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Verb-noun compounds in English and other European languages

1 Introduction: Verb-noun compounds

- Compounds made up of a verb and a noun:
  1. *Schlafsack, Schleifstein, Sehstärke, Zahltag, Parkverbot*
  2. *whetstone, drawbridge, blowlamp, drift ice, scatterbrain, cutthroat*
- Major types: exocentric, endocentric

(1) a. N_1 b. N_1

V N_2 V N_2

Schlaf- sack *cut- throat*

$[[N_1]] \subset [[N_2]]$ $[[N_1]] \not\subset [[N_2]]$

1.1 Endocentric VN-compounds

- Very common and fully productive in German, very rare (and unproductive) in English (as well as most Romance languages)

(2) a. *Schlafsack, Schlafzimmer, Umrührkakao, Mitklatschtempel*, etc.
b. *Kaufkraft, Laufzeit, Messwert, Nährwert, Nennwert, Schlagkraft,* etc.
c. *Baustil, Denkweise, Machart, Dichtkunst, Esskultur, Kochkunst,* etc.
d. *Nährmittel, Reizmittel, Schlafmittel, Treibmittel, Waschmittel*, etc.
e. *Parkverbot, Fressgier, Habgier, Raffgier, Schaulust*

- A comparison of English and German: Endocentric compounds are very common in German, while they are heavily restricted in English.
- In English, endocentric compounds are basically restricted to
  (i) **concrete referents** (*grindstone, stopwatch, washcloth*, etc.);
  (ii) **locations** (*bakeshop, driveway, paystation, washhouse*);
  (iii) **time spans** (*washday, leapyear, rush hour, workday*, etc.).
- More or less idiosyncratic restrictions in English: Specific verbs are not used at all in VN-compounds (only V-*ing* N):

(3) *boil, climb, dress, drink, eat, fight, fish, hear, hunt, look, read, ride, sew, sleep, spin, start, train, walk, write*

- A small set of verbs only occurs in VN-compounds (but not in V-*ing* N-compounds): *drift, drip, pay, rattle, show, slip*
- Verbs that occur in both types of compounds: *draw* (*drawbridge, drawing room*), *swim* (*swimsuit, swimming style*), *wash* (*washcloth, washing machine*)
- English: competition between V-*ing* N-compounds (≡ NN-compounds) and VN-compounds, with the former type gaining ground.
- Endocentric VN-compounds seem to have existed in Old English and Old High German (OE *bernīsen*, OHG *brennîsarn* 'burning iron'); they may have emerged by reanalysis of NN-compounds (e.g. MHG *slâfhûs*).
- On a European level, endocentric VN-compounds seem to be widespread only among Germanic languages (other than English); they are practically unattested in Romance and Slavonic languages.

1.2 Exocentric VN-compounds

- Two major types of exocentric VN-compounds

(4) a. *cut-throat*: ‘an *x* that [$_{VP}$[$_{PRED}$ cuts] [$_{COMP}$ throats]]]’
b. *scatter-brain*: ‘an *x* that has [$_{NP}$ a [$_{MOD}$ scattered] [$_{HEAD}$ brain/mind]]]’

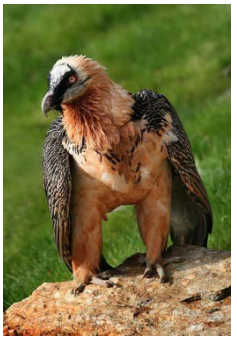
- *cutthroat*: **Agentive VN-compounds**
- *scatterbrain*: **Possessive VN-compounds**
- an intermediate type: *wagtail* ⇒ **Meronymical VN-compounds**

(5) a. ‘an *x* that [$_{VP}$[$_{PRED}$ wags] [$_{COMP}$ (*x*’s) tail]]]’
b. ‘an *x* that has [$_{NP}$ a [$_{MOD}$ wagging] [$_{HEAD}$ tail]]]’

- Exocentric VN-compounds have some interesting features
- Long history; inheritance, borrowing, calquing.

(6) ‘wag-tail’
a. Gr. *seiso-pugís* ‘wag-tail’
b. Lat. *mota-cilla* (< *mota-cul-a* ‘move$_{INT}$-tail-INFL’)
c. Fr. †*branle-queue* (‘wag-tail’)
d. Dan. *Vip-stjert*, Germ. *Wipp-sterz* (‘teeter-rump’)
d. Slw. *traso-chvost* (‘wag-tail’)
etc.

- Calquing even within the Romance family



(7) ‘break-bones’
a. Lat. *ossi-fraga*
b. Sic. *crepa-l-ossu*
c. Cat. *trenca-l-òs*
d. Sp. *quebranta-huesos*
e. Astur. *frang-üeso*
etc.

- Irregular morphological make-up?

(8) Spanish
a. *un* [$_{N}$ *cubre-cama*$_{FEM.SG}$]$_{MASC.SG}$
a cover-bed
‘a bedspread’
b. *un* [$_{N}$ *espanta-pajaros*$_{MASC.PL}$]$_{MASC.SG}$
a scare-birds
‘a scarecrow’

- Negative connotation in many languages

(9) Spanish
a. *mata-sanos* ‘kill-healthy (doctor)’
b. *saca-dolares* ‘take.out-dollars’
c. ?*regala-dinero* ‘give.away-money’

(10) English
a. *cut-throat*
b. *pick-purse*
c. **give-money*

- Matters of language change (competition).

(11) a. *break-bones*
b. *bone-break-er*

- Basically restricted to VO-languages; analogy between syntax and morphology?

(12) Spanish
a. *Esta máquina lava trastes.*
this machine washes dishes
'This machine washes dishes.'
b. *Es un lava-trastes.*
is a wash-dishes
'It is a dishwasher.'

2 Exocentric VN-compounds in contemporary European languages

- Romance languages

(13) a. Fr. *casse-cou* 'break-neck (daredevil)', *casse-tête* 'break-head'
b. It. *spazza-camino* (chimney sweeo), *spaventa-passeri* 'scare-sparrows', *guarda-boschi* 'guard-forests'
c. Sp. *mata-sanos* 'kill-healthy', *asalta-bancos* 'bank robber', *lava-dinero* 'money launderer'

- Celtic: not widespread; have apparently been borrowed from French into Breton (cf. Pilch 1996)

(14) a. *torr-penn* 'break-heart, difficult problem'
b. *rann-galon* 'split-heart, affliction'

- Germanic languages: very rare, widespread only in English

(15) a. Engl. *cutthroat, cutpurse, pickpocket, daredevil*, etc.
b. Germ. *Stör-en-fried* 'disturb-the-piece', *Habe-nichts* 'have-nothing'

- The pattern was more productive in MHG vernacular speech (cf. Fabian 1931):

(16) a. *lær-en-biutel* 'empty-the-bag (robber)'
b. *füll-en-sac* 'fill the bag (robber)'

- Slavonic languages: rather common

(17) a. OCS *vari-męso* 'cook-meat'
b. *Vladi-slav* 'rule-Slave'
c. *Vladi-mir* 'rule-world'

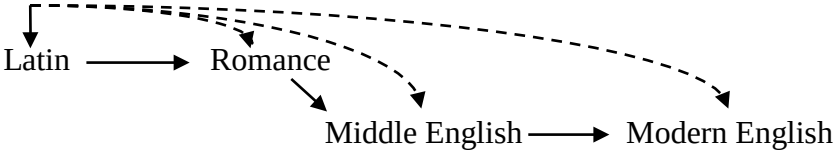
(18) Bosnian-Croatian-Serbian
a. *vadi-čep* 'take.out-cork'
b. *deri-koža* 'rip-skin'
c. *seci-kesa* 'cut-purse'

3 The historical development of VN-compounds in European languages

3.1 Morphological patterns in Ancient Greek

- VN-compounds appear to have an interesting history ('borrowing chain')

(19) Ancient Greek



- First occurrences in Ancient Greek (cf. Osthof 1878): three major types

(20) a. V-*e*-N-INFL: *arch-é-kak-os* 'begin-LNK-bad-INFL (direful)'
b. V-*si*-N-INFL: *helke-sí-pepl-os* 'drag-LNK-robe-INFL (robe-dragging)'
c. V-N-INFL: *phag-ánthrōp-os* 'eat$_{AOR}$-man-INFL (cannibal)'

- a: *-e* could be a stem formative or an imperative marker (cf. the Romance languages)
- b: *-si* could be an aorist suffix with a weakened vowel (< *-sa*) or a nominalizing suffix *-si* (cf. (21))
- c: is either a combination of a bare verb with a noun, or it has resulted from elision of a linking element (e.g. *phag*(*-e*)*-ánthrōp-os* 'eat$_{AOR}$-man-INFL')

(21) a. *sta-si-s* 'stand-NAC-INFL'
b. *ana-ly-si-s* 'up-solve-NAC-INFL'
c. *ba-si-s* 'go-NAC-INFL'

- other (minor) patterns:

(22) a. *hamart-o-ep-ēs* 'miss$_{AOR}$-LNK-word-INFL (speaking inappropriately)'
b. *sei-so-pug-ís* 'move-LNK-tail-INFL (wagtail)'
c. *eru-s-harmat-ēs* 'pull-LNK-cart-INFL'

3.2 The origin of Agentive VN-compounds in Ancient Greek

- Reanalysis of (possessive) AN-compounds?

(23) [$_A$ *ortho*$_A$-*krair*$_N$]-*os* 'straight-extremity-INFL (having straight horns)'

(24) [$_A$ *ortho*$_V$-*krair*$_N$]-*os* '[stretch-extremity]-INFL'
a. cattle with straight horns (Possessive VN-compound)
b. cattle stretching its horns (Meronymical/Agentive VN-compound)

(25) Possessive AN-cp. > Possessive VN-cp. > Meronymical/Agentive VN-cp.
[$_A$ A_{MOD} N_{HEAD}] > [$_A$ $V_{MOD/PTCPL}$ N_{HEAD}] > [$_A$ V_{PRED} N_{COMP}]

- different developments in the case of 'sigmatic' compounds (cf. (20)b.):

(26) NN-compound > Agentive VN-compound
[$_{A/N}$[$_N$ *helke*$_V$-*si*$_{DER}$]-*pepl*$_N$]-*os* > [$_{A/N}$ [$_V$ *helke*$_{Rt}$-*si*$_{Th}$]-*pepl*$_N$]-*os*

3.3 A competing pattern: NV-compounds

(27) Ancient Greek
a. *anthrōp-o-phág-os* 'man-LN-eat-INFL (cannibal)'
b. *phōs-phór-os* 'light-bring-INFL'
c. *eirēn-o-poí-os* 'peace-LN-make-INFL'

- NV-compounds were also common in Latin ...

(28) Latin
a. *agr-i-col-a* ‘field-LN-cultivate-INFL’ (‘farmer’)
b. *arm-i-ger* ‘weapon-LN-carry’ (‘warrior’)
c. *part-i-cep-s* ‘part-LN-take-INFL’ (‘participant’)

- ... and in Early Germanic

(29) Old English (Kastovsky 1985: 248–9)
a. *ǣw-brec-a* ‘law-break-INFL’
b. *mere-far-a* ‘sea-travel-INFL’ (‘sailor’)
c. *loc-bor-e* ‘curl-bear-INFL’ (‘person with long hair’)

- Kastovsky (1985: 246–7) on the final vowel in such compounds:

> “Historically, the following Old English patterns arose from the addition of nominal stem formatives to (verbal) roots [e.g. *-a* to *brec*, VG]. These formatives probably had some derivative-semantic function just like the consonantal suffixes, **but primarily they determined the inflectional class of the lexical item in question** [my emphasis, VG]. ... This is why in Old English works like NSg *gum-a*, GSg *gum-an* ‘man’ as well as in derivatives like *wig-a*, *bor-a*, etc., *-a*, *-an* have to be regarded as inflectional (case/number) suffixes and not as derivational suffixes; the derivational element in these cases is not represented overtly, i.e., it is zero.”

- Some Middle English examples (Sauer 1992: 202ff.)

(30) a. *childre-bere* ‘child-carry’ (‘pregnant woman’)
b. *eu-bruche* ‘matrinomy-break’ (‘adulterer’)
c. *here-toga* ‘army-draw’ (‘duke’, cf. Germ. *Herzog*)

- Remnants of this pattern in Modern English (often with negative meanings or connotations):

(31) *chimney sweep, barkeep, bellhop, cardsharp*

4 The spread of Agentive VN-compounds from Ancient Greek to other European languages

- Agentive VN-compounds are not generally assumed to have existed in Classical Latin, but there seem to be some attested examples, many of which are probably calques from Greek (cf. Bork 1990).
- Most of the examples found are adjectives:

(32) Adjectives
a. *flex-animus* ‘bend-mind (persuasive)’
b. *versi-color* ‘change-color’
c. *vinci-pes* ‘fasten-foot’

(33) Nouns
a. *motacilla* < **mota-cul-a* ‘move$_{INT}$-arse-INFL’ (‘wagtail’) (cf. Greek *seis-o-pygís*)
b. *fulci-pedi-a* ‘hold.up-feet-INFL’ (‘arrogant woman’)
c. *verti-cordi-a* ‘turn-heart-INFL’ (epithet of Venus, i.e. *Venus Verticordia*)

- Medieval Latin: Agentive VN-compounds are found in place names and proper names (cf. Darmesteter 1894: 234)

(34) a. *Tene-gaudia* 'have-fun' (from the *Testament d'Abbon*)
b. *Porta Florem* 'carry flower'

- Old French:

(35) a. *Boi l'-auwe* ('drink the-water')
b. *Martin boi vin* ('Martin drink wine')

5 The rise and fall of VN-compounds in English

5.1 Overview

- There is a handful of (mostly onymic) instances of VO-compounds from pre-Norman times:

(36) a. *Clawecunte* (*claw*[*i*]*an*: 'scratch', *cunte* 'vulva'),
b. *Cunnebried (cunnian* 'test', *bried* 'bread'*).*

- Singular occurrences in EME (11th–13th cent.):
  - *wesche-dish* 'dish-washer'
  - *kealche-cuppe* 'heavy drinker' (*cylcan* 'belch, swallow')

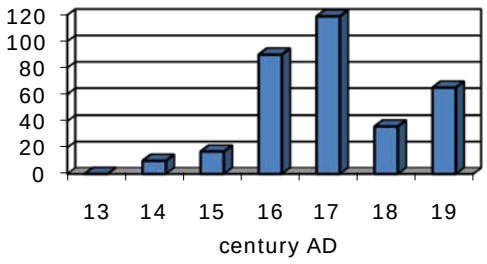
(37) a. direct borrowings: *chaunte-cler* 'sing-clear' ('cock, chanticleer'), *cache-pole* 'chase-chicken', *cheuer-chef* 'cover-chef' (> *kerchief*), *ward-robe* ('guard-robe')
b. hybrid formations: *dobbe-dent* ('beat-tooth' [dentist]), *steal-placard* ('steal-begging.license')
c. calques: *bere-blisse* (cf. Fr. *porte-joie*), *break-stone* (cf. Fr. 'rom[p]-pierre')

- Considerable increase in the 14th+15th cent. (e.g. *let-game* 'spoilsport' in Chaucer)
- Peak in the 16th cent. (e.g. *kill-courtesy, lack-brain, lack-beard* in Shakespeare), followed by a decrease up to the present.

5.2 A quantitative study

- Data: random sample from OED, on the basis of Uhrström (1918)
- 337 compounds, classified into five categories: (i) human, (ii) animal, (iii) plant, (iv) object, (v) event
- Earliest mention in OED was determined
- Frequencies were relativized to the corpus size for each century

Figure 1: First mentions in sample: Absolute frequencies



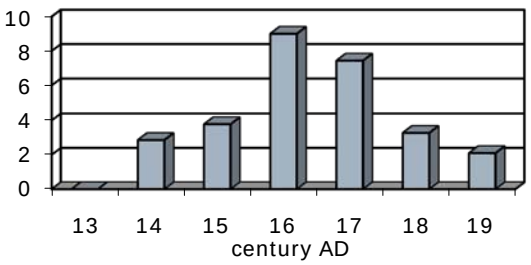


Figure 2: First mentions relative to corpus size (n/25,000 quotations)

- VN-compounds in the English lexicon

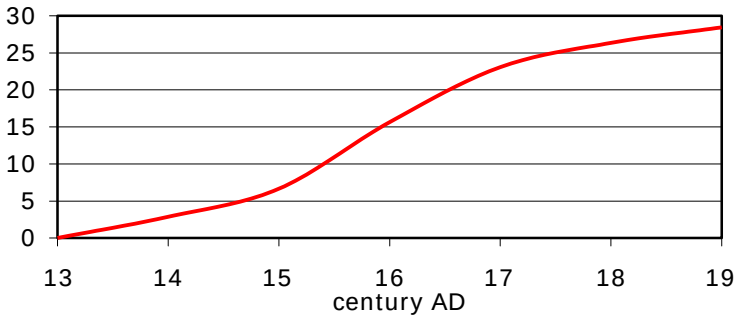


Figure 3: Cumulative frequencies of first mentions (n/25,000 quotations)

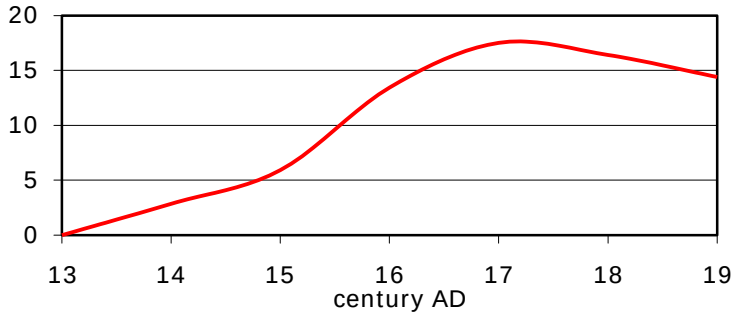


Figure 4: Estimated number of VO-compounds per 25,000 quotations (with an assumed 25% loss of existing compounds each cent.)

- Competition between VN-compounds and 'synthetic compounds' (*-er*)

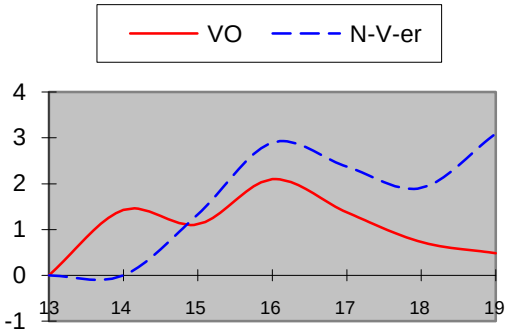


Figure 5: First mentions of VO-compounds and synthetic compounds based on *break, kill, turn, lick, pick* and *scratch* (n/25,000)

- Exocentric VN-compounds were 'imported' into the grammar of English.
- Later, they were superseded by synthetic compounds.
- Why did synthetic compounds win out?

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