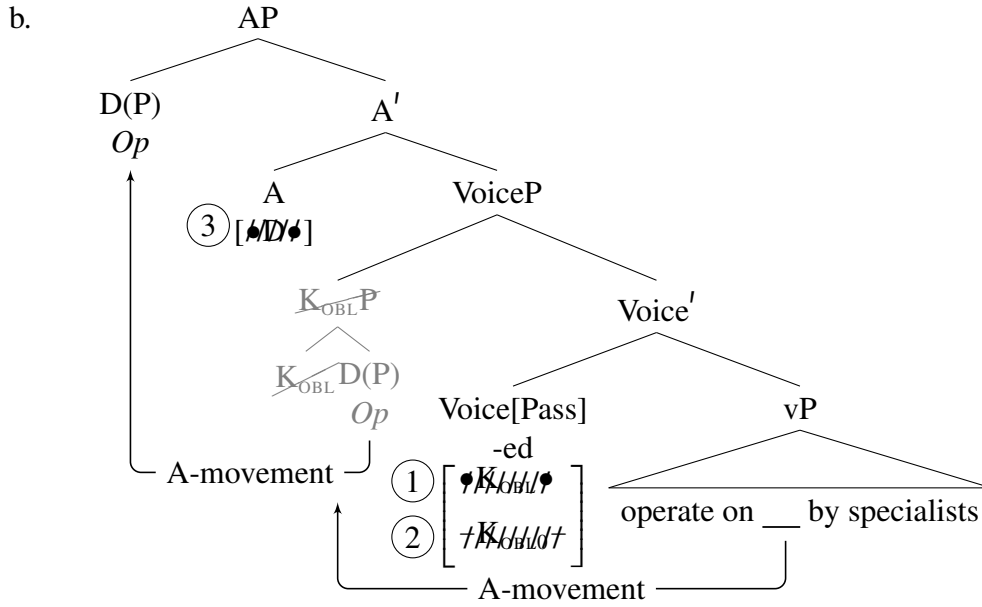
5.2 Deriving adjectival and concealed pseudopassives

Adjectival pseudopassives and concealed pseudopassives will be derived similarly, as they both structurally embed $VoiceP$ headed by $Voice[Pass]$ (see section §3). In adjectival pseudopassives

⁴⁵Reversing the order of the two features on $Voice[Pass]$, or eliminating the structure-building feature $[\bullet K_{OBL} \bullet]$ altogether, would render the structure-removal feature $[-K_{OBL0-}]$ impotent, since $K_{OBL}P$ would be in situ at the point of attempted structure removal and, per the Strict Cycle Condition ((117)), there can be no long-distance Remove.

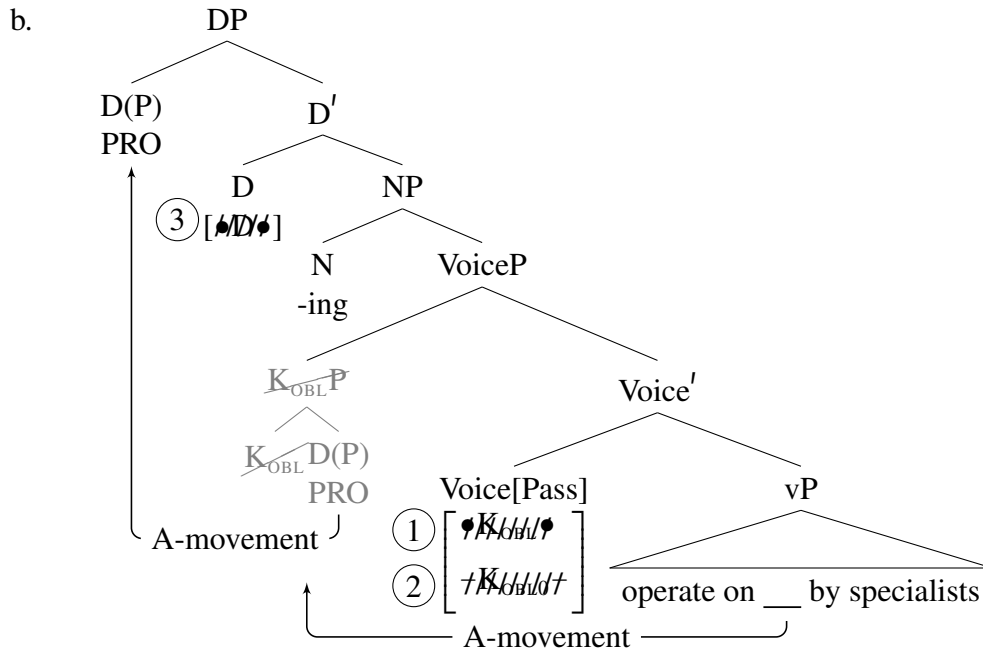
like (127), the DP that remains after removal of K_{OBL}^0 is a null operator which moves to [Spec, AP], triggering λ -abstraction and creating a predicate of individuals (see section §2.1 and Bruening 2014: esp. 385–387). I posit a [$\bullet D \bullet$] feature on A to trigger movement of *Op*.

(127) a. That patient appears operated on by a specialist.



In concealed pseudopassives like (128), the DP that remains after removal of K_{OBL}^0 is null PRO, which moves to [Spec, DP] to be bound by the subject of the predicate of requirement. This movement is triggered by a [$\bullet D \bullet$] feature on D (which happens to be null in (128)). I also posit a null allomorph of Voice[Pass] that is inserted when Voice[Pass] is local to N_{ing} , accounting for the absence of the (passive) participial ending in concealed passives.

(128) a. That patient needs operating on by a specialist.



Let us briefly consider what happens if Voice[Pass] lacks both $[\bullet K_{OBL} \bullet]$ and $[-K_{OBL0}-]$. The obvious consequence is that the KP complement of P will remain in situ. In verbal pseudopassives, a different nominal (more specifically, an expletive) must be merged to satisfy the EPP feature on T in order for the derivation to converge. This is precisely what we find in Norwegian (and Swedish, see e.g. Klingvall 2012), where expletive pseudopassives are acceptable:

- (129) Det ble advart mot slike bøker.
 it was warned against such books
 ‘Such books were warned against.’ (slightly adapted from Christensen 1986: 146, (33))

English lacks such expletive pseudopassives, a fact which I attribute to independent constraints on English expletives.⁴⁶ In adjectival and concealed pseudopassives, failure to move KP always results in unacceptability: A-movement to [Spec, AP] is necessary in adjectival passives for semantic type reasons, and A-movement of PRO in concealed passives is necessary for PRO to be controlled.

⁴⁶For instance, expletives must be merged extremely locally to their associates in the specifier of a low verbal functional head like v (Deal 2009) or passive Voice (Bruening 2011). If the KP associate remains low, inside PP, and if [Spec, PP] is not a *there*-insertion environment, then an expletive *there* merged as subject will never be local enough to its associate and the derivation will crash. The freer distribution of Norwegian expletives indicates that they do not need to merge as locally to their associates as English expletives do.

5.3 Deriving %pseudomiddles

We now turn to structure removal in middles. I account for idiolectal variation in the acceptability of pseudomiddles via variation in the lexical specification of Voice[Mid]. In idiolects which do not accept pseudomiddles like (130), Voice[Mid] lacks the features [$\bullet K_{OBL} \bullet$] and [$-K_{OBL0-}$] ((131)) and therefore cannot attract KP or remove K_{OBL}^0 .

(130) * Such patients probably won't operate on very easily.

(131) **Lexical specification of Voice[Mid] in idiolects which ban pseudomiddles**
Voice[Mid] does not bear [$\bullet K_{OBL} \bullet$] or [$-K_{OBL0-}$].

Without A-movement of $K_{OBL}P$ to [Spec, VoiceP], $K_{OBL}P$ will remain in situ and the [$\bullet D \bullet$] feature on T will need to be satisfied by merging an expletive. As we saw with passives, although independent constraints on English expletives rule out expletive pseudomiddles, this option is available in languages like Dutch where expletives have a freer distribution:

(132) *English lacks expletive pseudomiddles*

*There operate(s) on such patients easily.

(133) *Expletives can rescue pseudomiddles which do not remove KP*

Het loopt lekker op deze schoenen.

it walks comfortably on these shoes

'These shoes are comfortable to walk in.' (Dutch; Ackema and Schoorlemmer 2017: 15, (45a))

By contrast, in idiolects permitting pseudomiddles, Voice[Mid] bears the feature stack in (134).

(134) **Lexical specification of Voice[Mid] in idiolects which permit pseudomiddles**

Voice[Mid] [$\begin{array}{c} \bullet K_{OBL} \bullet \\ -K_{OBL0-} \end{array}$]

In these idiolects, Voice[Mid] attracts KP and removes K_{OBL}^0 just like Voice[Pass]. Because the account of pseudomiddles differs trivially from the account of pseudopassives, I will not go through an explicit derivation here.

5.4 Deriving %pseudopassive -able adjectives

-able adjectives likewise prohibit P-stranding for many speakers:

(135) * Mike is dependable on by just about anyone.

This fact indicates both that *-able* adjectives never embed $\text{Voice}_{[\text{PASS}]}\text{P}$ for these speakers and that $A_{\text{-able}}$ does not suppress oblique Case, specifically because $A_{\text{-able}}$ lacks the relevant Merge and Remove features:

(136) $A_{\text{-able}}$ does not bear $[\bullet\text{K}_{\text{OBL}}\bullet]$ or $[-\text{K}_{\text{OBL}0}-]$.

Rather, $A_{\text{-able}}$ bears a $[\bullet\text{D}\bullet]$ feature attracting a null operator into its specifier, parallel to the behavior of $A_{\text{-en}}$ (see (127)). Without A-movement (and structural reduction) of KP, nothing will satisfy this $[\bullet\text{D}\bullet]$ feature (see also footnote 40) or trigger λ -abstraction at AP and the derivation will crash. See section §3.4 for an account of idiolectal variation in the acceptability of P-stranding *-able* adjectives based on differences in the selectional profile of $A_{\text{-able}}$ across speakers.

5.5 Deriving *P-stranding genitive preposing, object shift, and unaccusatives

My account of failed P-stranding A-movement in genitive preposing, object shift, and unaccusatives is a straightforward and minimal extension of what I have proposed thus far. The relevant A-movement-triggering heads— $D_{\text{'s}}$, μ (cf. Johnson 1991), and v_{unacc} , respectively—bear $[\bullet\text{D}\bullet]$ features but crucially lack the relevant Merge and Remove features to suppress oblique Case:

(137) $D_{\text{'s}}$ does not bear $[\bullet\text{K}_{\text{OBL}}\bullet]$ or $[-\text{K}_{\text{OBL}0}-]$.

(138) μ does not bear $[\bullet\text{K}_{\text{OBL}}\bullet]$ or $[-\text{K}_{\text{OBL}0}-]$.

(139) v_{unacc} does not bear $[\bullet\text{K}_{\text{OBL}}\bullet]$ or $[-\text{K}_{\text{OBL}0}-]$.

Again, due to independent constraints on expletives in English (see (140)–(142)), nothing will satisfy the A-movement-triggering $[\bullet\text{D}\bullet]$ features on $D_{\text{'s}}$, μ , and v_{unacc} .

(140) * there's operation on a patient by a specialist

(141) * I looked there up to a certain patient.

(142) * There appeared [to a certain detective] then [that they might be spies].

We thus correctly account for the full distribution of P-stranding A-movement by restricting the pair of features $[\bullet\text{K}_{\text{OBL}}\bullet]$ and $[-\text{K}_{\text{OBL}0}-]$ to a few lexically specified heads.

5.6 Deriving A-movement of non-affected objects via removal of K_{N-AFF}^0

The same kinds of features and operations which derive P-stranding A-movement can also be employed to account for A-movement of non-affected objects. As we saw in section §4.2, non-affected objects can only undergo A-movement when locally c-commanded by Voice[Pass] or *A-able*. To account for these facts, I posit the following feature stacks for Voice[Pass] and *A-able*:

$$(143) \quad \text{Voice[Pass]} \left[\begin{array}{c} \bullet K_{N-AFF} \bullet \\ -K_{N-AFF0} - \end{array} \right] \quad (144) \quad A_{-able} \left[\begin{array}{c} \bullet K_{N-AFF} \bullet \\ -K_{N-AFF0} - \end{array} \right]$$

Failed A-movement of non-affected objects in middles and genitive preposing is accounted for if these other A-movement-triggering heads (i.e. Voice[Mid] and D_s) never bear $[\bullet K_{N-AFF} \bullet]$ or $[-K_{N-AFF0} -]$ and if nothing else (e.g. expletives) can satisfy the movement-triggering features on these heads, which I take to be $[\bullet D \bullet]$ features. Due to considerations of space, however, I must omit explicit derivations of successful and failed A-movement of $K_{N-AFF}P$.

6 Comparison with conceivable alternative analyses

Of course, there are other conceivable accounts of these restrictions on A-movement which I have not yet considered. This section is devoted to discussing these alternatives and to comparing them to the Remove-based approach. In particular, I consider analyses which have some means of accounting for lexical restrictions on A-movement.⁴⁷ I will suggest, however, that each alternative runs afoul of additional problems not faced by the Remove approach.

6.1 An Agree-based account of non-structural Case suppression

Core to my analysis is the idea that restrictions on A-movement are fundamentally related to the distribution of abstract Case. I accounted for the facts by appealing to Remove, but other Case-based accounts are logically possible (see also footnote 42 on Exfoliation). Rather than removal of

⁴⁷For reasons of space, I do not consider *reanalysis* analyses of P-stranding A-movement (e.g. van Riemsdijk 1978 and Hornstein and Weinberg 1981), which typically posit (possibly lexically determined) incorporation of P into V in passives (though see Drummond and Kush 2015 for an alternative which does not require P and V to form a constituent at any level of representation). See Baltin and Postal (1996), Postal (2004: 258–264), and Truswell (2008) for arguments against reanalysis.

non-structural Case, for instance, we might propose that heads like Voice[Pass] must Agree with a Case-deficient flavor of the relevant non-structural Case assigner to prevent a derivational crash.

Under an Agree-based approach, verbal pseudopassives would be derived along the following lines. Assume that, when Case is assigned within PP, it is assigned by a functional p head (Svenonius 2003; Richards 2017) and that p comes in two varieties— p_{OBL} and p_{INFL} —each of which combines in principle with any lexical preposition. The Case-assigning p_{OBL} assigns oblique Case to P's complement and does not bear any unvalued inflectional features, while the Case-deficient p_{INFL} does not assign Case and bears an unvalued inflectional feature [INFL: \square]. This unvalued inflectional feature must act as a 'derivational time-bomb' in Preminger's (2014) sense, crashing the derivation unless valued. To account for idiolects in which only Voice[Pass] licenses P-stranding A-movement, Voice[Pass] must be unique among A-movement-triggering heads in bearing a [*F*] probe feature, where 'F' is a placeholder for some feature linking Voice[Pass] to p. Voice[Pass] will Agree with Case-deficient p_{INFL} , valuing the latter's inflectional feature as [INFL: F] and forestalling a crash. Assuming that DPs are subject to the Case Filter (Chomsky 1981), the DP complement of P will then need to move to get assigned Case, accounting for the licitness of P-stranding A-movement under Voice[Pass]. Because all other A-movement-triggering heads (e.g. Voice[Mid], *A-able*, *D's*, etc.) lack [*F*] by hypothesis, they will never license Case-deficient p_{INFL} . Instead, they will only cooccur with p_{OBL} , which assigns oblique Case to the DP complement of P. If DP does not need to move to get Case, it will not move by virtue of economy (or perhaps due to the Activity Condition of Chomsky 2000: 127ff., 2001: 6ff.). This accounts for the absence of P-stranding A-movement outside of Voice[Pass]. Similar lexical constraints on the distribution of Agree-triggering probe features, Case features, and unvalued inflectional features can account for restrictions on A-movement of non-affected nominals.

The major hurdle faced by an Agree-based analysis such as this is that it requires positing agreement which is not otherwise empirically motivated. First of all, there is no overt reflex of the putative Agree relation between Voice[Pass] and p in English, in violation of Preminger's (2019: 11, (22)) *no-null-agreement generalization*, which states that systematically null agreement

(i.e. agreement which is null across an entire paradigm) does not exist.⁴⁸ Not only that, by tying the availability of P-stranding A-movement to agreement with p, an Agree-based account would need to claim that Voice agrees with p in English but not in languages which lack P-stranding A-movement. I am not aware of any independent evidence for this claim and it strikes me as extremely dubious. The Remove-based analysis, by contrast, does not face these issues.

6.2 Selective-opacity–based accounts

Instead of relying on the distribution of abstract Case, we could attempt to derive the restrictions on A-movement laid out in section §2 by proposing that PPs are *selectively opaque*. As discussed by Keine (2019, 2020), some maximal projections only block certain types of movement out of them—that is, they are selectively opaque. Selective opacity can be contrasted with the more familiar notions of subjacency (Chomsky 1973, 1977, 1981), barrierhood (Chomsky 1986), and phasehood (Chomsky 2000, 2001), according to which a particular domain is either absolutely transparent or opaque, regardless of the type of movement and regardless of the features of the moving element. Under a selective-opacity–based approach, we could propose that PPs are opaque to all types of A-movement out of them except for A-movement triggered by Voice[Pass].

To account for selective opacity effects under extraction, Keine argues that the outer limit of the search domain of a probe $[*F*]$ on a head X^0 can be fixed by nodes he calls *horizons*. Horizons are defined in terms of categorial features (e.g. C, P, etc.). Thus, a probe $[*F*]$ on a head X^0 having a category Y as its horizon would be notated: $[*F*]_{X^0} \dashv\vdash Y$. Any probing initiated by $[*F*]_{X^0}$ will halt once a (maximal) projection bearing [CAT: Y] is reached. The horizons framework is embedded in a feature-driven theory of syntactic operations and allows for a high degree of lexical specification, in that the same probe $[*F*]$ across different heads can have different horizons. This aspect of the framework allows us to account for the aforementioned restrictions on pseudopassivization. Specifically, we could posit that all $[*D*]$ probes except

⁴⁸Although Preminger’s original formulation of the generalization is about φ -features and although agreement between Voice[Pass] and p_{INFL} is probably not φ -feature related, I submit that the acquisition-based logic of the no-null-agreement generalization (see Preminger 2019: sec. 8) arguably extends to agreement *in general*. Thus, the Agree-based analysis at the very least violates the spirit of the no-null-agreement generalization, if not a version of it whose coverage is broadened beyond φ -features. Thanks to Erik Zyman (*pers. comm.*) for discussion of this point.

$[*D*]_{\text{Voice[Pass]}^0}$ have P as a horizon:⁴⁹

(145) *Default*⁵⁰ horizon for $[*D*]$ -probes (in English)
For any probe $[*D*]$ on head X^0 , the default horizon is $[*D*]_{X^0} \dashv\vdash P$ (in addition to other potential horizons, e.g. $[*D*]_{X^0} \dashv\vdash C$, etc.).

(146) $[*D*]_{\text{Voice[Pass]}^0} \dashv\vdash P$.

The main drawback of such an analysis is that it cannot straightforwardly be extended to restrictions on A-movement of non-affected objects. Non-affected objects are not obviously contained within a domain that could act as a selective barrier to A-movement, such as PP. Furthermore, positing a null PP encasing the non-affected object (a move which lacks independent empirical motivation) would make incorrect predictions. Recall that, for many speakers, *-able* adjectives disallow P-stranding but allow A-movement of non-affected objects. If non-affected objects were actually selected by null Ps, this asymmetry would remain unexplained.⁵¹ I count the broader empirical coverage of the Remove-based account as an argument in its favor.

In summary, although alternative analyses of attested restrictions on A-movement are conceivable (based either on Case deficiency licensed by Agree or on the selective opacity of PPs), these alternatives appear to face other non-trivial issues not faced by the Remove approach.

7 Conclusion

The novel claim of this paper is that A-movement of a nominal previously assigned non-structural Case (e.g. oblique Case or non-affected Case) requires a lexically specified, locally c-commanding licensing head. This is to be contrasted with A-movement of a nominal assigned structural Case, which does not require a lexical licensor. As evidence in support of this claim, I documented two asymmetries in A-movement showing that certain nominals can only undergo a subset of the full range of A-movements—one in P-stranding A-movement and one in A-movement of non-

⁴⁹Note that, under a selective-opacity-based account, the generalizations from section §2 would no longer be about P-stranding per se, but rather about A-movement out of PP.

⁵⁰See Keine (2019: 54–55; 2020: 197–199) on default horizons.

⁵¹Neither would an advocate of the horizons analysis easily be able to adopt my proposal that non-affected nominals in English are K_{N-AFF} Ps, since then DP movement (e.g. to [Spec, TP]) would be expected to strand K_{N-AFF} . I am not aware of any languages which permit stranding of affixes or particles exponing non-affected Case (or its equivalent, e.g. partitive Case, see footnote 38). Thanks to Erik Zyman (*pers. comm.*) for pointing out this prediction to me.

affected objects. To account for these asymmetries, I proposed that certain movements cannot target elements bearing non-structural Case (i.e. KPs) and that only some heads have the capacity to suppress non-structural Case on nominals. Case suppression allows these nominals to be assigned structural Case, to satisfy EPP features, and to Agree with higher heads like T. In particular, I argued that Voice[Pass] (and for some speakers also Voice[Mid]) can suppress oblique Case assigned by P to its complement and that both Voice[Pass] and A-*able* can suppress the non-structural Case lexically assigned to non-affected objects by the verbs that select them. Finally, I presented a feature-driven analysis of non-structural Case suppression that relies crucially on Müller's (2016; 2017; 2018; 2020; 2021) *Remove* operation: heads like Voice[Pass] are optionally specified in the lexicon (i) to attract nominals bearing non-structural Case (i.e. KPs) into their specifiers and (ii) to strip these nominals of their non-structural Case projections.

Of course, the Remove-based analysis is quite powerful and predicts very fine-grained variation in the A-movement profiles of nominals bearing different non-structural Cases. It remains to be seen whether this prediction is borne out, especially in languages with richer morphological case systems than English.

My analysis also supports a shift in perspective in future work on the relationship between Case and movement. Much previous work (especially following Chomsky 1981) derived the distribution of nominals from their inherent need to be Case licensed. By contrast, the restrictions on A-movement of certain nominals identified in this paper were not attributed to those nominals' failure to get Case. Rather, I argued that nominals bearing non-structural Case are, in many instances, unable to move (this recalls the Activity Condition of Chomsky 2000: 127ff., 2001: 6ff.; see Ershova 2019: sec. 2.3 for a related, but distinct proposal).

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