Complex verb mobility in Germanic languages: variation and parameterization

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This study is about. . .

- a special class of complex verbs known as "immobile verbs"
- mainly in German but also in Dutch/Afrikaans (i.e., West Germanic)
- absent from North Germanic languages (plus English)

Germanic languages
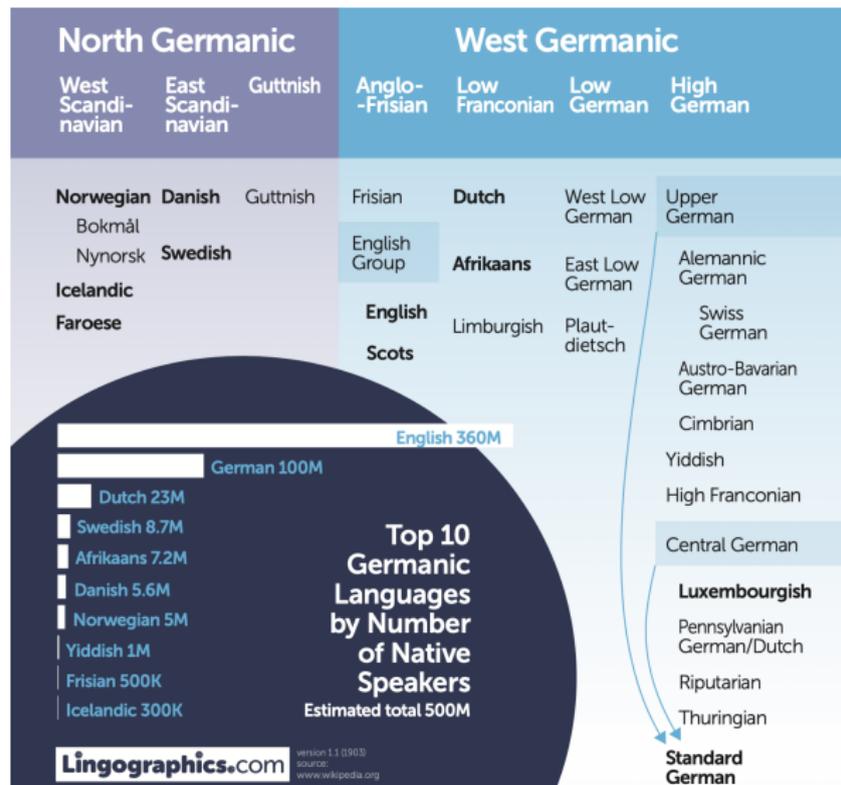
(picture source: https://www.lingographics.com/germanic/modern-germanic-languages/)

In this talk I plan to. . .

- present key data from German
- briefly introduce my theory
- present more crosslinguistic data
- develop a refined parameterization

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I may not have time to go through all four sections, so I'll give out the key message right away—

Takeaway

Immobile verbs are grammatically unstable and prone to reanalysis.

Plan

Simple verbs

V2 in finite main clauses, OV in subordinate clauses (with complementizers) and nonfinite constructions

(1) a. Der Dichter **las**   gestern   Abend   leider   nicht   [German]
         the   poet   read.PST yesterday evening unfortunately not

         seine Gedichte.
         his   poems

         "Unfortunately the poet did not read his poems last night."   (Harbert 2007:350)

     b. . . . dass er gestern   leider   nicht seine Gedichte **las**.
         . . . that he yesterday unfortunately not   his   poems   read.PST

         ". . . that he unfortunately did not read his poems yesterday."   (ibid.)

     c. Der Dichter will   seine Gedichte **lesen**.
         the   poet   wants   his   poems   read.INF

         "The poet wants to read his poems."

Complex verbs

German has several types of complex verbs, most of which observe V2.

1. Separable prefixed verbs (aka particle verbs)
   - e.g., *ein-steigen* 'in-climb; get on, board', *ab-lehnen* 'off-lean; reject', *aus-gehen* 'out-go; go out', *auf-stehen* 'up-stand; get up'

(2) a. Peter **steigt** in den Bus **ein**.
         Peter climbs in the bus in
         "Peter gets on the bus."

     b. . . . weil   Peter in den Bus **ein**-**steigt**.
         . . . because Peter in the bus in-climbs
         ". . . because Peter gets on the bus."   (Zeller 2001:55)

Complex verbs

❷ Inseparable prefixed verbs

– e.g., *ver-schießen* 'PREFIX-shoot; use up', *ent-gehen* 'PREFIX-go; escape', *er-schlagen* 'PREFIX-beat; slay, kill', *zer-stören* 'PREFIX-disturb; destroy, ruin'

(3) a.   Peter **ver-schießt**   die Munition.
          Peter PREFIX-shoots the ammunition
          "Peter runs out of ammunition."

     b.   . . . weil   Peter die Munition   **ver-schießt**.
          . . . because Peter the ammunition PREFIX-shoots
          ". . . because Peter runs out of ammunition."   (Zeller 2001:56–57)

Complex verbs

③ Nonprefixal complex verbs with normal behavior

– e.g., *früh-stück-en* 'early-piece-V; have breakfast', *buch-stab-ieren* 'book-stab-V; spell', *ohr-feige-n* 'ear-fig-V; slap in the face', *hand-habe-n* 'hand-posession-V; handle'

(4) a. Ich **früh-stücke** immer um 8 Uhr.
       I   early-piece always at 8 o'clock
       "I always have breakfast at 8 o'clock."

   b. . . . weil   ich immer um 8 Uhr   **früh-stücke**.
       . . . because I   always at 8 o'clock early-piece
       ". . . because I always have breakfast at 8 o'clock."

Complex verbs

④ Nonprefixal complex verbs with abnormal behavior

– e.g., *bau-sparen* 'building-save; save with a building society',
bauch-reden 'belly-talk; ventriloquize', *bauch-tanzen* 'belly-dance',
schutzimpfen 'protection-inoculate'

(5)   a. ***Spart** er **bau**?   / ***Bau-spart**   er?
         saves he building   building-saves him

         Intended: "Does he save with a building society?"

      b. . . . weil   er **bau-spart**.
         . . . because he building-saves

         ". . . because he saves with a building society."

      c. Er will   **bau-sparen**.
         he wants building-save

         "He wants to save with a building society."   (Vikner 2005)

Complex verbs

④ Nonprefixal complex verbs with abnormal behavior

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> ### Definition
>
> Complex verbs like *bausparen* and *bauchreden* are known as **immobile verbs** because, in generative syntactic terms, they resist V2 movement (i.e., fronting into the second position).

"He wants to save with a building society."   (Vikner 2005)

Immobility from a generative perspective
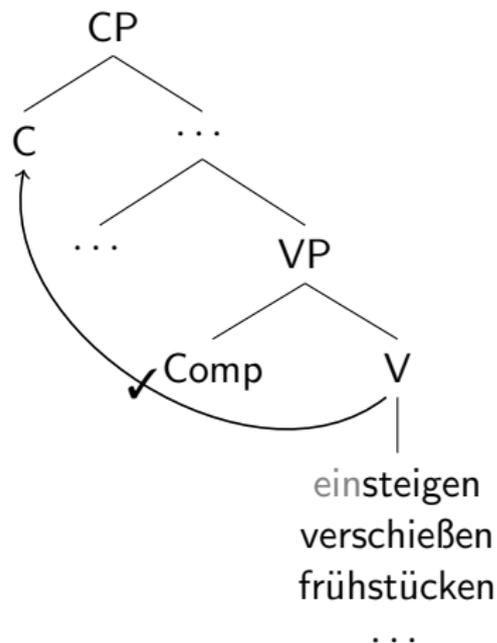
Mobile verb

Immobile verb

vs.

einsteigen
verschießen
frühstücken
· · ·

bausparen
bauchreden
bauchtanzen
· · ·
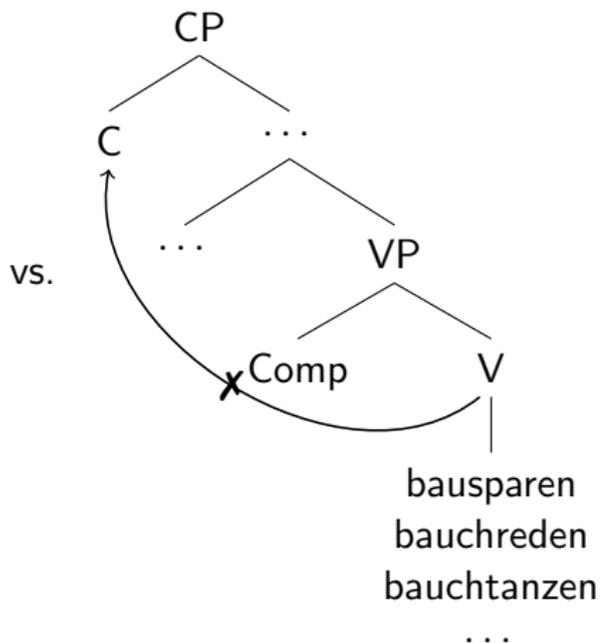
Immobility from a generative perspective

Mobile verb

Immobile verb

CP

CP

The "abnormality" of immobile verbs is that they behave neither like *einsteigen*-type verbs nor like *verschießen*- or *frühstücken*-type verbs. This sets them apart as a **fourth** type of complex verb in German.

✓Comp   V

✗Comp   V

einsteigen
verschießen
frühstücken
. . .

bausparen
bauchreden
bauchtanzen
. . .

Interim summary: German complex verb types

1. **Particle verb:** main verb moves, particle stranded
   - *steigen* . . . *ein-* ~~steigen~~
2. **Inseparable prefixed verb:** moves as a whole
   - *verschießen* . . . ~~verschießen~~
3. **Normal nonprefixal complex verb:** moves as a whole
   - *frühstücken* . . . ~~frühstücken~~
4. **Immobile verb:** cannot move to higher domains
   - *will/kann/hat/dass* . . . *bausparen/bauspart/baugespart*

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NB in terms of inflection immobile verbs behave like particle verbs

- e.g., (past participle) *ein-steigen→ein-ge-stiegen*, *bau-sparen→bau-ge-spart*
- compare with: *verschießen→verschossen*, *frühstücken→ge-frühstückt*

Interim summary: German complex verb types

1. **Particle verb:** main verb moves, particle stranded
   - *steigen . . . ein-~~steigen~~*

> This means immobile verbs and particle verbs have something in common in their underlying structures, which distinguishes them both from the other two types of complex verbs.

4. **Immobile verb:** cannot move to higher domains
   - *will/kann/hat/dass . . . bausparen/bauspart/baugespart*

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Plan

Complex verb structures

Song (2019) proposes three underlying structures for German complex verbs within a Minimalist framework.

Particle verb
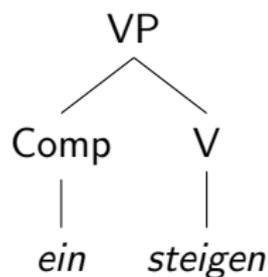
```
        VP
       /  \
    Comp    V
      |      |
     ein   steigen
```
☞
complementation

Nonprefixal mobile verb

```
        V
       / \
      N    v
      |    |
  Frühstück -en
```
☞
recategorization

Immobile verb

```
          V
         /  \
      CatP    V
      /  \     |
    Cat  bau  sparen
```
☞
adjunction
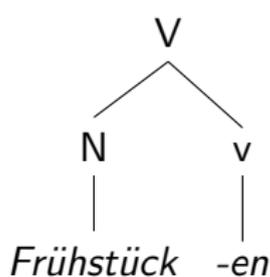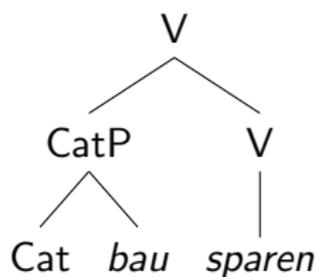
Complex verb structures

In Song's (2019) adjunction theory the adjunct does not alter the labeling status of its host. So, in the adjunction tree both the sister node and the mother node of CatP have identical labels, though the "bigger head" is structurally a phrase (since the tree structure is syntactically visible).

Particle verb
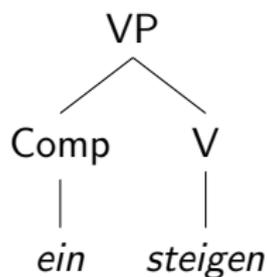
```
        VP
       /  \
    Comp    V
     |      |
    ein   steigen
          ☞
```

complementation

Nonprefixal mobile verb

```
        V
       / \
      N   v
      |   |
  Frühstück -en
       ☞
```

recategorization

Immobile verb

```
        V
       /  \
    CatP    V
    /  \    |
  Cat  bau sparen
        ☞
```
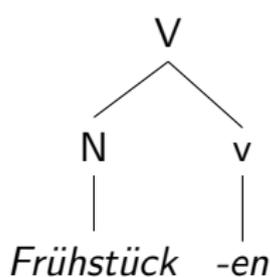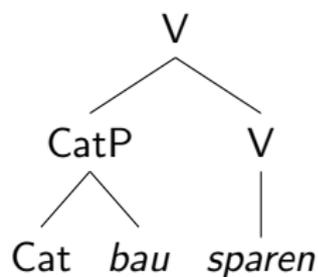
adjunction

Complex verb structures

Given the identical labels, operations targeting the "smaller V" inevitably also targets the "bigger V" (Minimal Link Condition, Chomsky 1995). But since the latter is structurally not a head, if the operation is head movement, a conflict occurs between the base module and the labeling module of the syntax, and so the derivation crashes.

Particle verb
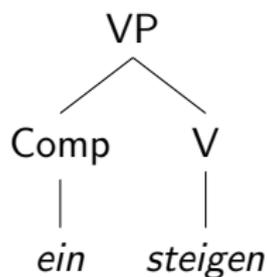
```
        VP
       /  \
   Comp    V
     |     |
    ein  steigen
```

☞

complementation

Nonprefixal mobile verb

```
        V
       / \
      N    v
      |    |
  Frühstück -en
```

☞

recategorization

Immobile verb

```
        V
       /  \
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    /  \    |
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```

☞
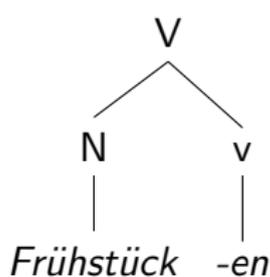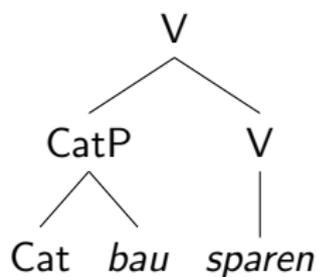
adjunction

Complex verb structures

That is why immobile verbs cannot appear in contexts that require head movement (e.g., V2 contexts) at all—because that would make the derivation crash.

Particle verb
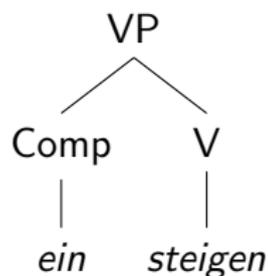
```
        VP
       /  \
    Comp    V
     |      |
    ein   steigen
```

☞

┌─────────────────────┐
│ complementation   │
└─────────────────────┘

Nonprefixal mobile verb

```
        V
       / \
      N   v
      |   |
  Frühstück -en
```

☞

┌─────────────────────┐
│ recategorization   │
└─────────────────────┘

Immobile verb

```
         V
        / \
     CatP   V
     /  \    |
   Cat  bau sparen
```

☞
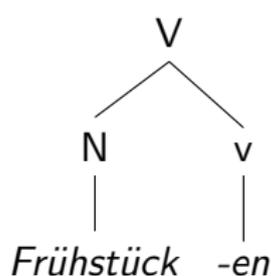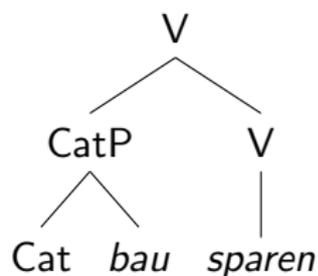
┌─────────────────────┐
│ adjunction   │
└─────────────────────┘

Predictions

Song's (2019) theory makes several predictions. Here I list three of them.

- If a language has consistent verb movement, then it doesn't have adjunction-based complex verbs. (e.g., Romance languages, Hungarian)
- If a language has no verb movement, then it has adjunction-based complex verbs, and those are fine with finite main clauses. (e.g., English, East Asian languages)
- If a language has mixed verb movement requirements, then if it has adjunction-based complex verbs, those are immobile. (e.g., West Germanic languages)

(Here "verb movement" = V-to-T/C movement; i.e., movement out of the VP/thematic/lexical domain.)

I will refine these predictions later, but first let's take a look at some crosslinguistic data.

Romance languages

Adjunction-based complex verbs in English (i.e., modifier-head compound verbs) are expressed either by phrases or by simple verbs in French and Spanish.

Table: Translations of English compound verbs in French and Spanish

English	French	Spanish
hand-wash	*laver à la main* 'wash by hand'	*lavar a mano* 'wash by hand'
dry-clean	*nettoyer à sec* 'clean in dry'	*limpiar en seco* 'clean in dry'
sleep-walk	*marcher en dormant* 'walk sleeping'	*caminar dormido* 'walk sleeping'
double-check	*revérifier* 'reverify'	*volver a revisar* 'inspect again'
window-shop	*faire du lèche-vitrines* 'do lick-windows'	*ir de escaparates* 'go of windows'
baby-sit	*faire du baby-sitting* 'do babysitting'	*hacer de canguro* 'do kangaroo'
hitch-hike	*faire du stop* 'do stop'	*hacer autoestop* 'do car-stop'

Hungarian

My informant only thought of one potential example—*menny-dörög* 'heaven-rumble; (to) thunder'—which is perfectly fine in all contexts.

Hungarian

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But whether this verb has an adjunction structure is uncertain, because an adjunct is typically a semantic **modifier** of its host (e.g., *hand* modifies *wash* in *hand-wash*), whereas *menny* 'heavy, sky' is more like an (incorporated) **argument** of *dörög* 'rumble' in *menny-dörög* '(to) thunder'.

East Asian languages

Adjunction-based complex verbs are common in Chinese and Japanese
(among other East Asian languages).

(7) a. *shǒu-xǐ*   'hand-wash'   *tàn-kǎo*   'charcoal-broil'   [Mandarin]
         fān-chǎo 'stir-fry'   *gān-xǐ*   'dry-clean'

     b. *uti-korosu*   'shoot-kill; shoot to death'   [Japanese]
         arai-otosu   'wash-make drop; wash off'
         furi-mazeru   'shake-mix; mix up'
         naki-sakebu   'cry-shout; scream'

(That is, if these Japanese V-V compounds are analyzed as adjunction
structures; see Usuki 2007 and Tsujimura 2014)

West Germanic languages

Apart from Standard German, other West Germanic languages like Dutch and Swiss German also have immobile verbs (Vikner 2005), though to a lesser extent. For example, the Dutch and (especially) Afrikaans counterparts of some German immobile verbs are mobile.

West Germanic languages

(8) a. Hij **hersen-spoeld** zijn kinderen met fantasie verhalen.[Dutch]
         he brain-washes   his children with fantasy stories

     b. Wie **brein-spoel** vir wie?   [Afrikaans]
         who brain-washes for who

NB the German version *gehirn-waschen* 'brain-wash' (a rare word!) is
immobile (at least according to PONS dictionary).

ge·hirn·wa·schen VB trans *irreg, nicht im Präsens und im Imperfekt*		🛈
🔊 jdn **gehirnwaschen**	to brainwash sb	🔊 •••

(picture source: https://en.pons.com/translate/german-english/gehirnwaschen)

West Germanic languages

A quick search in the DWDS corpora returns 13 results with
gehirn-waschen, and none of them is a finite main clause.

(9)   a.   ...weil   er Jugendliche   nicht länger   [German]
           ...because he young people no   longer

             gehirn-waschen wollte.
             brain-wash   wanted

           "...because he no longer wanted to brainwash young people."
                                 (*Berliner Zeitung*, 19.06.1997)

      b.   ...die   ihre   leicht beeinflussbaren, rückgratlosen
           ...which their   easily influenced   spineless

           Leserinnen   dermaßen **gehirn-waschen**, dass ...
           female readers so   brain-wash,   that ...

           "...which brainwash their easily influenced, spineless female
           readers so much, that ..."   (*Die Zeit*, 17.03.2005, Nr. 12)

West Germanic languages

The verb for "belly-talk" (i.e., ventriloquize) is immobile in German and Dutch but mobile in Afrikaans.

(10) a. Er kann **bauch-reden**.   [German]
          he can   belly-talk

      b. Hij gaat soms   **buik-spreken** voor   ons.   [Dutch]
          he AUX sometimes belly-talk   before us

      c. Hy **buik-spreek** soms   voor   ons.   [Afrikaans]
          he belly-talks   sometimes before us

West Germanic languages

Afrikaans does also have immobile verbs, though (Theresa Biberauer, p.c.).

(11) a. *Sy **droog-skoon-maak** die duur   rok.   [Afrikaans]
          she dry-clean-make   the expensive dress
   Intended: "She dry-cleans the expensive dress."

      b. ***Droog-skoon-maak** sy   die duur   rok?
          dry-clean-make   she the expensive dress
          Intended: "Does she dry-clean the expensive dress?"

      c. Sy kry hulle om   die duur   rok te **droog-skoon-maak**.
         she get them INF-C the expensive dress to dry-clean-make
         "She gets them to dry-clean the expensive dress."

West Germanic languages

Given the microvariation within West Germanic languages, Song's (2019) three predictions need refinement.

The problem is: counterparts of the same complex verb in different West Germanic languages often behave differently.

And North Germanic languages aren't covered by the predictions—the Norwegian/Swedish/Danish counterparts of German immobile verbs are **all mobile** according to my informants (see also Vikner 2005, Ahlers 2011).

Recall: Germanic languages
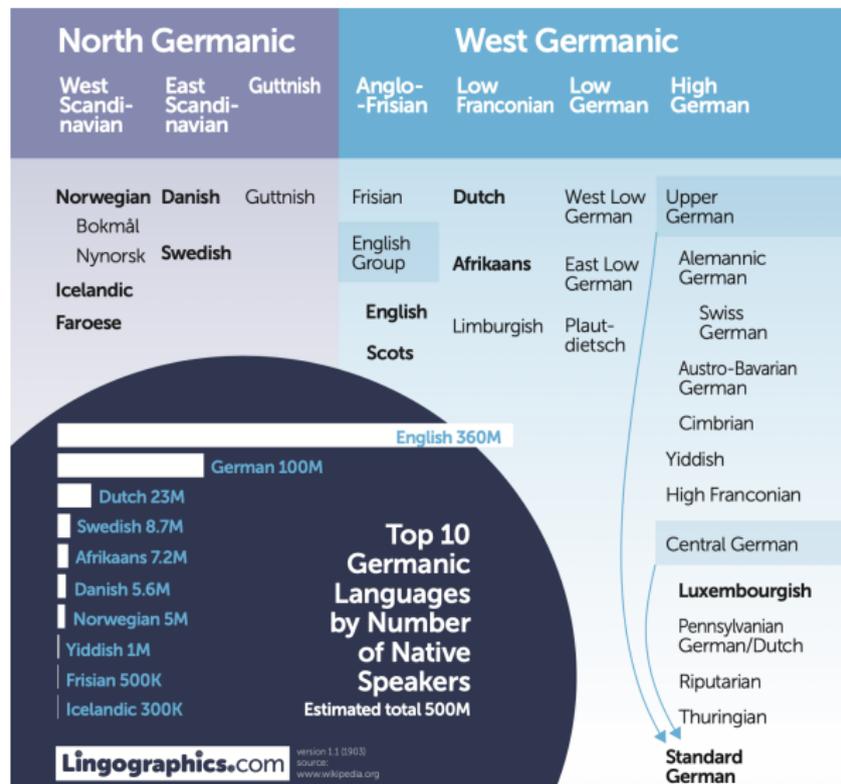
Plan

Backformation

An important fact: German immobile verbs are backformed from compound nouns (see Zeller 2001, Ahlers 2010, inter alia).

- *bauch-reden* 'belly-talk' < *Bauch-redner* 'ventriloquist'
  bauch-tanzen 'belly-dance' < *Bauch-tanz* 'belly dance'
  ehe-brechen 'marriage-break; commit adultery' < *Ehe-brecher* 'adulterer'
  wett-rennen 'bet-run; run a race' < *Wett-rennen* 'race'

The backformation path is common in other Germanic languages as well. Bauer (2017): compound verbs are increasingly productive in English.

- e.g., butt-dial, vacuum-pack, hate-kiss, sucker-punch, panic-buy, etc.

While backformation (and etymology in general) has little theoretical relevance in synchronic syntax, it may help us explain why there's so much variation concerning immobile verbs from a diachronic angle.

Reanalysis

If immobile verbs are created by backformation, then what we have is not only a synchronic issue, but also a diachronic one. Namely, adjunction-based complex verbs are created by **reanalysis**.

Definition

Reanalysis is a mechanism that changes the *underlying* structure of a syntactic pattern without any substantial modification of its *surface* manifestation (Harris & Campbell 1995).

Hypothesis: there may be **multiple steps of reanalysis** from the creation of an adjunction-based complex verb till its eventual, stable lexicalization (that is, if it gets stably lexicalized at all).

Reanalysis

Potential factors that may influence the reanalysis process:

1. **word structures** (the starting/end point of reanalysis)

2. **syntactic parameters** (which may allow/ban certain reanalysis paths)

3. **extragrammatical factors** like frequency of usage (the more frequent a word/concept is, the more likely it'll get stably lexicalized, which provides motivation for reanalysis)

   – So, if an adjunction-based complex verb is rarely used in finite main clauses, then it may well just remain adjunction-based (and immobile).

   – This may be true for many technical terms in German (which are mainly used in passive forms); e.g., *sand-strahlen* 'sand-shine; sandblast', *wasser-kühlen* 'water-cool', *band-schleifen* 'band-polish', etc.

   – Children are rarely (if ever) exposed to such complex verbs in the acquisition process!

Reanalysis

Song's (2019) theory readily provides two further reanalysis paths (in addition to the initial noun-to-verb reanalysis):
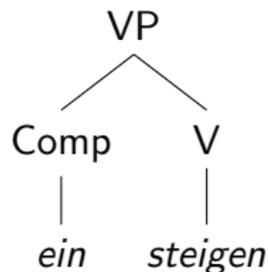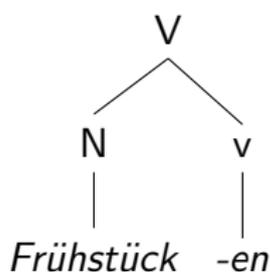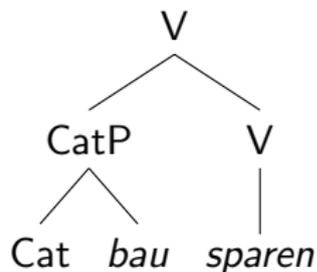

1. adjunction → complementation
2. adjunction → recategorization (→ simple categorization)

Path 1 essentially creates a particle verb, while Path 2 essentially erases the inner structure of the complex verb and turns it into a simple verb.

The role of basic word order
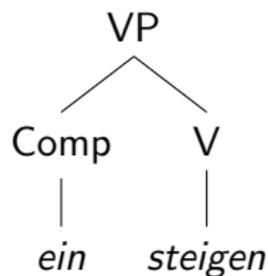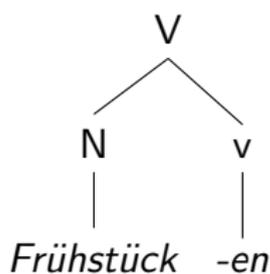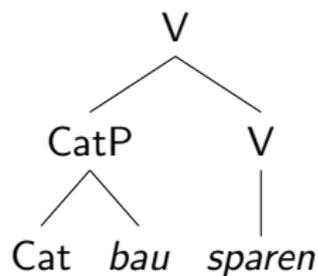
NB reanalysis is based on surface strings (e.g., *another→a whole nother*).
This means Path 1 and Path 2 **may not be equally likely** in different
languages.

The role of basic word order

| Complementation | Recategorization | Adjunction |
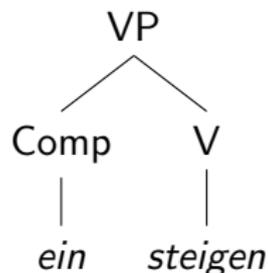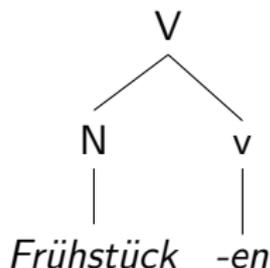
```
        VP                      V                        V
       /  \                    / \                      /  \
   Comp    V                  N   v                 CatP    V
     |     |                  |   |                 /  \    |
    ein  steigen          Frühstück -en          Cat  bau sparen
```
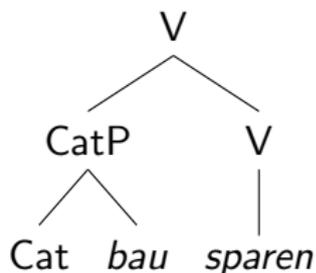
Suppose a language has modifier≺head compound nouns (like *black-board* and *ice-cream*) and has also reanalyzed some of them as compound verbs.

- If the language is VO, Path 1 becomes impossible because of the opposite string direction. So, it's either nothing or Path 2.
- If the language is OV, both paths are possible, but Path 2 may be more favorable for semantic reasons, because complementation and adjunction have very different semantic effects (e.g., *wash hands* vs. *hand-wash a shirt*), which is not conducive to reanalysis.

The role of basic word order

| Complementation | Recategorization | Adjunction |

```
      VP                   V                    V
     /  \                 / \                  / \
  Comp   V               N   v              CatP   V
    |    |               |   |               |     |
   ein  steigen      Frühstück -en          Cat   sparen
                                             bau
```
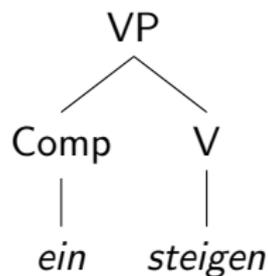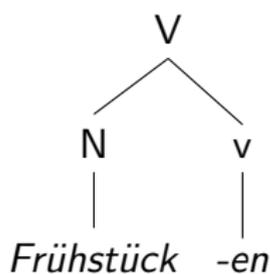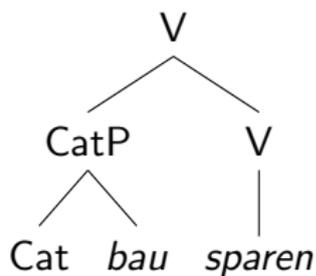
Also, reanalysis needn't take place if there's no motivation. So, while Path 2 is more favorable in both VO and OV languages, the reanalysis is more "urgent" if the language has verb (i.e., V-to-T/C) movement.

The role of verb movement

1. If a VO language has no verb movement, then its adjunction-based complex verbs can remain adjunction-based. This is the situation in English and Chinese.

2. If a VO language has verb movement, then it will presumably take Path 1. This is the situation in North Germanic languages, where counterparts of German immobile verbs are all mobile.
   - Hungarian is a bit odd in this respect, as it has verb movement but doesn't seem to have adjunction-based complex verbs at all. This may have to do with the fact that morphological processes in Hungarian always have overt affixation, so the kind of noun-to-verb backformation in English and German is hard to implement in Hungarian. My prediction here is merely that **if** Hungarian has adjunction-based complex verbs at all, they should be more readily (or even compulsorily) reanalyzed as simple verbs.

North Germanic languages

(12) a. Han **dag-drømmer** alltid i timene.   [Norwegian]
          he   day-dreams   always in classes

      b. Han **dag-drommer** alltid i skolan.   [Swedish]
          he   day-dreams   always in school

      c. Han **dag-drømmer** altid   i timerne.   [Danish]
          he   day-dreams   always in classes

(13) a. Noen ganger **buk-taler** han   for oss.   [Norwegian]
          sometimes   he   belly-talks for us

      b. Han **buk-talar** framfor oss ibland.   [Swedish]
          he   belly-talks before us sometimes

      c. Nogle gange **bug-taler** han for os.   [Danish]
          sometimes   belly-talks he for us

The role of verb movement

③ If an OV language has no verb movement, then its adjunction-based complex verbs can also remain adjunction-based. This is presumably the situation in Japanese and Korean (though whether these languages have verb movement is debated).

④ If an OV language has verb movement, then depending on its extent and the frequency of the relevant words (in contexts requiring verb movement), some adjunction-based complex verbs will be reanalyzed as simple verbs, though there may be much crossdialectal/interspeaker variation. This is the situation in West Germanic languages (except English).

The role of compound nouns

Last but not least, if a language has no modifier≺head compound nouns, then it can hardly go through the initial reanalysis (i.e., backformation) step, let alone the further steps.

This is especially true if the language also has suffixal inflection, because reanalyzing a head≺modifier compound noun as a compound verb would lead to a head-INFL-modifier scenario, which is highly unlikely in human language. Depending on the situation of inflection, we can make two further predictions.

The role of compound nouns

- If a head≺modifier language is inflectional, then it has no adjunction-based complex verbs at all. This is the situation in Romance languages.
- If a head≺modifier language is noninflectional (but analytical), then it theoretically can have adjunction-based complex verbs, which can go through further reanalysis steps depending on other language-specific factors like verb movement requirement. Vietnamese might be such a language.

(14) *ăn sáng* 'eat morning; have breakfast'   [Vietnamese]
      ngủ trưa 'sleep noon; take a siesta'
      giặt khô 'wash dry; dry-clean'
      ăn xin 'eat ask; beg'

Summary: A refined typology of immobile verbs
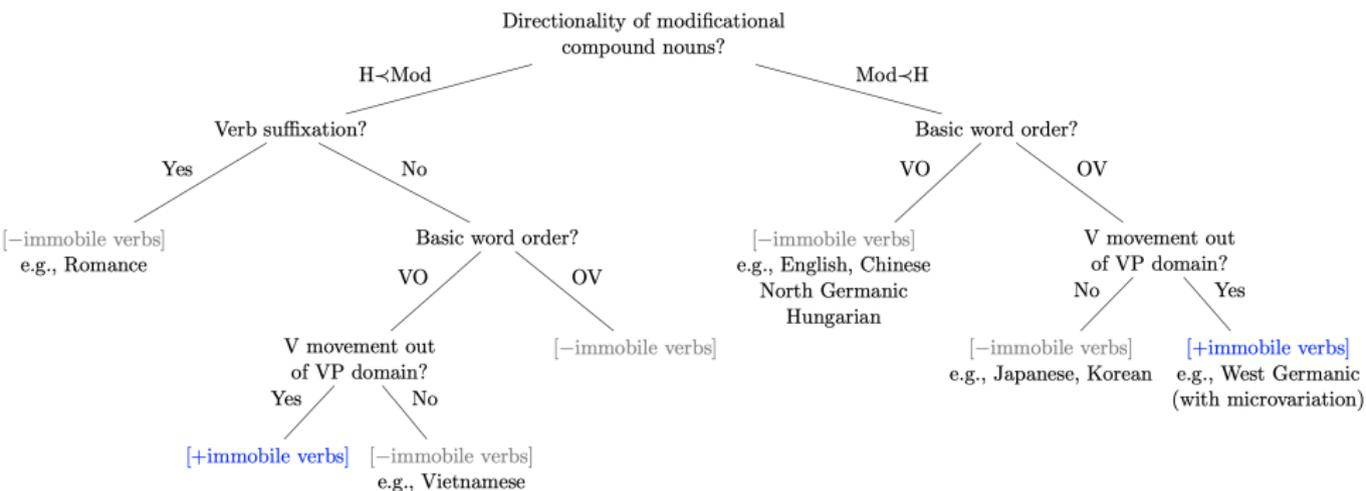
NB [+immobile verbs] means a language has the right syntactic conditions for immobile verbs to exist but doesn't guarantee their existence (there are still extragrammatical factors at play).

I still need to...

- check more crosslinguistic data to verify the new predictions
- think whether the typology hierarchy could be improved
- pin down factors behind the West Germanic microvariation

(Let me know if you'd like to collaborate!)

Thank you!

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