Merge, conflation, and head movement: The First Sister Principle revisited
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0  What I’ll say
- HM a problem, conflation mechanism lets it be ‘phonological’ in the right way
- Locality for HM follows from conflation mechanism, not minimality considerations
- Conflation mechanism can capture sisterhood effects in English compounding

1  Introduction: Head Movement is a Problem

(1) Well-known issues with head-movement in the Minimalist Program:
a) Brody (2000)
   \( \rightarrow \) If the lexicalist, ‘checking’-style approach to head-movement of Chomsky 1993 is adopted, many extra stipulations required to get the Mirror Principle to fall out, lots of duplication of effort in the morphology and the syntax.¹
   \( \rightarrow \) No obvious reason why heads shouldn’t be able to excorporate
b) Head movement is counter-cyclic—can’t be a ‘normal’ instance of Merge, unlike XP movement, doesn’t Extend Target, violates Structure Preservation
c) Syntactic head-movement² incompatible with Bare Phrase Structure; given contextual definitions of ‘phrase’ & ‘head’, violates Chain Uniformity (Chomsky 1995: 321:
   “We have so far sidestepped a problem that arises in the case of ordinary head adjunction. Take \( \overline{a}, \overline{K} \) to be X’s in (120) [they’re sisters], with \( \overline{a} \) raising to target \( K \), which projects, forming L – \{<H(K), H(K)>, \{\overline{a}, K \} \}. Since K projects, \( \overline{a} \) is maximal. Thus, \( \overline{a} \) is both maximal and minimal. If that is true of \( i \) as well (e.g. in the case of clitic raising), then CH[ain] satisfies the uniformity condition. But suppose \( i \) is nonmaximal, as is common in the case of V-raising to I or to V. Then, under a natural interpretation, [chain uniformity] is violated; CH is not a legitimate object at LF, and the derivation crashes.”)
   \( \rightarrow \) This theory-internal consideration, plus the fact that he can’t get V2 word order to work out properly, leads Chomsky to assert that head-movement phenomena are ‘phonological’, rather than syntactic

(2) Well-known benefits of head-movement in syntactic theory:
   \( \rightarrow \) It has tremendous explanatory power!
(3) Some kinds of approaches to eliminating head-movement:
   \( \rightarrow \) Kayne, Mahajan: (massive) remnant XP-movement lines heads up
   \( \rightarrow \) Brody: syntax projected from pre-built morphological structure

¹ Warning: The main motivation for the ‘check-my-morphology’ account of HM — the visible tense marking on VP-internal English Vs — will still be a problem for the mechanism presented in this talk. I assume a morphological-adjacency account like that of Bobaljik 1994 must be correct.
² As long as it’s adjacency-style HM
Making sense of head-movement as ‘phonological’: Conflation

One commonly-expressed intuition behind head-movement seems to be that it’s triggered by “affixal” properties of one or the other of the heads involved. People say things like “T-to-C movement is blocked in German embedded clauses because C is filled”… where the only serious notion of ‘filled’ that might be relevant is morphophonological.3

Hale and Keyser (2002: 60-88) propose (then retract) an implementation of Conflation for their lexical syntactic derivations that will work beautifully as a Minimalist, phonological head-movement mechanism:

“We would like to take seriously the idea that Conflation is a concomitant of Merge, the operation which is fundamental in defining the projection of syntax from the lexicon (Chomsky, 1995). […] To say that Conflation is a concomitant of Merge is to say that it is in some intimate manner bound up with Merge, that it is a part of Merge in some sense.” (pp. 60-61)

Key assumptions for H&K 2002 Conflation (Mark I):

a. The label of any constituent has ALL the features of the head, including some representation of a phonological matrix, which H&K call the 'p-sig' of the head.4

b. Conflation occurs when a constituent [a] is merged with a sister head [b] whose p-sig is 'defective'. The p-sig of [a] is merged into the defective p-sig of [b].5

c. For Economy reasons, the copied p-sig is only pronounced once, in its uppermost position.

Notational convention: I will represent heads with a syntactic category label, subscripted with their phonological realization, intended to represent the p-sig of the head. Since I believe in an ‘interpretive’ morphology, with Late Insertion, this isn’t really what I think is happening; rather, I think that ‘p-sigs’ are just positions-of-exponence, waiting for Vocabulary Insertion to fill them in; conflation just makes a copy of a p.o.e. and puts it next to the ‘defective’ sp.o.e. of another head.

Consider what will happen in the derivation of this Mohawk incorporation example:

Owira'a       waha'-wahr-ake'        (Baker 1988)
Baby          Agr-meat-ate
"The baby ate meat."

start with the roots, [N wahr-], ‘meat’ (N_wahr-) and [V -rake], ‘eat’ (V_rake)
assume V_rake has a 'defective' p-sig

3 Of course, even a null (‘unfilled’) C must be syntactically & featurally completely robust
4 Because this approach depends crucially on labels, it’s incompatible with Collins 2002.
5 This is rather like foot-feature passing in GPSG and later models. It violates Brody 1998’ ‘Uniqueness’ principle, although only for phonological material; I assume Uniqueness still holds for syntactically active features.
Harley, Head movement

(6) a. \( N_{\text{wahr}} \) merges with \( V_{\text{rake}}' \).
b. Because \( V_{\text{rake}} \) has a ‘defective’ p-sig, the p-sig of \( N_{\text{wahr}} \) copies into the p-sig of \( V_{\text{rake}} \).
c. The head, now with the P-sig \( V_{\text{wahrake}}' \), projects (i.e. is used as a label, forming the set \{ \( V_{\text{wahrake}}' \), \( V_{\text{wahrake}}' \), \( N_{\text{wahr}} \} \), or, in tree-terms

d. For economy reasons (because \( V_{\text{wahrake}}' \) is pronounced), \( N_{\text{wahr}} \) is not.

(BPS reminder: Xs undominated by copies of themselves are XPs, Xs dominating no copies of themselves are \( X^0 \).)

(7) How to extend this to regular cases of head-movement:

\( \Rightarrow \) the insight: in the theory of Bare Phrase Structure, the p-sig of the head of a complex constituent is a sister of the new head it’s Merging merging because the label of the complex constituent is just a copy of its head.

\( \Rightarrow \) let’s do an instance of V-to-T-to-C movement, as in Icelandic:

(8) a. Af hverju lásu nemendurnir bækurnar
   for what read.fin the.students the.books
   "Why did the students read the books?"

(9) a. The verb \( lás- \) ‘read’ merges with the (independently constructed) DP \( bækurnar \) ‘the books’. Neither P-sig is defective, and no copying occurs. The whole constituent is labelled with the p-sig of its head, \( lás- \).
   b. The verb phrase labelled \( lás- \) merges with the adjunct PP \( af \) hverju, ‘for what’. Neither of the p-sigs of the labels of these constituents is defective, so no copying occurs. The whole constituent is labelled with the p-sig of its head, \( lás- \).
   c. The verb phrase labelled \( lás- \) merges with an element from the numeration, a [+finite] T element, \(-u\). This element’s p-sig is defective. Consequently, the p-sig of the verb phrase — \( lás- \) — is copied into the defective p-sig of
the T element, giving lásu. Then, the whole constituent — a projection of T — is labelled with the p-sig of its head, lásu.

d. The TP labelled lásu merges with the subject DP, nemendurnir, ‘the students’.
(Nota: this could be a copy of nemendurnir from down in the VP, if we’re assuming the VP-internal subject hypothesis). Neither p-sig is defective, so no copying occurs. The whole constituent — a projection of T — is labelled with the p-sig of its head, lásu.

e. The TP labelled lásu is merged with a [+wh] C element, whose p-sig, ∅, is defective. Consequently, the p-sig of the TP, lásu, is copied into the defective P-sig of C. Then the whole constituent, a projection of C, is labelled with the P-sig of its head.

f. Finally, the [+wh] PP af hverju, ‘of what’, is copied from its position inside the VP and Merged with the [+wh] CP, checking its [+wh] feature. No defective p-sig is present, so no copying occurs; the whole CP is labelled with the p-sig of its head, lásu.

→ This mechanism essentially lets us retain the idea that head-movement is ‘phonological’, while ensuring that it is local, and only triggered by appropriate items higher in the tree (i.e. it’s an instance of Enlightened Self-Interest, violating Greed).

→ I will call heads with ‘defective’ p-sigs [+affix] heads; this is just for convenience. As we’ll see, I’m not suggesting that such heads are necessarily morphophonologically affixal, though in canonical cases they are. ⁶

Locality: Notice that this mechanism derives the the Head Movement Constraint, but it has nothing to do with the Minimal Link Condition!

(10) → only the p-sig of the label of its sister may be copied during merge of a [+affix] head. The copied p-sig is a copy of the p-sig of the head of the larger constituent. Any p-sigs within that constituent, that are not in its head, will not make it into the label.

(11) Example: Consider the derivation of a French passé-compose clause, like that below, at the point where the vP (labeled with the verb’s p-sig) merges with T⁷:

a. Marie a parlé à Jean
   Mary has spoken to John.

b. $\text{V}_\text{parl€}$

Pₐ
parlé $\text{P}_\text{parlé}$ $\text{P}_\text{a}$

DPJean a Jean

+ $\text{T}_\text{a}$ a

P-sig is not defective: [-affix]

No copying of V into P-sig of T because T not defective. V’s p-sig now ‘locked’ downstairs, not visible in any label dominating it. Head-movement must be to an immediately c-commanding head. ⁷

⁶ Many discussions of the HMC and triggers for head-movement feature (see, e.g., Carnie 2000) as a trigger for movement that does not involve any actual movement at all, making

⁷ Or Asp or another v or whatever your favorite category for the avoir auxiliary is.
(12) **No excorporation:** Because there’s no provision for ‘partial’ copying of a P-sig, there can be no excorporation without special effort.

(13) **No semantic effects of head-movement:** Because HM is only movement of phonological material, it can’t, for instance, change scope relations. There’s no $V$-$\text{Neg}$/Neg-$V$ effect in the classical verb-raising-past-negation cases:

\[
\text{Jean ne parlait pas français.}
\]

\[
\text{Jean n’as pas parlé français.}
\]

(14) **Something weird happens.**

a. Every key didn’t work
   i. $=$ Not every key worked.
   ii. $=$ No key worked.

b. Didn’t every key work?
   i. $\not=$ Is it the case that not every key worked?\(^8\)
   ii. $\not=$ Is it the case that no key worked?\(^9\)
   iii. $=$ Is it the case that every key worked?\(^10\)

(Points to literature appreciated; only started thinking about this very recently).

3 **Deriving the First Sister Principle: Conflation and Compounding**

(15) **English incorporation in nominalizations**

- It's well-known that English has a very productive object-incorporation process in `-er` and `-ing` nominalizations (`synthetic compounds`) (Roepen and Siegel 1978; Selkirk 1982)
  a. `-er` nominalizations
     paper-cutter, can-opener, door-stopper, housekeeper, page-turner, truck-driver, scriptwriter, tiebreaker, mind-reader, homemaker, name-caller, storyteller, noisemaker, blood donor
  b. `-ing` nominalizations
     paper-cutting, can-opening, housekeeping, page-turning, truck-driving, script-writing, tiebreaking, mind-reading, name-calling, storytelling, noisemaking, fact-checking, fact-finding

(16) **Deriving these incorporations through conflation**

a. Select *write* with +affix features in the numeration.

b. Merge *write* and *script*. Copy the p-sig of *script* into *write* during Merge (by Conflation Economy).

c. Project the head (i.e. label the whole thing with the head's features)

d. Merge [scriptwrite] with `-er` (also selected with a +affix feature). Copy the p-sig of *scriptwrite* into that of `-er` during Merge (again by CE)

\(^8\) Felicitous answers: “Yes. For instance, key #2 didn’t work.” or “No. Every key worked.”

\(^9\) Felicitous answers: “Yes. No key worked.” or “No. For instance, key #2 worked.”

\(^10\) Felicitous answers: “Yes. Every key worked.” or “No. For instance, key #2 didn’t work.”
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e. Project the head.
f. Pronounce entire structure as *scriptwriter*
g. 

Conflation Economy: Conflation must occur as early as possible. That is, a [+affix] p-sig must copy the p-sig of its sister during Merge; it cannot ‘wait’ to copy some later available p-sig.

• By Conflation Economy, [+affix] heads must get a p-sig from their sister at Merge
• This means that no conflation can ‘wait’. If you have a [+affix] V, you have to copy the p-sig of the first thing it merges with into V’s label.
• (side note: it also derives a ban on head-lowering—V couldn’t remain defective all the way through the derivation until it got to T, and then copy T’s P-sig into its label.)

(17) Contrast that with a derivation where *write* starts with a -affix feature:

a. Merge *write* and *scripts*.
b. Project the head (*write*), i.e. label the whole structure with *write*’s features.
c. Merge [write scripts] with -er. Copy the p-sig of write into -er
d. (Insert genitive of for free to case-mark argument of *write*)
e. Pronounce entire structure as *writer of scripts*.

h. 

The payoff: deriving Roepre and Siegel 1978:208 First Sister Principle

(18) *Dative compounds:

a. Consider the following: drug-pusher, errand-runner, truck-driving, horse-jumping
b. These are all formed from verbs which have good (resultative) argument structures with a Goal PP:
   push drugs to children, run an errand to the store, drive trucks across the country, jump the horse over the fence.
c. Their nominalizations, however, do NOT allow the goal PP to be included:
d. Similarly for resultative & V-particle constructions: washing dishes clean & dishwasher are fine but *dishwashing clean; eating apples up & apple-eating but *apple-eating up…

11 Selkirk’s 1982:37 version of this is the First Order Projection Condition, but here I think the First Sister principle is really the thing at work, given BPS, as we’ll see in a minute.
e. However, if the object is *not* incorporated, modification of the nominalization by a result or goal secondary predicate is ok (at least, better): *painting of houses red, washer of dishes clean, running of errands to the store, driving of trucks across the country*.

The impossibility of secondary predication in these incorporation structures follows from Conflation Economy, because 'inner subjects' (specifiers, subjects of predication) can't incorporate by themselves unless the predicate is complementless; if the predicate has a complement, it must also incorporate if the specifier is going to.

(19) Compare the derivation of *truck-driving across the country* and *driving of trucks across the country*: Let's try to derive them by generating *drive* with a +affix feature in the first case and not in the second:

a. Numerations

\[
\begin{align*}
\text{[+affix] ‘drive’} & \quad \{\text{drive}, \text{[DP the country]}, \text{across}, \text{truck}, \text{-ing}\} \\
\text{[-affix] ‘drive’} & \quad \{\text{drive}, \text{[DP trucks]}, \text{across}, \text{[DP the country]}, \text{-ing}\}
\end{align*}
\]

b. Make your P’ by Merging *across* and *[the country]*

c. Merge: *truck* and *[across the country]*

\[
\begin{align*}
\text{V}_{\text{across}} \quad \text{P}_{\text{across}} \\
\text{N}_{\text{truck}} \quad \text{P}_{\text{across}} \\
\text{P}_{\text{across}} \quad \text{DP}_{\text{the country}}
\end{align*}
\]

\[
\begin{align*}
\text{V}_{\text{across}} \quad \text{P}_{\text{across}} \\
\text{N}_{\text{trucks}} \quad \text{P}_{\text{across}} \\
\text{P}_{\text{across}} \quad \text{DP}_{\text{the country}}
\end{align*}
\]

\[
\begin{align*}
\text{\text{\textit{*across}}-\text{drive}} & \quad \text{\textit{truck(s)}} \\
\text{\textit{across}} & \quad \text{\textit{the country}} \\
\end{align*}
\]

\[
\begin{align*}
\text{\textit{drive}} & \quad \text{\textit{trucks}} \\
\text{\textit{across}} & \quad \text{\textit{the country}} \\
\end{align*}
\]

NOT *truck-drive across the country*

d. Merge: *drive*, *aff or *drive*, and *[truck across the country]*

e. Merge -ing with *[acrossdrive truck the country]* or *[drive trucks across the country]*

\[
\begin{align*}
\text{n}_{\text{acrossdriving}} \\
\text{n}_{\text{acrossdriving}} \quad \text{V}_{\text{acrossdrive}} \\
\text{n}_{\text{driving}} \quad \text{V}_{\text{drive}} \\
\text{n}_{\text{driving}} \\
\end{align*}
\]

\[
\begin{align*}
\text{\textit{*across-driving (of) trucks the country}} \\
\text{\textit{driving (of) trucks across the country}}
\end{align*}
\]

12 Also note: if we’d tried to do this derivation with a [+aff] feature on *truck*, we’d get *truck-across* at this point.
What's wrong with *acrossdriving of trucks the country*?

2 possibilities:

a) English doesn't have any appropriate [+affix] form vocabulary item for *across* (it's not in the limited set of English Ps that can compound (e.g. *outrun*)).

b) Somehow, case-checking of *the country* is tied to the phonological realization of the P that it is the complement of (not unreasonable since it has long been hypothesized that case-checking is necessary to license the realization of DPs phonologically).

I’m going to assume that (a) is the answer, in fact I think I’m going to make a principle of it:

Affixal Determinism: At least functional vocabulary items (f-morphemes; the VIs that realize T, D, C, v, P at least) are specified as morphophonologically bound or free or both; if conflation applies to a p.o.e. that can only be realized as a free morpheme, insertion fails.\(^\text{13}\)

Conflation Economy ensures that incorporation of internal subjects can happen in cases where the complement of the predicate incorporates, but not otherwise.

This is why dative objects can’t form synthetic compounds; they have a first-sister Theme.

a. give orphans a gift \*but not\* orphan-giving

b. read children a story \*but not\* children-reader

4 Adverbial synthetic compounds and BPS

Roeper & Siegel (1978) show that synthetic compounds can occur between *any* two things that are first sisters, not just verbs and objects. As long as a verb doesn’t have an object, adverb-verb synthetic compounds are possible:

a. quick-acting baking powder (It acts quick(ly)) (examples from R&S 1978)

b. fast-falling snow (It falls fast)

c. snappy-looking suit (It looks snappy)

d. light-stepping horse (It steps lightly)

e. odd-seeming sentence (It seems odd)

f. late-bloomer (He blooms late)

g. well-written story (It’s written well)

h. oft-heard motto (It’s heard often)

i. early-riser (She rises early)

This very nice for BPS, of course.

And, if a complement is included, the compound of course is ill-formed.

\(^{13}\) It may be that roots are variable in their affixal properties, or that they’re always bound. See below.
If the adverb was incorporated into a verb with an object, without incorporating the object (even a null object), Conflation Economy would be violated.

(24)  

a. The farmer grows wheat quickly.  

b. a wheat-growing farmer.  

c. *a quick-growing farmer  

(bad where it’s the things he’s growing that grow quickly)  

e. The wheat grows quickly  

f. quick-growing wheat)

leads to a funny conclusion about the structure of adjectival passives: internal argument is ‘inner subject’ of (resultative) adjectival small clause, not sister of root, since instrumental/locative/comitative synthetic compounds are possible; these, interestingly, either involve P-deletion or else the P is present in the verbal equivalents only for Case purposes:

(25) (Examples from R&S 1978 again)  

a. ‘by’ cases: starstruck, wolf-reared, rebel-held, horse-drawn, expert-tested, frost-bitten  

b. ‘at, in, to’ cases: homemade, panfried, land-based, deskbound, jungle-trained, California-grown

(26) Synthetic compound with adjectival passive:

(27) Corresponding verbal structures:

(28) The $64,000 question: Why can (certain) a and n heads in English accommodate a conflated object or adjunct (i.e. a compound) but v heads can’t? Not because they’re not affixal—non-compound sister labels conflate with them just fine, and necessarily. Sadly, I have no good answer. As above, 2 possibilities:
a. V’s p.o.e. has a prosodic template associated with it, no compounds allowed. Perhaps not as crazy as it sounds; like what Hale 2001 does for Navajo (strict CVCCV template for verbs; morphemes discarded as necessary to fill it up)

b. Case-related: if object incorporates, v won’t be able to assign it’s +acc case. (But leaves unergatives and unaccusative verbs’ failure to incorporate adverbs unexplained — *The snow fast-fell, despite fast-falling snow.

5 Re-affixation

→ If we treat re-affixation as adverbial modification of the predicate part of a small clause structure, with a [+affix] V predicate, we’ll capture all the blocked cases discussed in Keyser and Roeper 1992.

→ By the same logic as for adverbial synthetic compounds, above, re-affixation should be blocked when the V takes an ‘inner object’ or takes a true sister object (V+bare N idioms). When there is a separate resultative predicate, or a particle, re would have to attach to the predicate or particle.

(29) Keyser & Roeper’s observation:
  a. Good re-affixations: retied the shoe, regrouped the troops, restarted the car
  b. Bad re-affixations: *regave the money, *releft a note, *rethrew the ball

→ The bad cases have appropriate (telic) semantics, so semantic explanation out

→ The bad ones have potential double-object dative structures (throw him the ball, leave her a note); the good ones don’t (*tie him his shoes, *group him his troops, *start him the car.)

(30) More:

<table>
<thead>
<tr>
<th>Bad</th>
<th>Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allow a benefactive structure</td>
<td>Don’t allow such a structure</td>
</tr>
<tr>
<td>*refound an island</td>
<td>rediscovered an island</td>
</tr>
<tr>
<td>*rebought a car</td>
<td>repurchased a car</td>
</tr>
<tr>
<td>*reshowed his paintings</td>
<td>reexhibited his paintings</td>
</tr>
<tr>
<td>V+Particle</td>
<td>V without particle</td>
</tr>
<tr>
<td>*resold his friend out</td>
<td>resold the car</td>
</tr>
<tr>
<td>*reopened the door up</td>
<td>reopened the door</td>
</tr>
<tr>
<td>*rewrote the idea down</td>
<td>rewrote the idea</td>
</tr>
<tr>
<td>Motion V + Goal PP</td>
<td></td>
</tr>
<tr>
<td>*rejump over the fence</td>
<td></td>
</tr>
<tr>
<td>*rerun to the store</td>
<td></td>
</tr>
<tr>
<td>V+Resultative</td>
<td></td>
</tr>
<tr>
<td>*redrive someone crazy</td>
<td></td>
</tr>
<tr>
<td>*remake someone sick</td>
<td></td>
</tr>
<tr>
<td>*rewipe something clean</td>
<td></td>
</tr>
</tbody>
</table>

→ Generalization: re-modification only good with change-of-state Vs where the V itself encodes the change-of-state; no ‘remnant’ of the small clause can be left downstairs — no Theme in a double-object construction, no particle, no resultative predicate.\footnote{K&R consider a version of this hypothesis, put forward by Kayne 1985, but dismiss it based on examples like wall-repapering (vs. *chess-replaying). You can repaper walls to your heart’s content, though, but you can’t replay chess—you have to replay a game of chess. The bare interpretation of the incorporated noun is at fault. In any case, the proposal here is not that re- *is* a small clause predicate, just that it has to modify (and affix to) one.}


→ What happens if you try to affix *re-* in these cases?

(31) \[ \text{vP} \]
\[ \text{DP} \]
\[ \text{He} \]
\[ v_{\text{aff}} \]
\[ \text{VP} \]
\[ \text{small clause} \]
\[ \text{DP} \]
\[ \text{Bill} \]
\[ \text{Adv} \]
\[ \text{re-} \]
\[ v_{\text{aff}} \]
\[ \text{give} \]
\[ \text{DP} \]
\[ \text{the money} \]

Not First\nSisters!!

(32) \[ \text{vP} \]
\[ \text{DP} \]
\[ \text{He} \]
\[ v \]
\[ \text{wipe} \]
\[ \text{DP} \]
\[ \text{the table} \]
\[ \text{Adv-} \]
\[ \text{re-} \]
\[ \text{A'} \]
\[ \text{A}_{\text{aff}} \]
\[ \text{clean} \]
\[ \text{small clause predicate} \]

(33) Another $64,000 question: What’s wrong with *He wiped the table reclean*? That is, why can’t *clean* be generated with a [+affix] feature?

→ Possible answer: Morphological subcat problem with *re-* (wants to be in a [v] structure)?

→ What about the following:

(34) a) Unergative V b) Object Drop V c) V+Bare N
*relaugh* John likes to (*re)fold
*rework* It pays to (*re)think
*resneeze* It’s fun to (*re)work

→ a) don’t have an appropriate small clause predicate for *re-* to modify,
→ b) (K&R’s proposal) have a null, bare N object, in which case Conflation Economy will rule them out,\( ^{15} \) or
→ c) require the V+N pair to be first sisters for the idiomatic interp, in which case modification of the predicate by *re-* would wreck the idiom.

\( ^{15} \) This is an example how a p.o.e. with a null realization can block conflations, since we’re assuming that it’s a syntactically present null indefinite object blocking conflation in the (b) cases here. I think it’s another reason to prefer the late-insertion view of things, perhaps.
(35) **Final thought:** Deriving the Canonical Use Constraint (Kiparsky 1999, McIntyre 2000):

→ Perennial question for H&K analysis of denominal roots: Why can you *bank the money* but not *church the money*? Why can you *fertilize the bushes* but not *bush the fertilizer*?

→ Kiparsky’s answer (in the context of arguing for a truly lexicalist theory of denominal verbs): Denominal verb construction is subject to the (quintessentially lexical) Canonical Use Constraint: true denominal verbs can only be formed from nominals that are being put to their canonical use.

→ The true generalization: Some f-morphemes’ p-sigs can’t be copied even into a [+affix] sister’s p-sig: D and C particularly. (Plus, of course, v doesn’t like more than one free morpheme in the p-sig it gets).

→ Consequently, denominal verbs must be formed from *bare* Ns, not from complex NPs or DPs

→ Bare Ns in English are subject to a Canonical Use Constraint even when *not* incorporated:

(36)  

a. go to school vs. go to the school.  
b. watch television vs. watch the television

6 **Conclusions**

→ I hope to have shown that:
  
i. There are good reasons to wonder if/hope that head-movement could be ‘phonological’

ii. H&K’s conflation mechanism has the right properties to be a general theory of head-movement

iii. It could give us a handle on how to do certain kinds of productive compounding and affixation in the syntax.

Some references:


