

Smaller structures for stative passives

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1 Introduction

TWO THEMES:

Theme 1 The question of how/where Roots enter syntactic structures– Are Roots merged in the same way as phrases, so that (for example) $\sqrt{\text{FLAT}}$ in *Mary flattened the metal* originates in a phrase like that seen in *Mary hammered the metal flat*?

Theme 2 The distinct (but often related) question of why certain types of modification/semantic interaction appear to be sensitive to something like the “word/phrase” boundary: e.g. *This door is not opened* \neq *This door is unopened*. On the face of it, is this expected if all derivation is syntactic?

TODAY: Mostly looking at a specific instance of Theme 2, which will connect with Theme 1 in interesting ways. Here’s the sequence:

1. *Smaller structures*: One hypothesis is that Roots are introduced into the syntax in ways that are not “phrasal”– by “directly attaching” them as heads directly to category-defining functional heads, for example. This allows us to do a number of useful things, in derivational morphology and compounding, for example.
2. *Stative passives*: Aka “adjectival passive”; “resultative participle”: e.g. *The recently opened door*. These have some properties that might make a “direct attach” analysis look appealing; but the stative passive appears to take fully phrasal *vP* complements, e.g. *The metal is [hammered flatter than a pancake]*.
3. *un- × stative passive*: Stative passive looks like it scopes over resultative secondary predicates. *Un-* attaches productively to statives passives. But together, these observations produce a scope paradox...
4. *Synthesis*: A “smaller” analysis for (at least some) stative passives provides a solution to the scope paradox. A more adventurous solution (stative passive is always small) leads to some interesting further points; I’ll outline some of them in concluding.

2 Smaller structures

How are Roots introduced into syntactic derivations? One view that parts company from much Root-based work in the 1990s onwards– Hypothesis R (see the discussion in Marantz (2009)):

HYPOTHESIS R: Roots are introduced in a way that does not involve phrasal projection of the Root.

Various ways of introducing Roots (and perhaps other things) by “directly” attaching them to heads have been discussed as alternatives to e.g. head-movement in phrasal structures; see below.

There are a couple of different intuitions related to Hypothesis R

- Roots do not interact with modifiers in a way that suggests that they are themselves phrasal;
- Roots are interpreted as properties of eventualities (in verbs/adjectives), where event structural properties are derivative of the functional structure (plus the semantic rules of interpretation).
 \Rightarrow (For the most part), Roots adorn argument structure, they don't project it.

A narrow version of Hypothesis R says something like this:

- (1) **Roots in syntax:** Roots enter the syntax by being head-attached (see below) to functional heads.

A narrower version restricts the types of functional heads that can be targeted in this way to *category-defining* heads:

- (2) **Roots in syntax II:** Roots enter the syntax by being head-attached to category-defining functional heads.

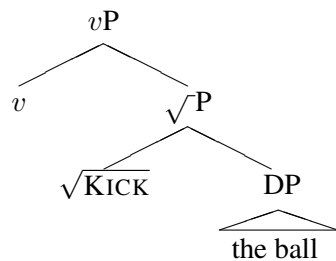
I highlight this difference because it leads to some interesting consequences that are worth exploring (think of e.g. “prefixing” scenarios like *per-miss-ion* etc., derived by head-attachment: [[per $\sqrt{\text{MIT}}$ -ion] versus [per- [$\sqrt{\text{MIT}}$ -ion]]– cp. Embick (2016)).

\Rightarrow In either scenario, Roots do not have phrasal syntactic projections associated with them.

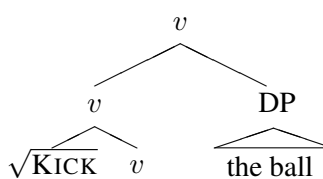
Structures: I will be exploring a general (in part vague) version of how to implement “direct attachment” here.

To start with, the idea behind Hypothesis R is that instead of there being a $\sqrt{\text{P}}$ with a Root that needs to be head-adjoined to the categorizer v as in (3), the Root would be merged to v as in (4):

(3) phrasal Root

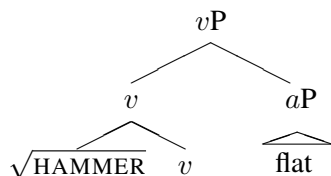


(4) Root directly on v



In my own work— and with respect to something that will figure in the discussion to come— something called “Direct Merge” appears in the (2004) analysis of resultatives of the *hammer the metal flat* type, where, (due to other assumptions) the “means” Root is directly attached to *v*:

(5) *vP* of *hammer flat* in Embick 2004

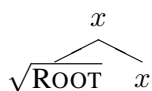


Summarizing, if the complement of the verb in a resultative is an *aP* (or a “small clause”), then (with binary branching) there is no position from which the Root could have moved to head-adjoint to *v*. So:

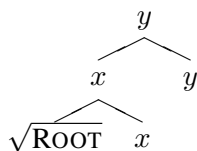
- According to this view at least some Roots enter syntactic derivations not through being merged into phrasal structures, but by being directly head-attached.
- There is actually some discussion in the same paper of apparent cooccurrence restrictions between Roots and phrases: **John darkened his hair black*. An updated account might point to a restriction against double-delimitation (of a particular type); see Creemers (2018) for relevant discussion.

To start generalizing the “direct attachment” idea, we could talk about assumptions like the following (which could be connected with proposals in Chomsky (1995)):

- Terminals *v*, *n*, etc. are *heads*;
- Direct-attaching a Root to a terminal produces an object of type *head*;



- Heads may continue to be attached to other heads in this way,



...

but

- If something that is unambiguously phrasal YP is attached to a head, the result is phrasal

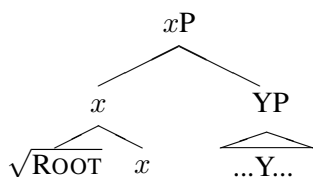
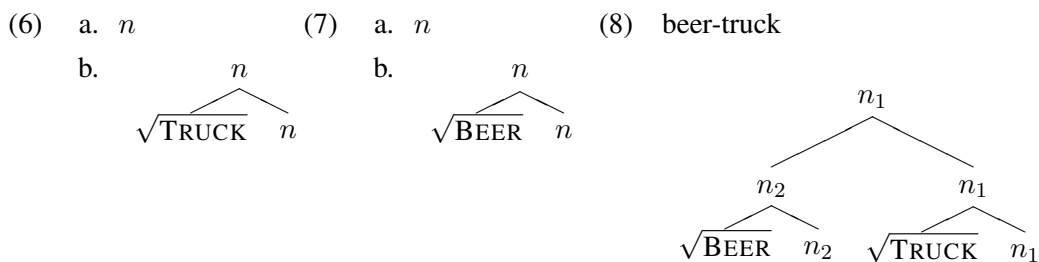
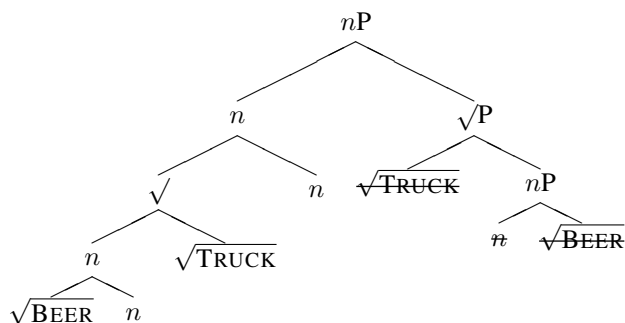


Illustration 1: A potential application would be with XN compounds in English (e.g. Embick 2016):



Compare a phrasal derivation (e.g. Harley (2012))

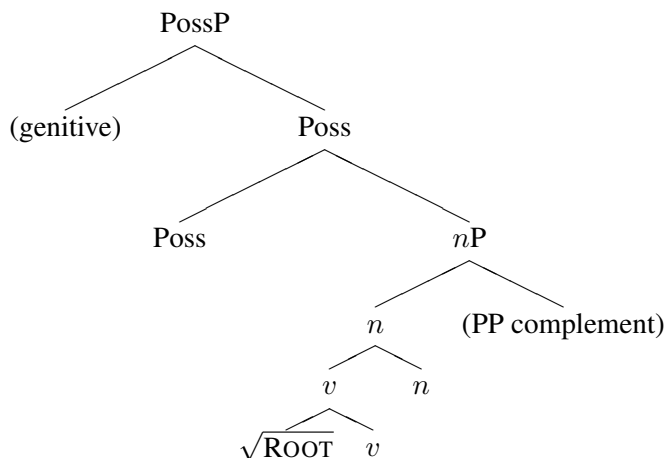
(9) NN compound via movement



Among other things, it is clear on the “small” analysis why there is e.g. no adjectival modification (e.g. *pilsner*) of the nP beer, which would yield **beer-truck pilsner beer* with movement.

Illustration 2: Wood (2020), “complex head” analysis of (certain) nominalizations—crucially, Root is verbalized but there is no vP :

(10) Nominalization (Wood 2020)



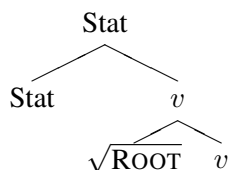
Looks like the right kind of analysis for e.g. *vapor-iz-ation* as well, although this remains to be worked out in detail (see Wood’s book).

3 Stative Passives

Part of a long history of architectural discussions; think Wasow (1977), which treats them (“adjectival passives”) as “Lexical”. Part of the analysis I will develop here is directed at some related questions.

For the stative passive, assuming that the argument is introduced high, a “small” analysis would involve at least three ingredients: a Root, a verbalizer *v*, and a stativizing head, given as *Stat* here. Considerations of (irregular) allomorphy (Embick 2003, 2010) suggest it is a non-cyclic head, not e.g. *a*):

(11) stative passive



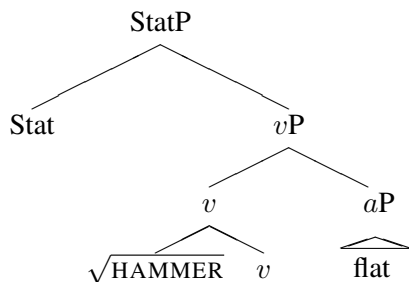
This would produce *opened*, *hammered*, etc.; basic stative passives.

On the face of it, this cannot be the whole story, though, as various phrasal elements look like they are in the scope of *Stat*:

- (12) a. [painted a lovely shade of lime green]
 b. [opened wider than it should have been]
 c. [hammered flatter than a pancake]

As it turns out, both Kratzer (2001) and Embick (2004) (among others) talk about Stative Passives as having phrasal structure. So, for example, with *Stat* as the stative passive head (recall (5)):

(13) stative passive of *hammer flat*



However, the accounts mentioned differ crucially in other ways:

- The Embick (2004) story has all stative passives as phrasal (as do a number of more recent accounts);
- the Kratzer account
 - makes a distinction in interpretations– *target* versus *resultant* state interpretations, in ways that

- involve particular criteria for whether a particular stative passive is “lexical” or phrasal, in ways that
- put a lot of what happens into the semantics of different verb classes.

For my purposes, the important point is that Kratzer requires phrasal structures for at least some stative passives; two arguments for this are (i) stative passive of idioms; (ii) resultatives (with “intransitive” means verbs).

A more interesting one for today is based on adverbial modification, and the contrast in (14)-(15):

- (14) Die Haare waren immer noch schlampig gekämmt.
 the hairs were still sloppily combed
 ‘The hair was still combed sloppily.’
- (15) *Die Haare waren schlampig fettig.
 the hairs were sloppily greasy
 ‘The hair was greasy sloppily.’

The argument is based on the idea that adverbs like *schlampig* cannot modify statives— like with the adjective *fettig* (15)— and that it must therefore have attached low in (14), i.e. to a *vP* in the terms adopted here.

- Thus: Stative passive applies to a *vP* with a phrasal adverb, and are thus phrasal.

So—, the accounts above agree that at least some stative passives are built on phrasal *vPs*, and this idea recurs in a number of subsequent approaches.

* * *

However...— and in the light of what is said about phrasally-deriving XN compounds above— while some *vP* things are ok in stative passives, others are not. That is, if you could just generate a *vP* and then apply stative passive to it, it is not clear why the (16b) examples are deviant:

- (16) a. The Romans destroyed the city {
 violently
 2035 years ago
 with fire arrows
 by launching flaming boulders into it
- b. */#The city is destroyed {
 violently
 2035 years ago
 with fire arrows
 by having had flaming boulders launched into it

For the hedge— (i) some modifiers, instrumental *with* in particular, depend on what we think about agentivity in stative passives; (ii) examples of the (16b) type can be found (as can occasional examples of “adjectival passives” with *by*-phrases, or certain types of instrumental modifiers), but this seems to be the exception, not the norm. See below...

Along these lines, recall Kratzer’s argument from adverbs above, *schlampig gekämmt*/**fettig*; and consider the *vP*/stative passive contrasts in (17):

- (17) a. Der Hans hat die Haare $\left\{ \begin{array}{l} \text{schnell} \\ \text{um 2 Uhr} \\ \text{mit der Bürste von seiner Mutter} \end{array} \right.$ gekämmt.
 ‘Hans combed his hair quickly/at 2/with his mother’s brush.’
- b. */#Die Haare waren $\left\{ \begin{array}{l} \text{schnell} \\ \text{um 2 Uhr} \\ \text{mit der Bürste von seiner Mutter} \end{array} \right.$ gekämmt.
 ‘The hair was-stative combed quickly/at 2/with his mother’s brush.’

(some of these can be coerced; see below).

What about Kratzer’s adverb-based contrast *schlampig gekämmt/fettig*? It is worth noting that there are other parts of the grammar that **distinguish between (i) simple states, and (ii) states that are produced by a grammatically-represented event**. Consider the (actually quite puzzling) fact that stative passives cannot themselves be resultative secondary predicates:

- (18) a. Mary hammered the metal flat/*flattened.
 b. Bill kicked the door open/*opened.
 c. The assailant shot him dead/*killed.

⇒ So, it could be that the adverb is modifying the state– and sensitive to the difference between uncaused and caused states– not attaching to the *vP*.

Looking ahead, where we will reconnect with this line of reasoning, the general pattern seems to be:

- Modifiers with stative passives pertain to the state, not the event that produced the state.

This needs to be explained a bit more; right now, it suffices to note that the patterns in (16)-(17) are surprising if the syntax of stative passives contains a phrasal *vP*.

4 *un-* × Stative Passive

There are lots of interesting things going on with the morpheme(s) pronounced as *un-* in English, concerning its meaning with adjectives, what it can and cannot attach to, etc. For my purposes, the relevant point is the following:

- Negation realized as *un-* can be productively attached to stative passives.

This observation plays a role in much of the literature on stative passives, and has a long history (Horn (2005) cites Zimmer’s (1964) correlation: “the less productive the affixation process, the more likely its output is to be interpreted as a contrary (rather than a contradictory) of its base.”; apparently Jespersen (1917) arrives at something similar).

This aspect of *un-* is striking when we consider that many verbs require hefty coercion in order to be interpreted as stative passives; but this is not the case when *un-* is attached:

- | | |
|---|---|
| <p>(19) These boxes remained __ all day.</p> <p>a. flattened
opened
broken
stacked</p> <p>b. kicked^C
licked^C
watched^C
examined^C</p> | <p>(20) compare:</p> <p>a. unflattened
unopened
unbroken
unstacked</p> <p>b. unkicked
unlicked
unwatched
unexamined</p> |
|---|---|

The interpretation of these is (sometimes) complex, on account of how different verbal interpretations interact with different meanings of stative passives (recall “target state” versus “result state”; see Adamson (2017) for some related discussion).

⇒ Overall, though, *un-* clearly scopes over the stative passive: *unverbed* = ‘not in some state S’, not ‘in the state of not having undergone a VERB event’.

Now; given the reasoning above, what looks like a scope paradox:

1. Stative passive \succ resultative secondary predicate (RSP) §3;
2. *un-* \succ stative passive;
3. So: *un-* \succ stative passive \succ RSP.

And.....:

- (21) *The metal is unhammered flat.

This looks like a real problem for approaches that build stative passives on top of phrasal *v*Ps.

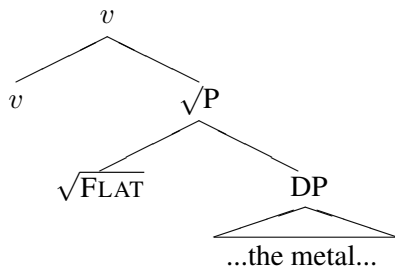
5 Synthesis

Generalizing– the pattern above is not just found with “canonical” resultatives; other *v*P things that are ok in stative passives are impossible with *un-*:

- (22) a. *The metal is unhammered flat.
b. *The box is unpainted lime green.
c. *The door is unopened wide

Before moving toward a resolution, note that the pattern is one that is emphasized by Theme 1; if we introduced *flat* in *flatten* phrasally in a \sqrt{P} that is the structural equivalent of a resultative secondary predicate:

(23) phrasal $\sqrt{\text{FLAT}}$



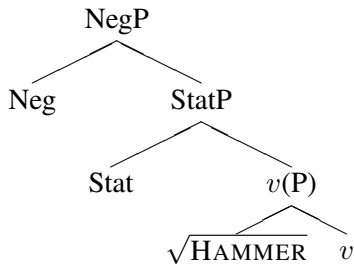
why do we find *unflattened* but **unhammered flat*?

⇒ points to a “small” analysis of stative passives; how small?

First, I am going to assume that *un-* scopes over the things that it c-commands (see Kayne (2017) for an interesting discussion).

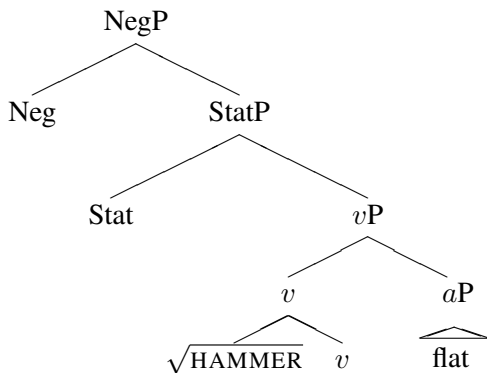
If we just looked at *The metal is unhammered*, we could consider an analysis in which *un-* realizes a phrasal Neg head that takes StatP as its complement:

(24) unhammered(?)



But the facts considered above rule out this approach. Consider:

(25) does not work



If this (or something like it) were the syntax of *un*-stative passives (e.g. Bruening 2014), *unhammered flat* would be grammatical and mean ‘not in the target state of a hammering that ends in flatness’ (roughly). The point is generalizable:

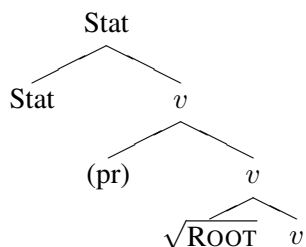
- For an analysis that treats (i) *un*- as realizing a head that takes stative passive as its phrasal complement, and, (ii) attaches resultative secondary predicates etc. somewhere below this, **unhammered flat* etc. are predicated to be grammatical.

Now: Remember §2, and the idea that in talking about Roots, we should consider derivations involving smaller structures. This part of the theory is crucial for Roots, but could also involve other elements: e.g. the prefixes in *com-mit*, *per-ceive*, etc., as noted above.

- ★ **Proposal:** The neg(ation) head realized as *un*- in stative passives is directly head-attached to Stat.

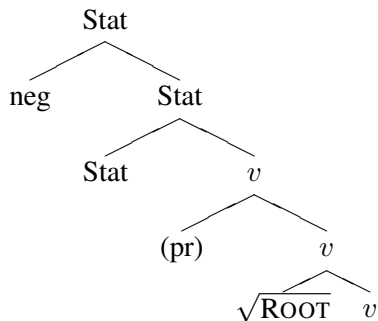
Revising part of what is said above: now, the idea is that simple stative passive (*opened*, *hammered*, would look like (26); crucially, because everything dominated by Stat is of type *head*, this object is a head (taking into account the idea that some verbs involve prefixes (e.g. *de-destroy*), I have added a PR morpheme as well, direct-attached to *v*):

(26) Structure for “smaller” stative passive



The head-attachment operation targets this head if negation is added, to produce (27):

(27) negated “smaller” Stat

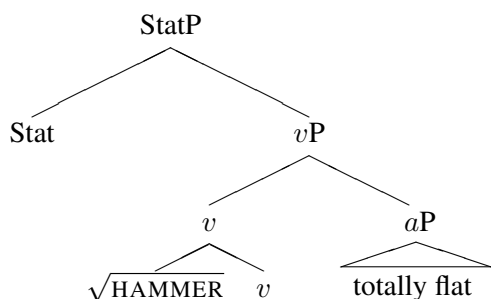


Crucially, neg here scopes over the entire Stat complement; hence *unopened*, *unhammered*, *undestroyed*, etc.

- The idea that a direct-attached head scopes in this way is based on the (simple) point that we are creating hierarchical structures; the (complicated) question of how to relate this to other notions (e.g. the adjunction/substitution distinction) remains to be examined;
- While theories with head-movement might create structures that look like (27), the question about heads and scope doesn't always arise; in dealing with direct attachment, though, the question is an important one (cp. Wood 2020).

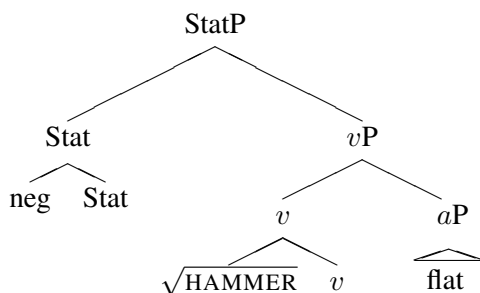
What if there is phrasal material in the *vP* (e.g. an RSP)? In the non-negated version, Stat could in principle take the entire *vP* as its complement; thus *hammered totally flat* etc.:

(28) with phrasal *vP*



With negation, though, the proposal concerning how neg attaches produces a different outcome in this case than it does for (27): neg has to direct-attach to Stat, and from there, it does not scope over *vP*:

(29) negated phrasal *vP* case



Then for **unhammered flat*:

- Neg does not scope over the *vP*, so we will not derive the meaning “not in a state of having been hammered flat”.
- If we had e.g. $\sqrt{\text{HAMMER}}$ originate with the stative part (see below), we would get the meaning “flat as a result of not being in the state of having undergone a hammering event”, which is non-sensical. [It's actually more complex than this.]

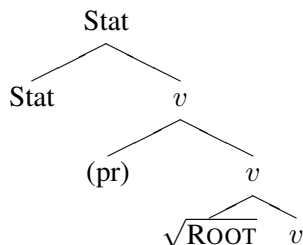
INTERIM SUMMARY: The scope problem– Neg \succ Stat \succ RSP etc., but **unhammered flat* etc.– does not arise in an account that treats neg as directly attaching to Stat.

6 Possible extensions

For the analysis above to work as it does, some stative passives (those negated by *un-*, at the very least), need to be small. **Question...**

★★ Could all stative passives be small?

(30) All small?



On the face of it, no, because of *hammered flatter than a pancake* etc.; we’ve been talking about this...

However; the small-analysis has some interesting properties (looking back, some steps in this line of reasoning are found in Embick (2009); it connects with a way of analyzing *re-/stative* passive similarities in Marantz (2009) as well).

6.1 Modifiers (including by-phrases)

The uniformly-small approach would explain why “typical” *vP* modifiers are not freely found in stative passives; remember

(31) *The city is destroyed {
 violently
 2035 years ago
 with fire arrows
 by having had flaming boulders launched into it

⇒No phrasal *vP*, no modifiers that attach to phrasal *vPs*.

Looking at the literature– mostly on *by*-phrases– and paraphrasing somewhat, it appears that something like the following generalization applies when there are modifiers with stative passives:

- The modifiers that are able to appear with stative passive are associated with states, not with events. [A weakened version is that the modifiers attach high and can only access the eventive part of the stative passive by “reaching in”– under conditions that would have to be made precise].

This connects with something McIntyre (2015) calls “state relevance”: the adverbs that modify stative passives seem to be ok to the extent that they have an impact on the state:

(32) Out of context, *hastily written*/#*slowly written*... But if we take *slowly* to mean something like *carefully*, things improve). In this way, the adverb is relevant to how the state is defined.

This line of reasoning extends to “agentive” *by*-phrases. These are found sporadically in stative passives, unlike in event passives, where they appear with no problems.

(33) Mary is being/*is arrested by the police, so she can’t come to the party.

It appears that when (informally) the *by*-phrase plays a crucial role in determining the state, it is possible to get some that sound quite natural; e.g.

(34) The goal of this exercise is to remain [undetected by the spotter] for as long as possible.

This is tricky, though, because it interacts with lexical semantics and the target state/resultant state distinction noted earlier. There’s clearly more to be done here.

⇒In short, it looks like there are paths toward reasonable explanations for which modifiers appear with stative passives (and which do not). Getting all of this to work semantically is going to raise some questions, though.

6.2 Generalizations about other arguments

One of the striking things about stative passives is that they do not always involve the same arguments that are found in verbal passives; this is called the “Sole Complement Generalization” in Levin and Rappaport (1986):

(35) The car-dealer sold the customers a car.

(36) eventive passive

- a. A car was sold to the customers.
- b. The customers were sold a car.

(37) stative passive

- a. recently sold cars
- b. *recently sold customers (*unless you “sell them on an idea; or sell them...”*)

This observation is both interesting in itself, and in the role it plays in determining the structure of other clauses– see Biggs and Embick (2021) on the *get*-passive. There’s nothing in general that keeps such arguments out of statives like the *done*-state (Biggs 2021), or the perfect for that matter:

- (38) a. When the customers are done being shown the houses, please take them to the office.
b. The customers have been shown three different houses this week.

Moreover, the restriction does not appear to be thematic (e.g. patients/themes but not goals); compare *feed* and *teach*– cf. Anderson (1977), Levin and Rappaport 1986:

(39) *recently fed carrot types; recently fed babies

(40) recently taught languages; recently taught students

The “Sole Complement” business is this:

- (41) Stative passive is possible only with arguments that are found in a monotransitive.
- a. I sold the cars/*the customers.
 - b. I fed *two types of carrot/the babies.
 - c. I taught three students/Hittite.

See also Dowty (1978,1979) for interesting discussion.

* * *

Looking back at a somewhat complex literature, it looks like there might be a generalization like (42) at play in determining which arguments are found in stative passives:

- (42) Stative passives are possible only with “direct” arguments (see Levin and Rappaport)

Adapting this to a sort of Root-based view, this would be something like (43):

- (43) Stative passives are possible only with arguments that are licensed by the Root/do not require additional structure (cf. Embick 2004:384–).

The problem, though, is that (43) is **incorrect**– stative passives are possible in at least two scenarios in which the argument in question is not an argument of the Root:

- (44) resultatives with intransitives
- a. Mary ran the soles of her shoes thin.
 - b. The soles of my shoes are run thin.
- (45) stative pseudo-passives
- a. Nobody talked to John last night.
 - b. Poor John remained untalked to for the entire party.

These observations point in more than one direction:

- The intransitive resultatives suggest that the participial structure itself need not license an argument; a way to go would be to have a *run* and *thin* combine before they meet the patient (“complex predicate formation”).

The pseudo-stative passives are more relevant to my main point. They– and perhaps some related things, e.g. particle verbs, or prefixed verbs like *bemoaned* etc.– suggest that elements introducing arguments **are** allowed in stative passives; **but only some of them...**

The question we are then led to is (46):

- (46) What accounts for which “non-Root” arguments are possible in stative passives, and which are not?

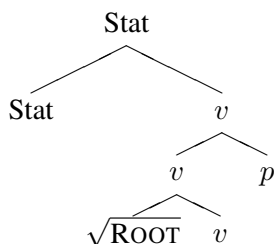
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Setting to the side the “complex predicate” cases, the hypothesis that I am exploring is this:

(47) *Arguments licensed in stative passives are those that are found in “small” structures.*

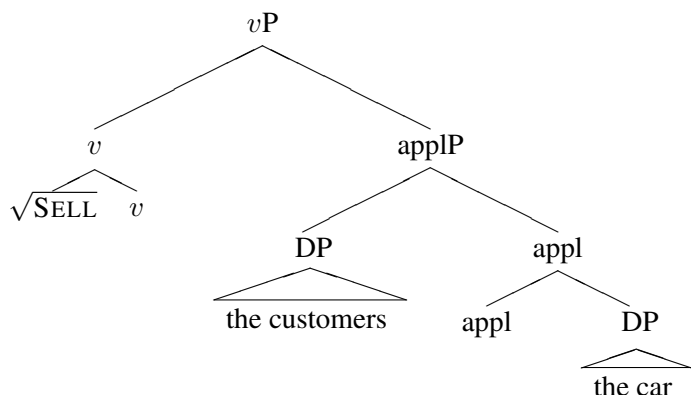
So, for example, *talked to* can be small on the view that I have developed:

(48) stative passive *talked to*



But other arguments (prepositional or “low applicative”) require phrasal structure; consider *sell*:

(49) *sell the customers the car*



Part of this analysis of low applicatives is that they are possible only when there is a direct object (*I baked Mary a cake*, **I baked Mary*).

1. Since this object clearly has to be phrasal, it is therefore predicted by a small analysis that the phrasally-licensed arguments will not be found in stative passives.
2. The patient/theme arguments can be, though, because they do not require phrasal structure.

FUN ASIDE: *Can we direct-attach the appl head to a verb like we did with the preposition above? As noted, the applied argument is possible only when there is a DO. So we could try to compound the DO: The car-sold customers were happier than the truck-sold ones. Might be odd for English but could be explored in other languages...*

THE PROGRAM IN SUMMARY: See if the small/phrasal licensing distinction can be extended to the full set of argument-licensing patterns seen in stative passives (including external arguments; tricky).

7 Conclusion/Further Directions

Main points:

- Considering smaller structures leads to ways of thinking about why– in an exclusively syntactic approach– there appear to be asymmetries implicating something like a word/phrase boundary.
- Stative passive is an interesting test-case for thinking about this, because Stat appears to take phrasal complements sometimes. When *un*-prefixation is introduced into this picture, there appears to be a scope paradox.
- Head-attaching neg realized as *un*- and treating some at least some stative passives as small resolves the scope issue.
- Generalizing the “small” view looks counterintuitive at first, but produces a number of interesting predictions that are not easy to derive if Stat attaches to phrasal *v*Ps. Both for
 - Modification restrictions that are otherwise not explained; and
 - argument-licensing asymmetries that are at the center of a long discussion.

This suggests to me that something about the small approach is on the right track, or at the very least that it will lead in interesting new directions.

- ★ An implication of this line of argument is that we have an argument for Roots not being introduced phrasally.

References

- Adamson, Luke (2017) “*un*-Answered Questions,” qualifying paper, University of Pennsylvania.
- Anderson, Stephen (1977) “Comments on the Paper by Wasow,” in *Formal Syntax*, Academic Press, New York, 361–377.
- Biggs, Alison (2021) “Building complex eventualities in syntax: A case study in the *done*-state derived stative,” to appear in *Syntax*.
- Biggs, Alison, and David Embick (2021) “On the event structural properties of the English *get*-passive,” *Linguistic Inquiry*, https://doi.org/10.1162/ling_a_00405.
- Bruening, Benjamin (2014) “Word formation is syntactic: adjectival passives in English,” *Natural Language and Linguistic Theory* 32, 363–422.
- Chomsky, Noam (1995) *The Minimalist Program*, MIT Press, Cambridge, MA.
- Creemers, Ava (2018) “Resultative secondary predicates and prefixes in German,” qualifying paper, University of Pennsylvania.
- Dowty, David (1978) “Governed transformations as lexical rules in a Montague Grammar,” *Linguistic Inquiry* 9:3, 393–426.
- Dowty, David (1979) *Word Meaning and Montague Grammar*, D. Reidel Publishing Company, Dordrecht.
- Embick, David (2003) “Locality, Listedness, and Morphological Identity,” *Studia Linguistica* 57:3, 143–169.
- Embick, David (2004) “On the Structure of Resultative Participles in English,” *Linguistic Inquiry* 35:3, 355–92.
- Embick, David (2009) “Roots, states and stative passives,” <https://www.ling.upenn.edu/~embick/stut.pdf>. Handout from a talk presented at the Roots 2 Workshop, Stuttgart.
- Embick, David (2010) *Localism versus Globalism in Morphology and Phonology*, MIT Press, Cambridge, MA.

- Embick, David (2016) “Approaching *polymorphy*,” <https://www.ling.upenn.edu/~embick/sadaf.pdf>. Handout of a lecture series given at the Sociedad Argentina de Análisis Filosófico (SADAF), Buenos Aires, Argentina.
- Harley, Heidi (2012) “Compounding in Distributed Morphology,” in Rochelle Lieber and Pavel Štekauer, eds., *The Oxford Handbook of Compounding*, Oxford University Press.
- Horn, Laurence R. (2005) “An *Un-* Paper for the Unsyntactician,” in Slikoko S. Mufwene, Elain J. Francis, and Rebecca S. Wheeler, eds., *Polymorphous Linguistics: Jim McCawley’s Legacy*, MIT Press, 329–365.
- Jespersen, Otto (1917) *Negation in English and Other Languages*, A.F. Høst, Copenhagen.
- Kayne, Richard S. (2017) “Anitymmetry and morphology: Prefixes vs. suffixes,” *Wiener Linguistische Gazette* 82, 145–161.
- Kratzer, Angelika (2001) “Building Statives,” in *Proceedings of the Berkeley Linguistics Society* 26.
- Levin, Beth, and Malka Rappaport (1986) “The Formation of Adjectival Passives,” *Linguistic Inquiry* 17:4, 623–661.
- Marantz, Alec (1997) “No Escape from Syntax: Don’t Try Morphological Analysis in the Privacy of Your Own Lexicon,” in Alexis Dimitriadis, Laura Siegel, Clarissa Surek-Clark, and Alexander Williams, eds., *Proceedings of the 21st Penn Linguistics Colloquium*, UPenn Working Papers in Linguistics, Philadelphia, 201–225.
- Marantz, Alec (2009) “Resultatives and Re-Resultatives: Direct Objects may Construct Events by Themselves,” talk handout, NYU.
- Marantz, Alec (2013) “Verbal argument structure: Events and participants,” *Lingua* 130, 152–168.
- McIntyre, Andrew (2015) “Event modifiers in (German) adjectival participles: Remarks on Gehrke (this issue),” *Natural Language and Linguistic Theory* 33, 939–953.
- Stechow, Arnim von (1996) “The different readings of *wieder* ‘again’: A structural account,” *Journal of Semantics* 17:2, 87–138.
- Wasow, Thomas (1977) “Transformations and the Lexicon,” in Peter Culicover, Thomas Wasow, and Adrian Akmajian, eds., *Formal Syntax*, Academic Press, New York, 327–360.
- Wood, Jim (2019) “Prepositions, Nominalization and Allosemy,” talk handout, Yale University.
- Wood, Jim (2020) “Icelandic nominalizations and allosemy,” ms., Yale University.
- Zimmer, Karl (1964) “Affixal negation in English and other languages,” supplement to *Word* 20.