

Particle incorporation in English double object constructions, nominalisations and elsewhere

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1. Introduction

➤ **Complex head approach:** V+Prt acts as a single head, e.g. for verb movement purposes (e.g. Dehé 2002, Farrell 2005, Haider 1997, Harley/Noyer 1998, Neeleman 2002, Toivonen 2003). Example: deriving particle shift using the syntactic incorporation variant of the complex head approach):

- (1) a. [_{VP} She [_V [_{V°} put out]+v] [_{VP} the light t_{put out} t_{out}]]] (particle shift)
 b. [_{VP} She [_V [_{V°} put]+v] [_{VP} the light t_{put} out]]]

➤ An alternative: **downstairs particle-shift:** no (overt) incorporation of Prt into V. Particle shift = head movement of Prt past the object in an articulated small-clause structure (Ramchand/Svenonius 2002, Svenonius 1996, den Dikken 1995):

- (2) a. [_{VP} She [_V put+v [_{VP} t_{put} [_{RP} the light R [_{PrtP} t_{the light} [_{Prt} out]]]]]]]]
 b. [_{VP} She [_V put+v [_{VP} t_{put} [_{RP} out+R [_{PrtP} the light [_{Prt} t_{out}]]]]]]]]

➤ [_{V°} V Prt] shouldn't be accepted lightly. Some extant arguments for it rely on dubious ideas like the No Phrase Constraint. [_{V°} V P] is left-headed, thus unusual in English. [_{V°} V P] is especially hard to motivate in languages with V-XP-Prt-DP order:

- (3) Kari **sparka** heldigvis **ut** hunden. [Norw. Ramchand/Svenonius]
 K. kicked fortunately out the.dog

- (4) Hon **sparkade** inte **ut** honom. [Swedish, Toivonen 2003:43]
 she kicked not out him

- (5) a. [_{VP} She [_V put+v [_{VP} t_{put} [_{XP} the light X [_{YP} t_{the light} [_{Prt} out ...]]]]]]]]
 b. [_{VP} She [_V put+v [_{VP} t_{put} [_{XP} out+X [_{YP} the light [_{Prt} t_{out} ...]]]]]]]]

➤ I will nevertheless argue that [_{V°} V P] exists. Phenomena discussed include:
 ➤ Quotative inversion (sect. 2)
 ➤ Nominalisations (*the {dividing/*division} up of the country*) (sect. 3)
 ➤ Synthetic compounding in nominalised particle verbs (*house-fixer-upper*) (sect. 4)
 ➤ The double object+particle construction (*send me out a letter*) (sect. 5)

2. Quotative inversion

➤ V+Prt in pre-subject position in quotative inversion has been analysed in terms of particle incorporation (Collins & Branigan 1997:4f, Toivonen 2003:175f):

- (6) a. "Civilisation is going to pieces," **broke out** Tom violently. [attested; Toivonen]
 b. "Out with it" **blurted out** the Captain brusquely. [Cappelle 2010]
 c. "What!?" **shouted out** John and Yuuda simultaneously. [Google]

➤ C&B's analysis of quotative inversion (substituting T for Agr, VoiceP for VP):

- (7) "Why" [_{CP} Op [_{TP} [_{T°} [_{V°} shouts out]] [_{VoiceP} Bill ... t_{shout out} t_{Op}]]] "did you do that?"
 ➤ Here [_{V°} V P] makes sense of the fact that particles are the only items which can intervene between the verb and subject and of the ban on modified (hence clearly phrasal) particles in the construction.

- (8) a. 'Get lost!', **shouted** {*at him/*loudly} Gertrude.

b. 'Get lost!', shouted Gertrude at him loudly.

c. 'You're a crypto-lexicalist!', **shouted** (*straight) out Gertrude to Basil.

➤ Material other than particles can only precede subjects if they have heavy-shifted, suggesting that non-heavy subjects are not extraposed.

- (9) 'Get lost!' shouted at him [a man *(in a bedraggled brown suit)].

3. Obligatory particle incorporation in English nominalisations

➤ **Fussy nominalisers** (affixes which impose constraints on types/tokens of bases they select, e.g. foreign affixes like *-ion*, unproductive ones like *-th*) contrast with the **elsewhere nominaliser -ing** in being compatible with full PPs but not with particles:

- (10) a. the **shipment** of the goods **to Europe** last week
 b. *the **shipment off** (of the goods) (to Europe) (last week)
 c. the **shipping** off of the goods to Europe last week

- (11) a. the acquisition of Rodocker's, or **merger** of it **into our company** [www]
 b. *the **merger in** of the company

- (12) a. the **enticement** of people into a hall [www]
 b. *the **enticement in** of (the) people

- (13) a. the **growth** of children **into powerful adults** [www]
 b. *the **growth up** of children

- (14) a. the **division** {*up} of the country {into two}
 b. the **leakage** {*out} of water {out of the tank}
 c. the **clearance** {*out} of the goods {out of the factory}
 d. the **closure** {*down} of nuclear power plants
 e. the **trial** {*out} of the products

➤ A rejected account: Sichel (2010): fussy affixes disallow multiple subevents, so incompatible with resultative particles. Problem: this wrongly excludes nominals with result PPs like (12)a). (Analysing such PPs as adjuncts makes no sense in unselected object structures like (11): *they merged it in* does not entail *they merged it*.)

➤ My account:

➤ Particles must incorporate in nominalisations:

- (15) *the dividing {up} of the country* {*up}

➤ [_{V°} V P] is thus part of the input to affixation, and [_{V°} V P] does not conform to the morpho-phonological selection restrictions of the affixes.

- (16) * [_{NP} divide+N (...) [_{VP} t_{divide} up (of) the country]] [*divide+N = division*]

- (17) [_{NP} divide up+N (...) [_{VP} t_{divide up} (of) the country]] [*division cannot spell out divide+up+N*]

➤ If [_{V°} V P] did not exist, the affixes would be as oblivious to Prt as they are to full PPs.

➤ *[[_{V°} **divide up**-ing] doesn't refute the analysis. It just shows that *-ing* must spell out on an inflectional V-stem (head marking, Stump 1994) even if stem is internal to the V° inputting affixation. Some varieties show overt evidence of such affixes attaching to both the stem and the whole particle verb. Web attestations:

- (18) %house-fixing-upping, %trash taking-outing

- (19) %put-out-ed-ness, %grown-up-ed-ness, %screwed-up-ed-ness, %pissed-off-ed-ness

4. Synthetic compounding in particle verb nominalisations

➤ Noun incorporation in nominalised V+Prt (all data web-attested):

(20) *trash taker outer* [cf. *the taker-outer of the trash*]

(21) *water soaker-upper, title thinker-upper*

(22) a. *towel thrower-inner* [who *throws in the towel* 'gives up']

b. *steam letter-offer* [that lets one to *let off steam* 'relax']

c. *tab picker-upper; rear bringer upper; new-leaf-turner-over; last word getter inner; support drummer upper*

➤ Incorporation of nominals in nominalised particle verbs is well-attested, but bad with nominalisations involving clearly phrasal arguments.

(23) a. I am an inveterate and incurable **taker of people into my house**.(www)

b. an inveterate people taker-inner

c. *an inveterate people taker into my house

(24) a. *a car pusher into the garage; *the ball thrower off the boat; *a bus driver south

b. *a door breaker open; *the partner shooter-dead

c. *a partner lover to bits; *the prisoner beater to death

d. *an opponent taker to the cleaners

➤ Use of a marginal phrasal incorporation strategy improves matters:

(25) a. *a bricklayer drinker under the table

b. ??bricklayer under-the-table-drinker [Bert Cappelle, p.c.]

➤ Dative PPs may coexist with incorporated nominals, (26), but there is independent evidence that such PPs can merge higher than Themes (Bruening 2010).

(26) a habitual present giver to children

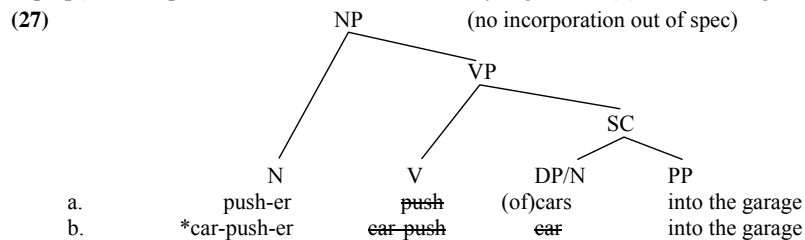
➤ Explanation for data like (23):

A. N may only incorporate if it is a sister to V (cf. the First Sister Principle, Harley 2008 and references). N may not incorporate out of a specifier.

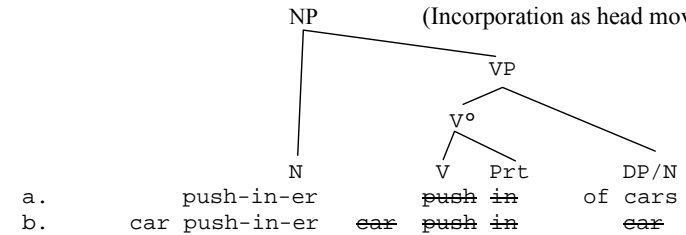
B. Particles can merge with V to form a complex V-head [_v V P].

C. Corollary: N can merge with a particle verb (either by direct merger or as a result of Baker-style head movement).

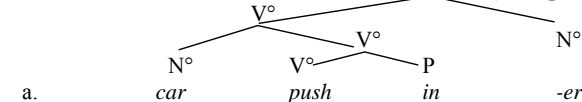
➤ Sample derivations below. For simplicity's sake I ignore the possibility (i) that *of*-phrases are merged in specifiers of functional projections and (ii) that certain *of*-insertion *er*-nominals do not involve phrasal V-projections below *er*- (McIntyre, in prep.). These points would not detract from my argument. (ii) would strengthen it.



(28) (Incorporation as head movement)



(29) (Incorporation as direct merger)



➤ Incorporation-qua-direct-merger seems preferable. Head movement wrongly predicts complement stranding (**son promotion* [_{NP} *t_{son} of a friend*]; McIntyre 2009).

➤ Attested compounds like (30) based on V+PP combinations are more simply treated with direct merger. Since N is an internal argument of P, a head movement approach respecting the Head Movement Constraint would have to assume excorporation.

(30) a. *bandwagon hopper-onner* (cf. *hop* [_{PP} *on the bandwagon*] 'follow a trend')

b. *site watcher-overer, maze-goer-througher, photo looker-at-er*

4.1. The affix reduplication problem

➤ Reduplication is due to conflicting requirements: affix must attach to right of its base and to the head of its base. This conflict only arises in (rare) left-headed structures. Similar problem with plural morphology in some dialects:

(31) %*sisters-in-laws*; %*governors general*; %*attorneys general* [all web-attested]

➤ The inner affix is clearly inserted for some PF reason, witness cases where the affix is semantically vacuous (Miller 1993:133; Cappelle 2010):

(32) *breaker-uppee, eye-putter-outee*

➤ Svenonius (2004) argued that *-er* merges twice because it binds both the external and internal arguments. Problems: we find reduplication even if internal argument is realised (*a fixer upper of cars*) or if there is only one argument (*walker-outer*). Some dialects also have triple *-er* (*fix-er up-er-er*; see Cappelle 2010 for more attestations).

4.2. Appendix: particle incorporation in German synthetic compounds

(33) a. *BäumeABSägen* 'trees.down.sawing'; *KerzenAUSblasen* 'candle.out.blowing';

MüllWEGbringen 'rubbish.away.taking'; *ReifenAUFpumpen* 'tyre.up.pumping'

b. *FeuerANzündler* 'fire lighter'; *WandANstreicher* 'wall.on.painter = wall painter;

SackAUFreißer 'bag.open.ripper = device for opening rubbish bags';

c. *SelbstAUFopferung* 'self-up-offering';

d. *BlutABnahme* 'blood.from.taking = blood test'

e. *VogelABSchießer* 'bird.down.shooter = person/thing that takes the cake'

(34) a. *das MüllWEGwerfen*; *das BallREINwerfen*

the rubbish.away.throwing

the ball.in.throwing

- b. ??das Müll-in-die-Tonne-werfen; ??das Ball-in-den-Korb-Werfen
 the rubbish.in-the-bin.throwing the ball.in.the.basket.throwing
- c. *das Müllwerfen in die Tonne; *das Ballwerfen in den Korb
 the rubbish.throwing in the bin the ball.throwing in the basket
- d. das Werfen des Mülls in die Tonne; das Werfen des Balls in den Korb
 the throwing of the rubbish in the bin; the throwing of the ball in the basket
- e. *das Werfen des Mülls weg. *das Werfen des Balls rein
 the throwing of.the rubbish away the throwing of the ball in
- All material in front of nominalised V incorporates in German nominals with incorporated or genitive Themes:
- (35) a. das Leertrinken des Kellers
 the empty.drinking of the cellar
- b. ??das Komplett-Leer-Trinken des Kellers
 the completely.empty.drinking of.the cellar
- c. *das Trinken des Kellers leer
 the drinking of.the cellar empty

5. The double object + particle construction

5.1. Particles and double objects: The data

- Typical judgments on particles in DOC (e.g. Neeleman 2002, Farrell 2005):
- (36) a. *I sent* ^(?){*out*} *the people* {*out*} *their schedules* {**out*}.
 b. *I sent* ^(?){*off*} *the people* {*off*} *the material* {**off*}.
- Clause-final particles are bad in DOC even if good in monotransitive contexts:
- (37) a. *I sent their schedules out*.
 b. *I sent the material off*.
- Less well-known: other particles *can* be clause-final. Most data below from den Dikken (1995:173), which I have put in three groups:
- (38) Particles with beneficiaries (no *to*-paraphrase; second object is *for* first obj, and V does not name a way of giving an object to someone):
 a. ^(?)*Would you saw Frank a piece off?* [for Frank/*to Frank]
 b. ^(?)*He poured Egbert a drink out*.
 c. ^(?)*She printed Edeltraud a copy out*.
- (39) back (acceptable to all speakers clause-finally; cf. Hudson 1992:259):
 a. *She gave the people their books back*.
 b. *She {sent/handed/sold/passed} the people their stuff back*.
- (40) Other particles:
 a. ^(?)*I passed Mary the wrench up/down*.
 b. ^(?)*She sent John some cigars over*.
- It is tempting to generalise that semantically transparent particles allow clause-final order (esp. as clause-final particles seem worse in benefactives if non-transparent: **write them a report up*). However, this approach does not seem promising:
 ➤ Non-transparent clause-final particles are ok in monotransitive contexts.

- Full PPs like (41) are ‘transparent’ yet illicit.¹
- (41) a. **I passed the patient a tray to his bed*.
 b. **I threw Fred a ball into his hands*.
 c. **They sent her a doctor into the building*.
- Most accounts wrongly only allow DP-Prt-DP order (e.g. Neeleman, Farrell...).
- Exception: den Dikken (1995:132,174). His structures in (42) assume that clause-final particles are phrasal, and interposed particles only heads. This is correct, cf. (43).
- (42) a. Interposed particle: [_{VP} send [_{sc1} e [_{VP} V^{=be} [_{sc2} [_{PP} P_o John]_i [_{XP} off [_{sc3} a package t_i]]]]]]]
 b. Final particle: [_{VP} give [_{sc1} [_{PP} P_o John]_i; (...)] [_{XP} Ø [_{sc2} [_{sc3} his books back] t_i]]]]]
- (43) a. I sent [_{P(P)} (*right) out] the people their stuff.
 b. I gave the people their stuff [_{PP} (right) back].
- Problems: *off/out* can be phrasal elsewhere (*send it right off/out*). It is unclear why these particles (but not *back*) are precluded from being phrasal in DOC.
- Treating SCs as arguments of *out/off* is hard to motivate. Normally *off/out* take Grounds as complements, which is inapplicable here. *Out* arguably takes an SC as Figure in *He made John out a liar* (cf. *It came out that John was a liar*), but this is not the reading of *out* found in DOCs.
- (42b) implies that what goes to John is *his books back*, not *his books*. One might seek independent motivation for this in dative shift analyses of *have*-structures like (48a) (in the spirit of Belvin & den Dikken 1997). However, it is unclear how to exclude all kinds of other small clauses found in *have*-structures from appearing in *give*-structures, (48)b,c).
- (44) a. *John had* [_{sc1} [_{sc2} his books back] ~~to John~~]]]]] *have=be+to*
 b. *John had* [_{sc} books on the table] vs. **I gave John* [_{sc} books on the table].
 c. *Mary had* [_{sc} her hair short] vs. **A hairdresser gave Mary* [_{sc} her hair short].

5.2. The direction of my argument

- One common analysis of DOC involves **dative shift**: movement of possessor/recipient out of a null-headed PP complement to a pre-Theme position (e.g. Baker 1997, den Dikken 1995, Larson 1988, Oba 2002):
- (45) a. Ann gave a book to Mary.
 b. Ann gave Mary a book [_{pp} P t_{Mary}]
- Dative shifting does not preclude us from capturing constraints on variants of the dative alternation unless we ignore the information-structural effects of word order and/or confuse spatial and possessive *to*. Details: McIntyre 2012.
- (46) a. *send* {*a letter to his home*/**his home a letter*} [**His home has a letter.*]
 b. *assign the book a number*. [*The book has a number.*]
- (47) *pull* {*the cart to her*/**her the cart*} [not a giving event]

¹ Acceptable clause-final PPs (*send him a letter to his home address*) seem to be adjuncts:

- (i) a. *I sent him a letter, this time to his home address*.
 (cf..) **I handed a book, this time to John*
 b. *I re-sent him a book to his home address*. [*re-* doesn't scope over PP]

- Silent dative PPs distribute complementarily with other clause-final PPs, cf. (48)b,c).
- I argue that acceptable clause-final particles are allowed because they are legitimate parts of the silent PP, e.g. because they are PP modifiers, cf. (48)d).

- (48) a. *She sent Basil a book* [_{PP} ~~TO Basil~~]
 b. *She threw Basil a ball* (*into her hands).
 c. *She sent Basil a book* (*off).
 d. *She sent Basil a book* [_{PP} *back* ~~TO Basil~~]

- Caveat: **Beneficiary indirect objects** like (38) are a separate problem, for which the proper analysis is unclear to me.

5.3. *Back* as a PP modifier

- *Back* in its (little-known) role as a restitutive modifier (cf. *again*, *wieder*):

- (49) Basil found the arms of Venus and glued them **back onto** the statue.
 → Modifier of PP: *...*and glued them back*.
 → Restitutive: presupposes nothing more than a prior arms-on-statue state

- (50) a. *I folded it **back flat***. [AP modification]
 b. *The noise jarred him **back awake***.
 c. *The goal brought the two teams **back even***.

- (51) a. *I wrote my name and crossed it **back*** *(out). [semi-transparent result prt.]
 b. *I turned the TV **back*** *(off).
 c. *I folded the carpet **back*** [#](up).

- Such examples translate into (Standard) German with restitutive *wieder* ‘again’, not *zurück* ‘back’. Unlike *zurück*, *back* has been reanalysed as a restitutive modifier (cf. the prefix *re-*, which also originally meant *back(wards)*.)

- Indications that *back* is part of PP: PP-typical modifiers like *straight*, *right*.

- (52) a. *I pulled the book **straight back** out of my bag*.
 b. *The chicken hatched, but wanted to go **right back** into the egg*.

- Restitutive *back* in possessive contexts; presupposes prior possession:

- (53) *She gave the vase **back to** the person who made it*.

- We find restitutive *back* with monotransitive possessive verbs. This perhaps speaks for a silent PP. Exceptions: **possess back*, **own back*. These either involve no silent PP, or are formed by incorporation of a silent P, and *back* interferes with this.

- (54) a. *I bought my house **back***.
 b. *The warlords conquered some parts of the country **back***.
 c. LIKEWISE: *get*, *receive*, *claim*, *obtain*, *procure*, *purchase*, *lease*, *acquire*, *win*;
 (Stative:) *have*, *want*, *need*

- (55) either licenses an elliptical PP or is a separate use of *back/zurück/wieder*.

- (55) a. *She left Bitterfeld and never came **back***.
 b. *Sie verließ Bitterfeld und kam nie **wieder/zurück***.

- Restitutive *back* is not to be confounded with other uses of *back*:

- (56) *Jack kicked Joe in the head. Joe kicked him in the head **back***. [reciprocal]

- (57) *I stepped back*.

[backwards]

5.4. What business *up/down/over* could have in a silent dative PP

- (58) ^(?)*She sent John the books **over/up/down***.

- A modifier analysis is less obvious for these particles than for *back*, so unsurprisingly some speakers do not dig (58). However, it can be motivated as follows:

- **The silent dative P in DOC is stative**. Hence (59) (reinterpreting data discussed in Krifka 2004, Rappaport & Levin 2008).

- (59) a. **Grandma’s drum playing gave headaches to John*.

[Headaches cannot move in space. Overt *to* has a directional interpretation, and by implicature this will be forced if there is no good information-structural reason for Theme-Recipient order]

- b. *Grandma’s drum playing gave John headaches*. [John had headaches]

- Overt instances of overt stative possessive *to* (rare):

- (60) a. *Grandma’s drum playing gave headaches **to** everyone who wasn’t deaf*.
 [overt stative *to* needed to mark a heavy-shifted recipient; Bruening 2010]

- b. *The book belongs **to** me*.

- c. *There is plausibility **to** the idea*. / *The idea has plausibility **to** it*.

- The closest thing to stative possessive *to* which is freely usable is **with** with possessor as complement. Observe its (in)compatibility with modifying particles:

- (61) a. *The books are over/down/up *(with John)*. [cf. (58)]

- b. **The books are off with John*. [**send John the books off*]

- c. *The books are out with John*. [**send the people the books out*]

- In (61)c), which seems ok, *out* describes a fairly narrowly circumscribed exterior location which is close to a deictic vantage point.

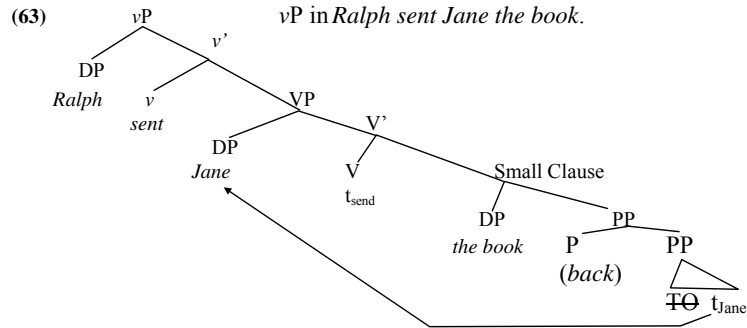
- By contrast, in *send the people out the books* the source particle *out* merely indicates that the books have left the location of the sender. Such a negatively defined location does as little to specify the location of the Theme as *overseas* in (62).

- (62) ^{??}*The books are overseas with the customers*.

5.5. The structure of the DOC with clause-final particles

- My suggestions about the semantics of particles in DOC will make the right word order predictions if the silent dative PP is a **small clause** head. Two options:

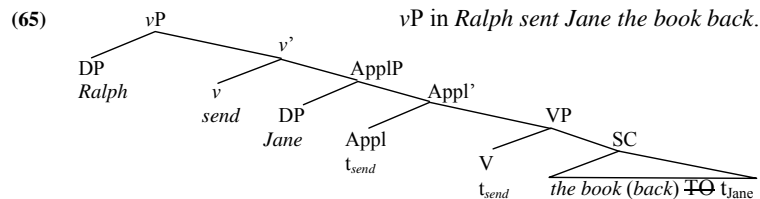
Variant 1: First object in spec,VP



- $\bar{t}\Theta$: phonologically empty non-case assigning variant of possessive *to*.
- Recipient moves to spec,VP. *v* can assign case to the specifier of its complement (feature inheritance). Cf. ‘adjacency’ requirement on case assignment to object.
- Lexical V assigns case to *the book*. This is unorthodox (but see Baker 1996, López 2001). V does not assign case with unaccusatives, passives and monotransitives since T only attracts *caseless* DPs, and since agentive little *v* assigns case. In DOCs there is an extra DP needing case, so V must assign case to it as a last resort. (Another last resort option is *with* in *present/endow/award him with a prize*. Cf. Baker 1988:264ff on markedness of case assignment to themes in applicatives.) V’s ability to assign case also surfaces in possessor raising unaccusatives:

- (64) a. [*The violin*]_i broke [_{DP} *t_i a string*]. [*a string* gets case from V]
 b. **A string was broken by the violin*. [hence no little *v* involved in (a)]
 c. **Which string did the violin break?* [(a) vs. (c) explained by a possessor raising account: *a* but not *which* projects a specifier for possessors; high applicative analyses don’t predict (c)]

Variant 2: High applicative head

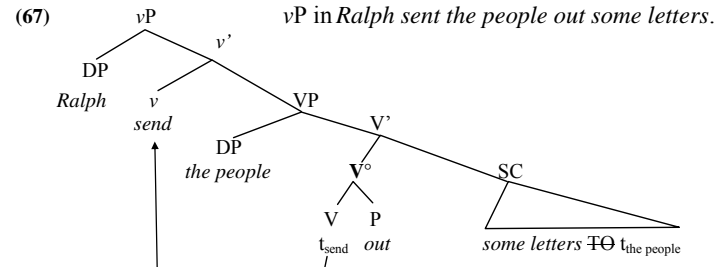


- Applicative head attracts caseless DP and assigns it an affected reading (Marantz 1993) or a discourse-related (e.g. topical) one (Levinson 2005, Takano 1998).
- Appl assigns case by Agree to *closest* DP: *the book*. *v* assigns case to closest DP (the recipient, attracted to spec,AppI).

- Alternative: Base-generate recipient in spec,AppI and assume that AppI can trigger *ellipsis* of possessive *to*-PPs (and perhaps certain *for*-PPs).
- Using both silent PP and AppI is unusual (though cf. Brandt 2003). An overt instantiation of such a configuration is (66) (where *have/with* correspond to AppI):

- (66) a. *The idea_i has* [_{SC} *plausibility* [_{PP} *to it_i*]].
 b. *an idea_i with* [_{SC} *plausibility* [_{PP} *to it_i*]]

5.6. Clause-non-final particles



- Prt and V are merged as a complex head. Prt is *optionally* affixal. If non-affixal, it will stay put when V raises, giving DP-Prt-DP order.
- Particles which cannot be part of SCs can only be inserted in the configuration [_{v°} V P] in DOC, so clause-final placement will be excluded.
- [_{v°} V Prt_[+affixal]] would move to *v*, yielding ^(?)*send out the people some letters*. Why some speakers find this order degraded: Particle shift is a way of putting a DP further to the right for information-structural reasons (Dehé 2002), and dative shift is a way of putting a DP further to the left for information-structural reasons (Bresnan/Nikitina 2006, Rappaport/Levin 2008). A derivation with particle shift and dative shift would thus be contradictory.
- Any aversion to Prt-DP-DP order could also be explained by using the Applicative head derivation in (65), and assuming that AppI resists morphologically complex heads, cf. Harley’s (2007) reinterpretation of the ban on Latinate verbs in DOC (*show/*exhibit them the books*) as a ban on morphologically complex verbs.
- **Is this really an argument for [_{v°} V P]?** If the SC part of the structure is right, then the only other way of getting the word order right appears to be to have *out* take an SC complement (e.g. (42)a), for which it is hard to find independent motivation.

5.7. Conclusions

- Native speakers acquire the word order options for different particles in DOC despite the extremely low frequency of the constructions, so we need an account that derives these facts from independent principles.
- The assumption that a particle’s semantics may or may not allow it to integrate into a silent dative PP seems to be the most promising first step in this direction.
- If right, this approach supports abstract syntax and thus a non-lexicalist research programme. (Irony: it grew out of study of alleged ‘idiosyncrasies’ that should be home territory for non-abstract approaches like Lexicalism, Construction Grammar.)

- **Problems:**
- No analysis for benefactive+particle structures yet.
 - Can an account of DOC compatible with my assumptions about particles handle all the other facts about DOCs? E.g. particles that dislike clause-final order with full DPs are better with pronouns (*?send him it out*), suggesting that pronouns move higher than full DPs.
 - Unclear how to handle constraints on particle+resultative constructions:
- (68)
- *Grandma beat the bouncer up unconscious.
 - *Grandma worked out all the fat off her body. [*work out* ‘do weightlifting’]
 - She painted the barn up red.

6. References

- Baker, M. 1988. *Incorporation*. University of Chicago Press.
- Baker, M. 1996. On the structural position of themes and goals. In J. Rooryck & L. Zaring (eds.) *Phrase Structure and the Lexicon*. Dordrecht: Kluwer.
- Baker, M. 1997. Thematic roles and syntactic structure. In L. Haegeman (ed.) *Elements of Grammar*. Dordrecht: Kluwer.
- Basillico, D. 2008. Particle verbs and benefactive double objects in English. *NLLT* 731-773.
- Beck, S. & Johnson, K. 2004. Double Objects Again. *Linguistic Inquiry* 35: 97-124.
- Belvin, R. 1993. The two causative *haves* are the two possessive *haves*. *MITWL* 20: 19-34.
- Belvin, R. 1996. *Inside Events*. Unpublished PhD. thesis, University of Southern California.
- Belvin, R. & den Dikken, M. 1997. *There, happens, to, be, have*. *Lingua* 101: 151-183.
- Benveniste, E. 1966. *Problèmes de Linguistique Générale*. Paris: Gallimard.
- Brandt, P. 2003. *Cipient predication*. Utrecht: LOT.
- Bresnan, J. & Nikitina, T. 2006. On the gradience of the dative alternation. Ms. Stanford.
- Bruening, B. 2010. Double objects disguised as prepositional datives. *Linguistic Inquiry* 41 287-305.
- Cappelle, B. 2005. Particle Patterns in English. Ph.D. Dissertation: University of Leuven.
- Cappelle, B. 2008. The grammar of complex particle phrases in English. In Ashbury, A. et al. (eds.) *Syntax and Semantics of Spatial P*. Amsterdam: Benjamins.
- Cappelle, Bert 2010. Doubler-upper nouns. In: Alexander Onysko and Sascha Michel (eds.), *Cognitive perspectives on word formation*, 335-374. Berlin: de Gruyter.
- Collins, C & Branigan, P. 1997. Quotative Inversion. *NLLT* 15: 1-41.
- Dehé, N. 2002. *Particle Verbs in English*. Amsterdam: Benjamins.
- den Dikken, M., 1995. *Particles*. Oxford: Oxford University Press.
- den Dikken, M., 1997. The syntax of possession and the verb ‘have’. *Lingua* 101: 129-150.
- den Dikken, M. 1998. Predicate Inversion in DP. In A. Alexiadou & C. Wilder (eds), *Possessors, predicates and movement in the DP*. Amsterdam: Benjamins. 177-214.
- den Dikken, M., 2004. *Serial prepositions*. Ms CUNY.
- Farrell, P. 2005. English verb-preposition constructions. *Language* 81, 96-137.
- Freeze, R. 1992. Existentials and other locatives. *Language* 68, 3:553-596.
- Harley, H. 1998. You’re having me on! Aspects of *have*, in J. Gueron and A. Zribi-Hertz, eds., *La grammaire de la possession*. Publidix.
- Harley, H. 2002. Possession and the double object construction. P. Pica and J. Rooryck *Yearbook of Linguistic Variation*, vol 2. 29-68.
- Harley, H. 2007. The bipartite structure of verbs crosslinguistically. Ms. Arizona.
- Harley, H. 2008. Compounding in Distributed Morphology. In R. Lieber and P. Stekauer (eds.) *The Oxford Handbook of Compounding*. Oxford University Press.
- Harley, H. & Noyer, R. 1998. Mixed nominalizations, short verb movement and object shift in English. In: *NELS* 28. 143-158.
- Heine, B. 1997. *Possession*. Cambridge: Cambridge University Press.
- Hudson, R. 1992. So-Called Double Objects and Grammatical Relations. *Language* 68: 251-276.
- Krifka, M. 2004. Semantic and pragmatic conditions for the dative alternation. *Korean Journal of English Language and Linguistics* 4: 1-32.
- Larson, R. 1988. On the double object construction. *Linguistic Inquiry* 19: 335-391.
- Levinson, L. 2004. *HAVE minus BE equals P*. Handout NYU.
- Levinson, L. 2005. *To in two places and the dative alternation*. Handout NYU
- López, L. 2001. On the (non)complementarity of theta theory and checking theory. *Linguistic Inquiry* 32: 694-716.
- McIntyre, A. 2004. Event paths, conflation, argument structure and VP shells. *Linguistics* 42: 523-571.
- McIntyre, A. 2005. The semantic and syntactic decomposition of *ger*: An interaction between verb meaning and particle placement. *Journal of Semantics* 22: 401-438.
- McIntyre, A. 2006. The Interpretation of German datives and English *have*. In D. Hole et al. (eds.) *Datives and Other Cases*. Amsterdam: Benjamins.
- McIntyre, A. 2007. Particle verbs and argument structure. In *Language and linguistics compass* 1(4): 350-397.
- McIntyre, A. 2009. *Synthetic compounding and argument structure*. Handout. Online.
- McIntyre, A. 2012. Silent possessive PPs in English double object (+particle) constructions. Handout online.
- McIntyre, A. in prep. *Agentive nominals and argument structure*. Ms. Online.
- McFadden, T. 2002. The rise of the *to*-dative in Middle English. In D. Lightfoot (ed.) *Syntactic effects of morphological change*. Oxford
- Miller, G. & Johnson-Laird, P. 1976. *Language and perception*. Cambridge (MA): Harvard University Press.
- Neeleman, A. 2002. Particle placement. In Dehé, N. et al. (eds.) 2002. *Verb-Particle Explorations*. Berlin: de Gruyter. 141-164.
- Oba, Y. 2002. The Double Object Construction and the Extraction of the Object. *Linguistic Analysis* 31: 40-71.
- Rappaport Hovav, M. & Levin, B. 2008. The English Dative Alternation. *Journal of Linguistics* 44:129-167
- Ritter, E. and S. Rosen 1997. The Function of Have. *Lingua* 101, 295-321.
- Sichel, I. 2010. Event structure constraints in nominalization. In A. Alexiadou & M. Rathert (eds.) *The syntax of nominalizations across languages and frameworks*. Berlin: Mouton de Gruyter. 151-190.
- Stump, G., 1994. The Uniformity of Head Marking in Inflectional Morphology. *Yearbook of Morphology* 7.
- Svenonius, P. 2004. The Zero Level. Ms. Tromsø.
- Svenonius, P. 2008. Spatial P in English. Ms. Tromsø.
- Takano, Y. 1998. Object Shift and Scrambling. *Natural Language and Linguistic Theory* 16, 817-889.
- Toivonen, I. 2003. *Non-Projecting Words*. Dordrecht: Kluwer.