

**Title:** Objectless locative prepositions in British English and parallels in German dialects

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**Acknowledgements:** Thanks to four anonymous reviewers; audiences at the American Indian Seminar and Syntax Seminar at UCLA, LangUE at Essex, and the LSA; Dylan Bumford, Gisbert Fanselow, Anke Himmelreich, Tim Hunter, Stefan Keine, Hilda Koopman, Andrew McIntyre, Pam Munro, Neil Myler, Ethan Poole, Dominique Sportiche, Peter Svenonius, Tom Trigg, and Masaya Yoshida. This research was supported by a UCLA Faculty Academic Senate Grant to the second author.

# Objectless locative prepositions in British English and parallels in German dialects

**Abstract:** In British English, sentences like *This film has monsters in* are possible without ending in the pronoun *it*. Descriptively, we refine the landscape of the phenomenon, identifying restrictions on the distribution and interpretation of OLPs, dialectal variation within British English, and an A-bar movement restriction. Analytically, we argue against an A-movement analysis (Griffiths & Sailor) and ponder alternatives from a cross-linguistic perspective, in particular comparing and contrasting OLPs with (silent) R-pronouns in dialectal German.

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## 1. Introduction

### 1.1. BASIC FACTS

Whereas most dialects of English (Eng) require the pronoun in (1a) and (2a), British English (BrEng) allows synonymous objectless locative prepositions (OLPs) (1b) and (2b). This phenomenon was first analyzed<sup>1</sup> by Griffiths & Sailor (2015a,b, 2017; Sailor & Griffiths 2017) (G&S) under the moniker Prepositional Object Gaps (POGs). The pronoun (a) or gap (b) obligatorily corefers with an overt DP.<sup>2</sup>

- |     |   |       |      |
|-----|---|-------|------|
| (1) | a. This film <sub>i</sub> has monsters in it <sub>i/*j</sub> .  | Eng   | [1a] |
|     | b. This film <sub>i</sub> has monsters in ___ <sub>i/*j</sub> . | BrEng | [1b] |
| (2) | a. the film <sub>i</sub> with monsters in it <sub>i/*j</sub>    | Eng   |      |
|     | b. the film <sub>i</sub> with monsters in ___ <sub>i/*j</sub>   | BrEng |      |

We use the term “Objectless Locative Preposition (OLP) construction” to refer just to cases like (1b) and (2b), which are possible only for British speakers, as distinct from other environments where all Englishes allow a preposition with no overt complement (cf. §3 below). In both (1a,b) and (2a,b) the preposition (P) (e.g. *in*) expresses a relation between the Figure (*monsters*) and the Ground (*film*). In clausal OLPs (1b), the Ground surfaces as the subject of the clause (3a); in nominal OLPs (2b), the Ground surfaces as the head of the DP (3b); compare the existential (3c).

- |     |   |
|-----|---|
| (3) | a. Ground <sub>i</sub> <i>has</i> Figure [PP P ___ <sub>i</sub> ].      |
|     | b. [DP Ground <sub>i</sub> <i>with</i> Figure [PP P ___ <sub>i</sub> ]] |
|     | c. <i>There BE</i> Figure [PP P Ground].                                |

Notationally, (4a,b) collapse the synonymous (1a,b), (2a,b) into a single line. “<>” surrounds pronouns that are optional only in BrEng, and asserts obligatory coreference between the subject/head and the pronoun. Otherwise “( )” indicates optionality in all Eng.

- |     |                                    |
|-----|------------------------------------|
| (4) | a. This film has monsters in <it>. |
|     | b. the film with monsters in <it>  |

<sup>1</sup> This phenomenon has been observed in the descriptive literature (Swan 1995, Algeo 2006:197) and (foot)noticed by syntacticians (Belvin & den Dikken 1997:168, fn. 17, McIntyre 2005:5).

<sup>2</sup> Example numbers in [square brackets] refer to G&S’s 2015a paper; in {curly brackets} to S&G’s 2017 handout; in \backslashes\ to G&S’s 2017 handout.

## 1.2. THEORETICAL ISSUES

What is the nature of the gap in (1b) and (2b), denoted pre-theoretically with an underscore? We demonstrate that the “silencing” of the pronoun is not free: many syntactic manipulations that are possible on (1a) and (2a) turn (1b) and (2b) bad, so OLPs must be different beyond nonpronunciation of the pronoun. And what is it about BrEng that allows such gaps where all other Eng to our knowledge (Canadian, Australian) do not? Answers to this questions may come from comparing and contrasting OLPs with (silent) R-pronouns in German.

## 1.3. GOALS AND ROADMAP

We refine the descriptive landscape of OLPs (§2) and superficially similar phenomena in Eng (§3). We then discuss G&S’s analysis and challenges it faces, in particular a novel observation that the Figure cannot A-bar move (§4). We consider alternative analyses from a cross-linguistic perspective with a special focus on German R-pronouns (§5) before concluding (§6).

## 2. The empirical landscape of OLPs

### 2.1. PREDICATES THAT LICENSE OLPs: *HAVE*, *WITH*, ...

As observed by Swan (1995:433), OLPs depend on the presence of *have* (1) or *with* (2). Thus in (5) the existential is bad (a), despite the apparent synonymy of (b) and (c).

- (5) a. Don’t watch that film<sub>i</sub>—there’s a monster in \*(it<sub>i</sub>)! [3a]  
b. There’s a monster in that film.  
c. That film has a monster in <it>.

Likewise in (6), OLPs with the Saxon genitive (a) and a *because*-clause (b) are bad for lack of a *have/with* frame.<sup>3</sup>

- (6) a. That file<sub>i</sub>’s papers are all in \*(it<sub>i</sub>). {cf. 3a}  
b. This film<sub>i</sub> is frightening because there are so many monsters in \*(it<sub>i</sub>). {cf. 2b}

Swan (1995:174) observes that *have got* works like *have* (7). We add that verbs that can be roughly synonymous with *have* fail to license OLPs (8).

- (7) My socks<sub>i</sub> have got holes in <them<sub>i</sub>>.  
(8) a. This box<sub>i</sub> {has/\*contains} papers in <it<sub>i</sub>>.  
b. This wallet<sub>i</sub> can {have/\*hold} up to 20 credit cards in <it<sub>i</sub>>.

Negation of the licensing predicates is allowed:

- (9) a. This film<sub>i</sub> {doesn’t have/hasn’t got} monsters in <it<sub>i</sub>>.  
b. The film<sub>i</sub> without monsters in <it<sub>i</sub>> was far more enjoyable.

The necessity of a *have*- or *with*-frame for OLPs sits nicely with analyses where (at least on some uses) *have* “contains” *with* (Tremblay 1996, Schütze 2001, Levinson 2011, i.a.). In fact, McIntyre (2005:5) marshals the parallel behavior of *have* (1b) and *with* (2b) with respect to OLPs as evidence for decomposing *have* as *be* + *with*.

Ritter & Rosen (1997) and Harley (1998) term the use of *have* in (1a) and (8) “Locational”; similarly, Myler (2016) uses “Locative”; other uses of *have* do not license OLPs (10), e.g., modal *have (got) to* (a), experiencer *have* (b), causative *have* (c):

<sup>3</sup> Alternatively, the problem with (6), and for that matter (5a), could be that there is no local c-commanding binder for the gap. The same may be true for (10a, c) below.

- (10) a. For a film<sub>i</sub> to be successful, monsters have (got) to be in \*(it<sub>i</sub>)!  
 b. The boiler<sub>i</sub> had its<sub>i</sub> tank collecting water in \*(it<sub>i</sub>).  
 c. The film<sub>i</sub>'s director had there be lots of monsters in \*(it<sub>i</sub>).

Additional licensing verbs are plausibly built from *have: need* (11), which has been argued to contain possessive *have* (Harves & Kayne 2012); and *get* (12), which has been claimed to be the inchoative of *have* (Kimball 1973, Emonds 1994:164, i.a.).<sup>4</sup> Again, roughly synonymous verbs fail to license OLPs.

(11) This film<sub>i</sub> {needs/??requires/??demands} more monsters in <it<sub>i</sub>>.

(12) Over the past year, the guestbook<sub>i</sub> {got/\*obtained/\*acquired} so many rude entries in <it<sub>i</sub>> that it had to be thrown away.

## 2.2. RESTRICTIONS ON THE GROUND

As complement of P, *it* and inanimate *them* (13) are possible; 1<sup>st</sup> and 2<sup>nd</sup> person pronouns are impossible (14); and 3<sup>rd</sup> person human pronouns (15) call for further investigation. While G&S claim that OLPs are restricted to non-human P-objects based on (15a), we note the relative goodness of (15b).

- (13) a. These boxes<sub>i</sub> have papers in <them<sub>i</sub>>.  
 b. the boxes<sub>i</sub> with papers in <them<sub>i</sub>>

(14) I/You have {poison/radioactive chemicals} in \*(me/you).

- (15) a. That guy<sub>i</sub> looks like he has ten pints of beer in \*(him<sub>i</sub>). [28b]  
 b. ?The poisoned spy<sub>i</sub> with radioactive chemicals in <him<sub>i</sub>> is dying.

## 2.3. THE FIGURE CAN BE ANY KIND OF DP

In addition to bare plurals (above), all sorts of DPs can appear as the Figure in situ (but cf. §4.3 for failed attempts to move it):

- (16) a. This film<sub>i</sub> has a monster in <it<sub>i</sub>>—namely, Godzilla.  
 b. At least two dozen films<sub>i</sub> have Eddie Redmayne in <them<sub>i</sub>>.  
 c. It<sub>i</sub> has every living member of Monty Python in <it<sub>i</sub>>.

(17) Is Peters strictly a stage actress? I can't think of any movies<sub>i</sub> with her in <them<sub>i</sub>>.

(18) Q: Do you have any pink jellybeans? A: Sure, this jar<sub>i</sub> has lots/plenty/50 (of them) in <it<sub>i</sub>>.

(19) Q: I'm looking for copies of papers by Chomsky...  
 A: This box hasn't got any in <it>. Check the one over there.

## 2.4. CONSTRAINTS ON THE SPATIAL RELATIONS

### 2.4.1. PREPOSITIONS

G&S claim that many spatial prepositions license OLPs. But this does not hold for the first author,<sup>5</sup> for whom OLPs are essentially restricted to *in* (above) and *on* (20).

- (20) a. This box<sub>i</sub> has spots on <it<sub>i</sub>>.  
 b. a package without enough stamps on <it>  
 c. pictures with coffee stains on <them> cf. {14}

<sup>4</sup> Sailor & Griffiths (2017:10) assert that *need* and *get* “partially license” OLPs, but do not elaborate.

<sup>5</sup> The first author considers himself a Standard Southern British English (SSBE) speaker.

Specifically, G&S (2017) claim that OLPs are also licensed by *behind, inside, below, above, beyond* (projective Ps); *around, through, across, along, over, under, past* (extended Ps); *between* (bounded P); *up* and *down* (Particles). (The taxonomy is from Svenonius 2010; to assist the reader, the Appendix reproduces Svenonius’s table summarizing the categories.) Their examples supporting these claims are in (21) (their judgments);<sup>6</sup> they provide no examples illustrating OLPs with *inside, beyond, around, through, over*. They further claim that if any P is modified by a deictic particle (21b) or a projective P is modified by a measure phrase (21c), OLPs become unavailable.

- (21) a. A church<sub>i</sub> can usually be found to have a graveyard behind <it<sub>i</sub>>. [3b]  
 b. I’ve just seen a mountain<sub>i</sub> with some beautiful houses (\*down) below <it<sub>i</sub>>. \10a\  
 c. Go through the door<sub>i</sub> with a sign (\*a few feet) above <it<sub>i</sub>>. \9a\  
 d. This river<sub>i</sub> has a bridge across <it<sub>i</sub>>. [14a]  
 e. Mine’s the mug<sub>i</sub> with the coaster under <it<sub>i</sub>>. [14d]  
 f. This street<sub>i</sub> has an adequate number of streetlights along %<it<sub>i</sub>>. [15a]  
 g. The next bus stop<sub>i</sub> has a Nando’s just past %<it<sub>i</sub>>. (G&S 2015b:(2))  
 h. Let’s sit at those tables<sub>i</sub> with gaps between <them<sub>i</sub>>. \1b\  
 i. Stop when you see two houses<sub>i</sub> with an alleyway between %<them<sub>i</sub>>. [15b]

G&S (2015a:66) assert that four speakers from London and four from other regions fully accepted (21d, e); the first author finds them very marginal (?\*). And where G&S report speaker variation (%) for (21f, g), the first author rejects these (\*). Cases with *between* vary: the first author considers (21h) “?” while (21i) is “??”. For him, (21b) is improved rather than degraded when the deictic particle *down* is included, and the measure phrase in (21c) is also ameliorating, but possibly for a different interpretation (‘above you/one’).

On the other hand, S&G (2017) assert that *at* does not license OLPs because it is not a spatial P (and according to Svenonius, i.a., non-spatial Ps must have functional structure above them that would preclude the A-movement by which S&G claim OLPs are derived—see §4, below). The example they provide to justify this claim is the following, where they characterize the meaning of *at* as “hospitative.”

- (22) That university has a conference at \*(it). {30g}

But to our ears, (22) is not grammatical even if *it* is pronounced, so we would not expect it to be grammatical when *it* is omitted.<sup>7</sup> Moreover, *There is a conference at the university* implies the university is hosting the conference, so that this is not purely an assertion about spatial location. We can instead consider purely spatial uses of *at*; as it turns out, these do not license OLPs either (23).

- (23) a. The picnic tables had people at \*(them) all night long.  
 b. a bank with three robberies at \*(it) in the last 6 months

<sup>6</sup> Further discussion of projective Ps is deferred to §3.1, and of *up* and *down* to §3.2.

<sup>7</sup> This strikes us as true of other examples in S&G (2017)’s (30) as well, in which case no conclusions about properties of P relevant to OLP licensing are warranted.

### 2.4.2. SENSES OF *IN* AND *ON*

The spatial sense of *in* was already metaphorically extended in (1)—monsters are not physically located in movies. (24) provides further metaphorical extensions of *in* to moments (a), musical contents (b), and concepts (c). Temporal senses are also possible (25).

- (24) a. Every Hitchcock movie<sub>i</sub> has truly frightening moments in <it<sub>i</sub>>.  
b. Hitchcock films<sub>i</sub> tend to have a lot of suspenseful music in <them<sub>i</sub>>.  
c. This new idea has a lot of flaws in <it>.
- (25) a. The month of May<sub>i</sub> has two bank holidays in <it<sub>i</sub>>.  
b. Every term<sub>i</sub> has at least one manically stressful day in <it<sub>i</sub>>.

However, *on* is difficult to extend metaphorically or temporally, as (26) and (27) show.

- (26) a. Tax forms<sub>i</sub> have various sources of income and deductions on \*(them<sub>i</sub>).  
b. a bus<sub>i</sub> with 50 people on \*(it<sub>i</sub>) {cf. 19b}
- (27) Fridays<sub>i</sub> with faculty meetings on \*(them<sub>i</sub>) are the worst.

Although S&G (2017:8) claim that the choice between the structure that licenses an overt *it/them* and the one that creates an OLP is “evidently without any semantic effects,” that is generally not true. Beyond the “extended” uses just examined, for the first author (and other SSBE speakers consulted) many straightforwardly spatial examples with *on* are degraded: compare the good cases in (28) with the contrasting pairs in (29) and (30). One relevant difference seems to be how temporary and/or easily disrupted the relationship is between Figure and Ground. In (28e), although cars would not be attached to the street, they are effectively unmovable if you do not have the keys. In (29) the ephemeral nature of website contents contrasts with the physical connection to a notice board. (30a) would be improved if the glasses were glued to the tray, as with a play prop. In (30b), whereas spots will remain on the crate indefinitely, paint will soon cease to be wet; but butter will remain on (or in) toast even if it dries (28b). Some uses seem to depend on quantity modification of the Figure in ways not yet well-understood (31).

- (28) a. The \$5 bill has Jackson’s face on <it>.  
b. I’d like a piece of toast with butter on <it>. (Swan 1995:174)  
c. Now we know it’s really Spring: all the trees have (got) leaves on <them> again.  
d. All new mattresses must have tags on <them> indicating how they can be cleaned.  
e. That street rarely has cars on <it>—finding parking is easy.
- (29) a. A department website typically has faculty and graduate student photos on \*(it).  
b. The department notice board has grad student photos on <it>.
- (30) a. That tray has champagne glasses on ??<it>.  
b. the crate with {spots/??wet paint} on <it>
- (31) a. The High Street has ??(too many) coffee shops on ?<it>.  
b. Here’s a shelf with ??(too many) books on ?<it>. \cf. 21b\

Likewise, not all spatial examples with *in* work so well (32): unlike the sugar, the fly is not (supposed to be) part of the drink (a); (b) may be degraded because it describes a temporary state; and the Ground in (c) does not provide a bounded container.<sup>8</sup>

- (32) a. a drink with {sugar/??a fly} in <it>  
 b. After the storm, the street had six inches of water in ?\*<it>.  
 c. The sky has clouds in \*<it>.

### 2.4.3. EXCLUSION OF ‘CONSISTS OF’ READINGS

OLPs are degraded when the Figures “exhaust” or fully make up the Ground (33), as opposed to characterizing a subset/subpart of it (34). The entire PP is optional in these examples.<sup>9</sup>

- (33) a. This house has 12 rooms in \*(it).  
 b. 2020 will be the next year with 366 days in \*(it).  
 c. *The Sonnets of Shakespeare* has all 154 sonnets in \*(it).  
 d. an album/record/CD with 12 songs on \*(it)  
 e. a book with 22 chapters in \*(it)
- (34) a. This house has two bathrooms in <it>.  
 b. 2020 will be the next year with an extra day in <it>.  
 c. *The Complete Works of Shakespeare* has all 154 sonnets in <it>.  
 d. an album/record/CD with {a couple of/no} decent songs on <it>  
 e. a novel with only one really exciting chapter in <it>

## 3. Superficially similar phenomena in English

We generally agree with G&S that OLPs cannot be an extension of other situations where the complement to P can be silent in English, chiefly because omission in these cases is not restricted to *have/with*-frames or to BrEng.

### 3.1. PREPOSITIONS WITHOUT OVERT GROUND

Svenonius (2010) notes that projective Ps allow anaphoric identification of the Ground quite generally (35). By contrast, he claims that bounded Ps all disallow this, as in (36) (his judgments; many other examples in §3 are (based on) his):

<sup>8</sup> Svenonius (2010:140) suggests that when the particle *in* has a stative containment reading, it realizes a high head *p*, distinct from the head(s) expressed by prepositions like *behind*, and likewise for *on* with the basic meaning of contact. Also distinct is the head that hosts these particles when they are directional, cf. §3.2, which he labels Dir.

<sup>9</sup> In this respect they fall in line with exceptions noted by Belvin (1996) to the general pattern whereby alienable “possession” between inanimates requires the PP (ia)—an instance of the “Link Requirement” of Belvin & den Dikken (1997: (30))—while inalienable possession does not (ib). He provides the counterexamples in (ii) (where OLPs are also possible), where he notes that the Figure is crucial to the normal functioning of the Ground.

- (i) a. The shelf<sub>i</sub> has a book \*(on it<sub>i</sub>).  
 b. The tree<sub>i</sub> has dark green leaves (on it<sub>i</sub>).  
 (ii) a. Does your car<sub>i</sub> have enough gas (in <it<sub>i</sub>>)?  
 b. The printer<sub>i</sub> doesn’t have paper (in <it<sub>i</sub>>).

Other apparent counterexamples we have encountered (iii) might involve the subject being interpreted metonymically as animate, though the impossibility of the PP seems to have more in common with ‘wearing’ readings—see §3.3, below.

- (iii) The grocery store has eggs (\*in <it<sub>i</sub>>).

- (35) a. There was a box on the table. Inside ((of) it) was fine Swiss chocolate.  
 b. There was a beach. Above (it) the cliffs swarmed with birds.
- (36) a. There were two stacks of boxes in the warehouse. Between \*(them) was a forklift.  
 b. I saw a small house. Beside \*(it) was a gas pump.

However, there seems to be interspeaker variation for some bounded Ps in this regard: examples with *between* and *beside* are well attested<sup>10</sup> and are accepted by the second author,<sup>11</sup> but not the first author; Quirk et al. (1985:714) and Huddleston & Pullum (2002:613) list *between* among prepositions not requiring a complement. Svenonius further claims that allowing a silent Ground correlates with the ability to be followed by *there* (his judgments), again contrasting projectives with bounded Ps:

- (37) a. Get behind/inside/?above/?below/?beyond there.  
 b. \*Get {between/among/beside/next to} there.

This diagnostic corroborates the interspeaker variation: the second author accepts *between* and *beside* in (37b), but the first author does not. Recall G&S claim that *between* is the only bounded P that licenses OLPs. In light of these observations, verifying their claim requires checking that a speaker who can use *between* in an OLP cannot drop its complement in any other circumstances. To the extent that *between* shares nonprototypical behavior with *beside*, it also seems worth looking more carefully for speakers who might allow OLPs with the latter.

Returning to (35), recall that G&S claim most projective Ps license OLPs. But given that all English speakers allow such Ps to take a silent Ground, how can we tell? The alleged badness of measure expressions and deictics in projective OLPs (21b, c) might have suggested that Ground omission arises differently there, since those modifiers do not block Ground omission in non-OLPs (38). However, for speakers like the first author that do not show the alleged restrictions, there is no way to be certain.

- (38) We came to a door. A few feet above (it), a sign swung in the wind. [9b]

Another subclass, extended Ps, are claimed to allow a null Ground freely only in their directional use (39); in their locative use (40), a null Ground is possible only with an overt measure expression. Svenonius provides no examples illustrating these claims, but they seem correct:

- (39) a. Although our truck exceeded the bridge's weight limit, we drove across (it) safely.  
 b. The town was almost deserted as we drove through %(it).
- (40) a. I just checked the bridge with the traffic jam again: that oversized truck is not yet \*(halfway) across (it).  
 b. The tunnel is just one lane wide, but there is a short stretch of shoulder \*(halfway) through (it).

<sup>10</sup> “The two armies occupied two hills and between stood a plain of green and gold, rich farmland. (<https://www.improfanfic.com/got/segs/got013.txt>); “... the airplane began to move without the pilot being able to stop it and another aircraft parked beside was hit.” (<https://www.aibn.no/Aviation/Published-reports/2015-15>)

<sup>11</sup> The second author is a speaker of North American English.



The methodological consequence is that purported OLPs with extended Ps should not include measure expressions, since these license Ground omission independently.<sup>12</sup>

### 3.2. PARTICLES WITHOUT OVERT GROUND

Particles readily appear with no following DP. However, they must then be interpreted as directionals (41), not locatives (42).<sup>13</sup>

- (41) a. They fell in (the hole).  
b. They slid down (the drainpipe).  
c. They jumped on (the back).  
d. They climbed up (the wall).
- (42) a. Smell the well. There must be a dead opossum in/down \*(it). \cf. 3b\  
b. Look at that wobbly ladder. No child should be on/up \*(it).<sup>14</sup>

However, adding a measure expression to a particle allows it to express location without a following DP, just as with extended Ps:

- (43) a. They had been climbing the tower for 20 minutes but were still only halfway up (it).  
b. Once you identify the drain pipe, the blockage should be about three feet down (it).  
c. Look at that garage. An SUV is stuck partway in (it).  
d. You can't move the truck yet. The palettes are only halfway on (it).<sup>15</sup>

Thus, to establish which particles license OLPs one must test examples that do not contain measure expressions, and the *in* and *on* examples in §2 did not. G&S (2017) do the opposite with *up* and *down* in (44), yet they conclude that these particles license OLPs. In fact, the measure phrases in (44) make these examples like (43), in that *it* is optional for the second author as well as the first author. When the measure phrases are taken away, the first author finds OLPs highly degraded (45).

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<sup>12</sup> There is a complication regarding the extended P *around*, which G&S claim licenses OLPs. It is lexically ambiguous (Quirk et al. 1985:681), and on the reading 'scattered nearby' it generally allows Ground omission:

(i) There are children around.

On the reading 'encircling' it behaves as in (39) and (40). Thus, genuine OLP examples would have to allow the latter reading without benefit of a measure expression, e.g., (ii), which the first author rejects.

(ii) a castle with a moat around <it>

<sup>13</sup> Particles without a following overt DP can additionally have idiosyncratic stative meanings, sometimes as a function of the (in)animacy of the subject, where the implicit complement may be obscure or nonexistent.

(i) a. The doctor is in (his office). [ $\neq$  in the pool/kitchen]  
b. The lead actor is {really on/a bit off} (??his game) today.  
c. The radio is on/off (\*DP).  
d. The party's on. [= confirmed]

<sup>14</sup> For completeness, we note that the quantity expressions observed to ameliorate some OLPs with *on* in (31) have no such effect on examples like (42b):

(i) Look at that wobbly ladder: If too many children were on \*(it), it would fall over.

<sup>15</sup> Svenonius (2010:154) states that *on* without an overt Ground cannot be rescued by a measure expression, apparently in contradiction to (43d), because *on* entails contact, hence a distance of zero from the Ground. But his bad example illustrating this uses a precise measurement (*\*ten centimeters on (the table)*). It seems plausible that (43d) could mean 'halfway in contact', but it could also be that *on* in that example has more meaning to it and does not challenge Svenonius's claim.

- (44) a. This rigging has a pirate halfway up (it). \cf. 8a\  
 b. This drainpipe has a blockage a few inches down (it). \cf. 8b\  
 (45) a. This rigging has a pirate up \**<it>*.  
 b. This drainpipe has a blockage down \**<it>*.

This leaves us wanting an explanation for why *in* and *on* license OLPs but *up* and *down* do not. (Section 4 of Svenonius (2010) holds some suggestive observations.)

### 3.3. PREDICATES OF ‘WEARING’

Unlike with OLPs, there is no *have/with* requirement on omitting the complement of these Ps, and presence/absence of the coindexed pronoun changes the meaning. Furthermore, the subject is human, which is scarcely possible with OLPs (cf. §2.2).<sup>16</sup>

- (46) a. John had a hat on. [he’s wearing it] (cf. *put on*, *take off*)  
 b. John<sub>i</sub> had a hat on him<sub>i</sub>. ≠ (a) [not wearing it but “with him,” e.g., in his pocket]  
 (47) a. Grandpa has his dentures in. [he’s wearing them] (cf. *put in*, *take out*)  
 b. Grandpa<sub>i</sub> has his dentures in him<sub>i</sub>. ≠ (a) [e.g., he swallowed them]

### 3.4. COMITATIVE WITH CONSTRUCTION

Further afield is the American dialectal phenomenon illustrated in (48) (perhaps restricted to the Midwest), whereby pronouns of any person (human or inanimate) can readily be dropped. Unlike with ‘wearing’ predicates (§3.3), there is no meaning change associated with their presence vs. absence.<sup>17</sup>

- (48) a. I’ll bring some wine with (me).  
 b. Can I come with (you)?  
 c. Do you want to go with (them)?  
 d. If I buy a premium ticket, does a backstage pass come with (it)?

## 4. G&S’s analysis: A-movement of the Ground

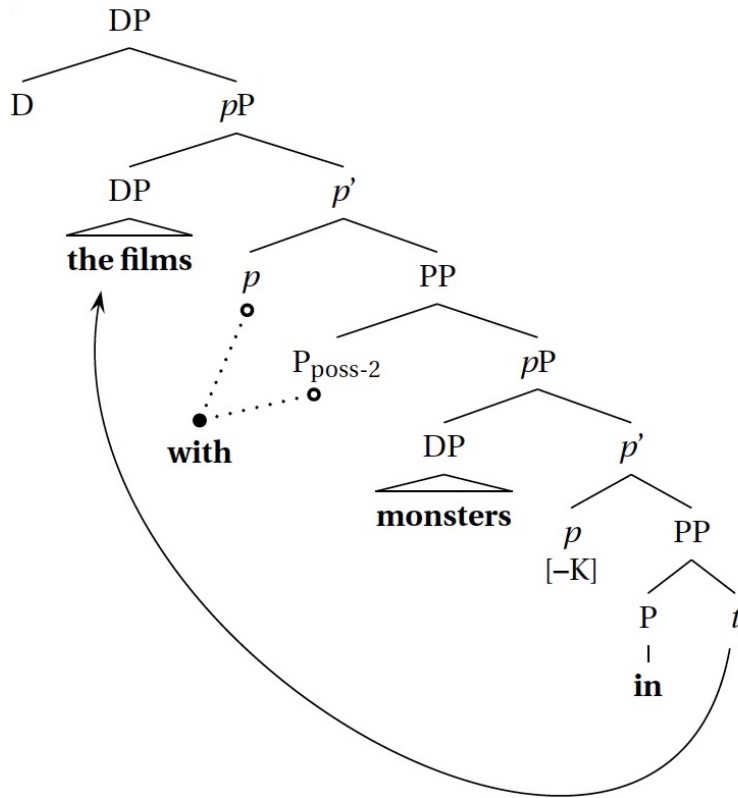
G&S propose that OLPs are derived by A-movement of the Ground from the complement of P (49) (as diagrammed in G&S 2017).

<sup>16</sup> Sometimes a body-part ground (inalienably possessed by the subject) can be made explicit while preserving the ‘wearing’ meaning (i), but not always (ii):

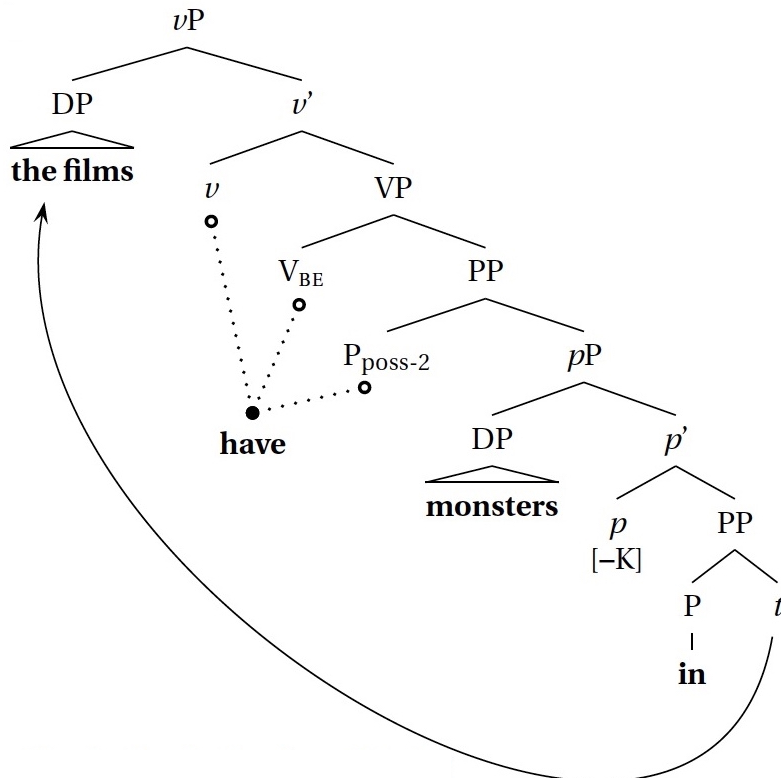
- (i) She<sub>i</sub> has a ring on (her<sub>i</sub> finger).  
 (ii) He<sub>i</sub> has a robe on (??his<sub>i</sub> body).

<sup>17</sup> *Along* can express this meaning (except in (48d)) in all dialects, and takes an optional *with*-PP complement, e.g., *Can I come along (with you)?* Thus, *with* is arguably not spatial here: there is no obvious Figure/Ground relation.

(49) a.



b.



G&S propose the following parametric distinction: BrEng is different from other Eng in that certain Ps optionally do not assign Case. More precisely,  $P_{\text{poss}}$  (inspired by Levinson 2011), which is the semantic heart of *have* and *with*, can select for *p*Ps whose head is  $[\pm K]$ .  $p[+K]$  licenses Case on the complement of the P immediately below it. By contrast, when  $p[-K]$  is deployed, the complement of the P below it must move for Case. S&G (2017) are explicit that the movements shown in (49) are not themselves movements to Case positions. In (49b), the Ground will subsequently raise to Spec-TP for Case; presumably the movement shown is what allows it to escape the  $\nu$ P phase. What they have in mind for (49a) is less clear: they state that a “higher, external Case assigner” is omitted from the diagram, but any such element would presumably license Case on the entire DP shown, which is distinct from the Ground DP seen moving to Spec-*p*P.

#### 4.1. CHALLENGES FOR A-MOVEMENT

##### 4.1.1. SUBEXTRACTION AS SUPPORTING EVIDENCE?

G&S provide (50) as evidence for the crucial step of A-movement in (49), showing what they characterize as a derived island/Freezing effect (Wexler & Culicover 1980, Corver 2017):

(50) Which president<sub>j</sub> did you read [a book about  $t_j$ ]<sub>i</sub> with a bunch of torn pages in { $t_i$ / $*t_i$ }? {13}

With the overt pronoun, the Ground [*a book about ...*] merges where we see it, and the *wh*-phrase *which president* is free to move out. Without the pronoun, however, the Ground has A-moved from the complement of *in*, rendering it a derived island and barring sub-extraction of the *wh*-phrase.

However, as S&G (2017, note 8) observe, the degree of contrast in (50) shows interspeaker variation. Further, the hypothesized configuration of movements in (50) is good in (51), where the bracketed DP A-moves for Case by passive and/or raising-to-object, but is not rendered a derived island for *wh*-movement (cf. Bošković 1992):

- (51) a. Which celebrity<sub>j</sub> do you believe [a picture of  $t_j$ ]<sub>i</sub> to have been stepped on  $t_i$ ?  
 b. Which president<sub>j</sub> does John consider [books by  $t_j$ ]<sub>i</sub> to have been plagiarized  $t_i$ ?

G&S give examples only for nominal OLPs (41), but their logic should apply equally well to clausal OLPs. Extraction from the Ground would independently be expected to be bad when it surfaces as the subject of a finite clause (as a Subject Condition violation); but since OLPs can be embedded as nonfinite clauses, we can construct (52) by analogy to (41). The sentences in (52) show no contrast as a function of overtiness of the pronoun (and minimal degradation).<sup>18</sup>

- (52) a. Which director<sub>j</sub> do you find [films by  $t_j$ ]<sub>i</sub> to have too much nudity in <them<sub>i</sub>>?  
 b. Which president<sub>j</sub> does John consider [biographies about  $t_j$ ]<sub>i</sub> to have too many sordid anecdotes in <them<sub>i</sub>>?

<sup>18</sup> Moreover, the very existence of Freezing as a grammatical constraint has been challenged (see Corver 2017, note 14 for references regarding Spec-TP). Recent experimental work (Hofmeister et al. 2015, Konietzko et al. 2018) finds that acceptability judgements for such sentences can be explained as an additive processing effect of extraction and movement, without a superadditive contribution from a Freezing Constraint, following the logic of Sprouse (2007) for islandhood.

#### 4.1.2. VARIABLE BINDING INCORRECTLY PREDICTED

If the Ground moves from the complement of P position, and the Figure c-commands this position as diagrammed in (49b), then the Figure should be able to bind a variable in the Ground. (53a) shows canonical variable binding under c-command. (53b) and (53c) show that A- and A-bar-movement respectively can reconstruct to allow variable binding. But the bound variable reading of *his* is not available in the OLP (53d), which it ought to be if the subject had moved (A- or A-bar-wise) from the underscored position; rather, it is interpretively the same as its counterpart with an overt pronoun (53e).

- (53) a. Every director<sub>i</sub> is in a film about his<sub>i</sub> youth.  
b. [His<sub>i</sub> first film]<sub>k</sub> seems to every director<sub>i</sub> to be *t<sub>k</sub>* immature.  
c. [Which film of his<sub>i</sub>]<sub>k</sub> does every director<sub>i</sub> find *t<sub>k</sub>* immature?  
d. [Films about his<sub>j/\*i</sub> youth]<sub>k</sub> have every director<sub>i</sub> in \_\_\_<sub>k</sub>.  
e. [Films about his<sub>j/\*i</sub> youth]<sub>k</sub> have every director<sub>i</sub> in them<sub>k</sub>.

#### 4.1.3. ANAPHOR BINDING INCORRECTLY PREDICTED

Whereas Condition A should be satisfiable prior to (A or A-bar) movement, it is not satisfied in the proposed pre-movement position of OLPs: (54b) and (55b) should be able to mean what their (a) counterparts mean (something trivial, in the case of (54)), but instead are as bad as their (c) counterparts with overt pronouns.

- (54) a. Of course [my car]<sub>i</sub> is in the picture of itself<sub>i</sub>.  
b. \*Of course [the picture of itself<sub>i</sub>]<sub>j</sub> has [my car]<sub>i</sub> in \_\_\_<sub>j</sub>.  
c. \*Of course [the picture of itself<sub>i</sub>]<sub>j</sub> has [my car]<sub>i</sub> in it<sub>j</sub>.  
(55) a. [John and Mary]<sub>i</sub> are in my pictures of [each other]<sub>i</sub>'s birthday parties.  
b. \*[My pictures of [each other]<sub>i</sub>'s birthday parties]<sub>j</sub> have [John and Mary]<sub>i</sub> in \_\_\_<sub>j</sub>.  
c. \*[My pictures of [each other]<sub>i</sub>'s birthday parties]<sub>j</sub> have [John and Mary]<sub>i</sub> in them<sub>j</sub>.

#### 4.1.4. THE STRUCTURE FOR NOMINAL OLPs

While the movement for clausal OLPs (to subject position) is familiar, the creation of the nominal OLP structure resulting from movement is not. On traditional assumptions, if the DP *a film* raises, then the *with*-PP which used to contain it would somehow have to become an adjunct to the N(P) *film* inside the DP that raised (56).

- (56) [with [[monsters] [in [<sub>DP</sub> a film]]]] → [<sub>DP</sub> a [<sub>NP</sub> [<sub>NP</sub> film] [with [[monsters][in *t<sub>i</sub>]]]]]]<sub>i</sub>*

Instead, (49a) shows a structure where *a film* is embedded inside a *pP* complement to a higher DP with a silent determiner; it is not clear why that containing DP should behave syntactically or semantically as if its structure were [<sub>DP</sub> [<sub>D</sub> a][<sub>NP</sub> film...]]. Furthermore, choosing the [+K] alternative in (49a) should yield unattested DPs of the form [<sub>DP</sub>  $\emptyset$ <sub>D</sub> *with monsters in the film*]; S&G (2017) show the [+K] alternative yielding the non-OLP *the films with monsters in them*, but say nothing about why Spec-*pP* should need to be filled by a base-generated DP just when the lower *p* [+K] assigns Case to the pronoun, but is fillable by movement otherwise.

An additional potential problem arises in (57), where the *with*-phrase appears to the right of a VP adverb: this could involve extraposition of *p'* according to the structure in (49a).

- (57) I like how they served [the soup \_\_\_<sub>i</sub>] yesterday [with cream in <it>]<sub>i</sub>.

## 4.2. FACTS CONSISTENT WITH BUT NOT COMPELLING A-MOVEMENT

As G&S note, with A-movement the following are expected: the A-moved subject of *have* can raise further (58a) and can create new binding opportunities (58b).

- (58) a. This box<sub>i</sub> seems (to appear (to be likely)) to t<sub>i</sub> have a skunk in \_\_<sub>i</sub>. {20}  
b. These films<sub>i</sub> have each other<sub>i</sub>'s directors in \_\_<sub>i</sub>. {cf. 18}

However, both of these observations are equally consistent with base-generating the Ground as the subject of *have*, as in the grammatical counterparts with an overt pronoun.

## 4.3. A-BAR MOVEMENT OF THE FIGURE IS NOT POSSIBLE

### 4.3.1. NEW OBSERVATIONS

In clausal OLP constructions, the Figure cannot undergo A-bar movement, whether by question formation (59) (including D-linking), topicalization (60), *it*- or pseudo-clefting (61), restrictive or non-restrictive relativization (62), or Heavy NP-Shift (63); all of these are possible when the pronoun is pronounced:<sup>19</sup>

- (59) a. What<sub>j</sub> does this film<sub>i</sub> have t<sub>j</sub> in {it<sub>i</sub> / \* \_\_<sub>i</sub>}?  
b. [How many monsters]<sub>j</sub> does this film<sub>i</sub> have t<sub>j</sub> in {it<sub>i</sub> / \* \_\_<sub>i</sub>}?  
c. [Which of these two actors]<sub>j</sub> does this film<sub>i</sub> have t<sub>j</sub> in {it<sub>i</sub> / \* \_\_<sub>i</sub>}?  
(60) Monsters<sub>j</sub>, this film<sub>i</sub> certainly has t<sub>j</sub> in {it<sub>i</sub> / \* \_\_<sub>i</sub>}.  
(61) a. It's monsters<sub>j</sub> that this film<sub>i</sub> has t<sub>j</sub> in {it<sub>i</sub> / \* \_\_<sub>i</sub>}.  
b. What<sub>j</sub> this film<sub>i</sub> has t<sub>j</sub> in {it<sub>i</sub> / \* \_\_<sub>i</sub>} is a huge monster.  
(62) a. John likes the monsters [OP<sub>j</sub> that the film<sub>i</sub> has t<sub>j</sub> in {it<sub>i</sub> / \* \_\_<sub>i</sub>}].  
b. Those monsters, which<sub>j</sub> the film<sub>i</sub> has t<sub>j</sub> in {it<sub>i</sub> / \* \_\_<sub>i</sub>}, are very scary.  
(63) This film<sub>i</sub> has t<sub>j</sub> in {it<sub>i</sub> / \* \_\_<sub>i</sub>} [some monsters that no one has ever heard of]<sub>j</sub>.

However, it is not true that the whole OLP structure or even the Figure is entirely “frozen”: the subject can be extracted (64a,b); in contrast to (63), the Figure can be subextracted (extraposed) from (64c); cf. (57). Moreover, *wh*-in-situ counterparts to (59) are fine (64d).

- (64) a. Which film<sub>i</sub> (do you think) t<sub>i</sub> has monsters in {it<sub>i</sub>/ \_\_<sub>i</sub>}?  
b. That film<sub>i</sub>, which<sub>i</sub> has monsters in {it<sub>i</sub>/ \_\_<sub>i</sub>}, is terrible.  
c. This box<sub>i</sub> has [some papers t<sub>j</sub>] in {it<sub>i</sub>/ \_\_<sub>i</sub>} [that need to be kept for at least five years]<sub>j</sub>.  
d. I forget which film<sub>i</sub> t<sub>i</sub> had which British actress in {it<sub>i</sub>/ \_\_<sub>i</sub>}.

Emphasizing the claims of §3, the Figure Extraction Restriction shown in (59)–(63) contrasts with what is found for other instances where understood complements of P are silent (65):

- (65) a. What<sub>j</sub> does this box have t<sub>j</sub> inside?  
b. How many benches<sub>j</sub> does the liquor store have t<sub>j</sub> opposite?  
c. What kind of cherry<sub>j</sub> does this sundae have t<sub>j</sub> on top?  
d. What kind of hat<sub>j</sub> does Mary have t<sub>j</sub> on?

---

<sup>19</sup> There is no hope of conducting these tests on nominal OLPs: an adjunct island effect is inevitable.

(i) \* [What (kinds of monsters)]<sub>j</sub> do you like films<sub>i</sub> with t<sub>j</sub> in (them<sub>i</sub>)?

In pondering the source of the Figure Extraction Restriction, it is worth noting that OLPs are fully acceptable in types of clauses that may not be as rich in functional structure, including ones that resist overt material (e.g., topicalized DPs) in the left periphery:

- (66) a. [That the box had papers in <it>] surprised the clerk.  
 b. [For the box to have papers in <it>] would be surprising.  
 c. ?The magician made [the hat suddenly have a rabbit in <it>].  
 d. That producer never lets [his movies have any nudity in <them>].  
 e. Despite [having lots of monsters in <it>], the film did not appeal to young boys.  
 f. What?! [A British coin not have the Queen's face on <it>]?! Preposterous!

#### 4.3.2. COULD THIS RESTRICTION FOLLOW FROM MOVEMENT OF THE GROUND?

Perhaps, but only if the Ground first underwent A-bar movement to a position below where it surfaces. A-bar movement of the Ground would create two crossing A-bar chains:

- (67) [which monsters]<sub>j</sub> ... [[this film]<sub>i</sub> [<sub>t<sub>j</sub></sub> in <sub>t<sub>i</sub></sub>]]?

Crossing, in contrast to nested, A-bar chains appear to yield ungrammaticality in a range of structures, e.g. infinitival *wh*-clauses (68) (Pesetsky 1982, esp. 267ff.)

- (68) a. \*[Which sonata]<sub>i</sub> is [this violin]<sub>j</sub> easy [OP<sub>i</sub> PRO to play <sub>t<sub>i</sub></sub> on <sub>t<sub>j</sub></sub>]?  
 b. [Which violin]<sub>j</sub> is [this sonata]<sub>i</sub> easy [OP<sub>i</sub> PRO to play <sub>t<sub>i</sub></sub> on <sub>t<sub>j</sub></sub>]?<sup>20</sup>

From (67), the surface order could be derived by further A-movement of *this film* (if Improper Movement is irrelevant) (69a), or it could be that what undergoes the short A-bar movement is a null operator bound by *this film* (69b).

- (69) a. \*[Which monsters]<sub>j</sub> does [this film]<sub>i</sub> have [<sub>t<sub>i</sub></sub> [<sub>t<sub>j</sub></sub> in <sub>t<sub>i</sub></sub>]]?  
 b. \*[Which monsters]<sub>j</sub> does [this film]<sub>i</sub> have [OP<sub>i</sub> [<sub>t<sub>j</sub></sub> in <sub>t<sub>i</sub></sub>]]?

The first little step of A-bar movement might be required if the small clause is a Phase, but it is hard to see what independent evidence one could seek for it in English.<sup>21</sup> There is, however, evidence that any A-bar movement of the Ground would have to be to a position below where it surfaces. What will not work is to A-bar move [*this film*] directly from complement of P to subject position—G&S argue against such A-bar movement, i.a. because parasitic gaps (*pg*) are not licensed in adjuncts to *have*'s VP.<sup>22</sup> Whereas A-bar movement licenses the parasitic gap in (70a), an OLP in the same configuration does not in (70b):<sup>23</sup>

<sup>20</sup> Contra Chomsky (1977), the goodness of this example is not due to the *on*-PP being in some surprisingly high position: *put X on Y* behaves exactly the same way.

<sup>21</sup> Germanic R-pronouns have been analyzed (e.g., by Abels 2012) as involving movement from the complement of P. R-pronouns are discussed in section 5.2.

<sup>22</sup> G&S make the parasitic gap argument based on examples like (i):

- (i) \*John filed the papers<sub>i</sub> with doodles on <sub>\_i</sub> [without having read *pg<sub>i</sub>*]. {19a}

However, (i) does not seem relevant, since an accepted case of A-bar movement, e.g. relative clause formation, across a similar span does not license a parasitic gap:

- (ii) \*John [filed [the papers<sub>i</sub> that the law specified <sub>\_i</sub>]] [without having read *pg<sub>i</sub>*].

<sup>23</sup> G&S note in addition that A-bar movement of the Ground to subject position would incorrectly predict (58a and b) to be bad, as Improper Movement and Weak Crossover violations, respectively. Another argument is that whereas A-bar movement reconstructs to create a Condition C violation (i), OLPs do not induce a corresponding violation (ii):

(continued)

- (70) a. Which cups<sub>i</sub> did they drink coffee from *t<sub>i</sub>* [without anyone washing *pg<sub>i</sub>* afterwards]?  
 b. \*These cups<sub>i</sub> have had coffee in \_\_\_<sub>i</sub> [without anyone washing *pg<sub>i</sub>* afterwards].

Likewise, if the Ground simply undergoes A-movement as diagrammed in (49b) above, the restrictions observed in §4.4.1 would not be expected, since crossing of an A-chain and an A-bar chain is not excluded (71):

- (71) Who(m)<sub>i</sub> does John<sub>j</sub> strike *t<sub>i</sub>* as (being) *t<sub>j</sub>* selfish?

Section 5.2 casts further doubt on the idea that the restriction could follow from movement of the Ground. Dialectal German has a similar-looking restriction on A-bar movement when the Ground is silent, but no such restriction holds when the Ground is overt and has moved.

#### 4.4. AWAITING EXPLANATION

Among the further empirical properties of OLPs observed by G&S, two do not seem to follow immediately from the A-movement account: the restriction of licensing to *have/with*, (which is stipulated as a unique property of P<sub>poss</sub>) and the (near?) ban on human/animate Grounds. Likewise, the restrictions we observed in §2.4 on the uses of *in/on* (and for some speakers the restriction to those two prepositions) also do not seem obviously derivable from A-movement.

### 5. In search of alternatives

To the extent that both A- and A-bar-movement directly relating the Ground to the OLP gap seem to derive incorrect predictions and fail to derive attested restrictions, alternatives should be explored.

#### 5.1. WHAT OTHER ANALYSES ARE AVAILABLE FOR THE OLP GAP IN PRINCIPLE?

One possibility is that the gap in OLPs might be an in situ silent element, call it *pro*; such has been posited in complement positions for recipe/instructional English (see Stowell & Massam 2017 for review). This *pro* would have to be obligatorily (and perhaps locally) bound (as noted by S&G (2017:5)), but perhaps that requirement can be enforced by whatever mechanism forces the corresponding overt pronoun to be so bound—the Link Requirement (Belvin & den Dikken 1997). An analysis along these lines might lead to a more parsimonious analysis that enforces coreference between the subject and object-of-P position uniformly, rather than one way when it is pronounced, and another way—viz. G&S’s A-movement—when it is not. In fact, Belvin & den Dikken (1997: 168, fn. 17) postulate a *pro* in the complement of the preposition in a sentence like (72a) as in (72b), following Déchaine et al. (1994) for (73a,b). However, such an analysis must contend with very different contrasts between overt and covert inanimate and animate pronouns. With inanimate pronouns (72) there is no meaning difference as a function of (c)overtness between (a) and (c), whereas with animate pronouns (73), there is a clear meaning difference: John is wearing a hat (a) vs. John has a hat somewhere on his person (c)—scrunched up in his pocket, perhaps.

- (72) a. The table has a stain on.  
 b. The table<sub>i</sub> has a stain on *pro<sub>i</sub>*.  
 c. The table<sub>i</sub> has a stain on it<sub>i</sub>.

- 
- (i) \*[Which picture of John<sub>i</sub>]<sub>j</sub> did he<sub>i</sub> sell *t<sub>j</sub>*?  
 (ii) Of course, [the picture of John<sub>i</sub>]<sub>j</sub> has him<sub>i</sub> in <it<sub>j</sub>>.



- (73) a. John has a hat on.  
 b. John<sub>i</sub> has a hat on *pro*<sub>i</sub>.  
 c. John<sub>i</sub> has a hat on him<sub>i</sub>.

A parallel contrast is found in German as a function of the presence/absence of *da(r)*, which is discussed in detail in the next subsection:

- (74) a. *ein Mann mit einem Hut auf*  
 a man with a hat on  
 ‘a man wearing a hat’  
 b. *ein Mann mit einem Hut drauf*<sup>24</sup>  
 a man with a hat DAR.on  
 ‘a man with a hat somewhere on his body’

Another possibility is that the gap might reflect absence of any syntactically projected position whatsoever (as might be argued for some of the cases in §3); we would then need the Link Requirement to be enforceable purely semantically.

The challenge for pursuing either possibility is that it seems hard to derive from them any predictions about constraints on OLPs from independent facts about (British) English. In such circumstances, we suggest looking to other languages for inspiration; and indeed, when it comes to gaps in complement-of-P positions, we do not have to look far afield to find cases where: (i) movement, base-generated empty categories, and radically missing structure have all been entertained; (ii) the gaps “alternate” with overt “pronominals”; and (iii) the versions with gaps diverge in subtle and mysterious ways from the versions with overt pronominals.

Taking a cross-linguistic perspective, the rest of this section provides comparative case studies. For the first, we examine R-pronouns, which are widespread in Germanic languages. Intriguingly, they can sometimes be silent, and when they are, they impose restrictions on movement that are reminiscent of the Figure Extraction Restriction on OLPs. The second, briefer case study on French orphan prepositions illustrates the cross-linguistic generality of some of the semantic restrictions on OLPs, with alternation with silence arising again.

## 5.2. GERMANIC R-PRONOUNS

In certain Germanic languages, illustrating with German, the weak neuter pronoun *es* (‘it’) cannot be the complement of spatial (or many other) Ps; instead, one finds (some variant of) *da(r)*, known as an R-pronoun, procliticized to (an allomorph of) the preposition (van Riemsdijk 1978, Gallmann 1997, Haider 2010, Koopman 2010, Abels 2012, Noonan 2017, i.a.). Words formed by combining *da(r)*+P are known in the German syntax literature as ‘Pronominaladverbien’:

- (75) *Fritz hat gestern {daran /\*an es} gedacht.*  
 Fritz has yesterday {DAR.on/\*on it} thought  
 ‘Fritz thought about it [lit. *thereon*] yesterday.’

<sup>24</sup> Some speakers do not accept *drauf* here, but still detect the same meaning contrast if the animate *Mann* is replaced with an inanimate like *Gartenzwerg* ‘garden gnome’.

With other 3<sup>rd</sup> person pronouns, Pronominaladverbien alternate with canonical P–pronoun orders if the referent is inanimate, but are excluded if the referent is human (or an animal viewed anthropomorphically) (G. Müller 2000, 2002):

- (76) *Maria mußte noch oft daran denken.* vs. ... *an sie denken.*  
 M had.to still often DAR.on think on 3SG.F think  
 ‘Maria still had to often think about it/\*her.’ ‘...think about it/her.’

Recall the possible exclusion of human/animate Grounds in OLPs from §2.2. G&S note this commonality between OLPs and R-pronouns and comment as follows: “Despite this similarity, the analysis we sketched above does not provide a direct means of relating Dutch R-words and English POGs, though it is not clear that our analysis should be revised to accommodate this similarity” (2015a:71).

We instead take this common restriction as a point in favor of pursuing potential connections.<sup>25</sup> In the rest of this subsection we explore the behavior of R-pronouns in German dialects and Old English, seeking parallels that may inform the analysis of OLPs.

Intriguingly, there are dialects, especially in northern Germany, where the otherwise obligatory *da(r)* morpheme can disappear. Fleischer (2002) refers to this phenomenon as “Präposition ohne overte Ergänzung,” ‘preposition without overt complement’.<sup>26</sup> He notes the optionality of *da(r)* in (77); the two examples are drawn from the same page of a dialectal German source.

(77) North Saxon (Feyer 1939:27)

- a. *Ja, aver Hinnerk, man dröögt sik doch de Han’n nich drin af!*  
 ja aber Hinnerk man trocknet sich doch die Hände nicht DAR.in ab [StdGer]  
 yes but H one dries self yet the hands not therein off  
 ‘Well, Hinnerk, but one does not dry off one’s hands in it!’
- b. *Dat hangt ane Wand un lett witt, un man dröögt sik de Han’n in af.*  
 das hängt an=der Wand und sieht.aus weiß und man trocknet sich die Hände in ab  
 that hangs on=the wall and looks white and one dries self the hands in off  
 ‘It hangs on the wall and looks white, and one dries off one’s hands in it.’

<sup>25</sup> McIntyre (2006:202 & fn. 12) independently hints at the potential connection between OLPs and R-pronouns.

<sup>26</sup> A passage cited from the first edition of the *Duden* (Grebe 1959) by Fleischer (2002:293) suggests the phenomenon was at one time quite common: “In der Umgangssprache kann das Demonstrativadverb ‘da’ auch ganz fehlen. Die Präposition übernimmt dann allein die pronominale Aufgabe.” [In colloquial speech the demonstrative adverb *da* can also be completely absent. The preposition then takes over the pronominal function by itself.] The accompanying example is *Ich habe nichts von gehört* [lit. ‘I have nothing about heard’].

In some dialects there is a particular preposition (‘for’ in (78), ‘with’ in (79)) with which *da(r)* is mostly or entirely dropped, though *da(r)* is required with other prepositions.<sup>27</sup> This could presumably be a morpholexical idiosyncrasy.

(78) North Hessian (H. Müller 1958: 19)

*se hädden Hieser foor bauen sollen, daß die Menschen alle unnerkamen*  
 sie hätten Häuser für bauen sollen, daß die Menschen alle unnerkamen [StdGer]  
 they had.SBJV houses for to.build should that the people all find.accommodation.SBJV  
 ‘they should have built houses for this reason: that the people could all have found  
 accommodation’

(79) Middle Pomeranian (Bretschneider et al. 1968–2001, vol. 3: 295)

*se müssten sich äbend met affin’n*  
 sie müssen sich eben mit abfinden [StdGer]  
 they had.to self just with compensate  
 ‘They simply had to compensate themselves with it.’

But the most common dialectal situation, according to Fleischer, is that a number of prepositions allow omission of *da(r)*, sometimes restricted to consonant-initial prepositions. When *da(r)* does surface in these dialects it is often displaced leftward from the preposition, a construction he refers to as the “Spaltungskonstruktion,” ‘split construction’. Not allowed in the standard language, *da(r)* frequently appears sentence-initially (80) but occasionally in the Mittelfeld (81).<sup>28</sup>

<sup>27</sup> Fleischer (2000) argues that some of the dialects where only *mit* allows *da(r)* omission show none of the other properties of dialects where *da(r)* is more generally omissible (e.g., frontability of *da(r)*) and are also geographically disjoint from them (e.g., Swabian, Alemannic, cf. (i)–(iv)). He concludes on this basis that these omissions call for a different analysis. (He even cites some dialect descriptions that suggest the form *damit* has virtually ceased to be used.) The English data in §3.4 (viz. comitative *with*) would seem to support the idea that *with* licenses complement omission in an idiosyncratic way. So do data from Zurich Swiss German, as noted by van Riemsdijk (1975:196–7), where *mit* (and its negative *ooni* ‘without’) licenses omission of inanimate complements where no other prepositions do. (ii) is a simple example from the *Idiotikon*. (iii) is an example van Riemsdijk considers idiomatic, with the understood complement being context-dependent. In (ii) but not (iii), Standard German would use *damit*. (iv) is an example of complementless ‘without’ from formal Swiss German writing.

(i) Colmarien (Alsatian) (Muller 1983:260)

*ī nimm d’ rüet un schlâ- di mit.*  
 ich nehme die Rute und schlage dich mit [StdGer]  
 I take the rod and hit you with  
 ‘I take the rod and hit you with it.’

(ii) *I<sup>ch</sup> bi<sup>n</sup> mit z’fride<sup>n</sup>.*

I am with satisfied (Bachmann et al. 1901:560)  
 ‘I am satisfied with it.’

(iii) *iz daz {mit/ooni} (zervis)?*

is that with/without service  
 ‘Is the tip included/excluded?’

(iv) Swiss High German (*Neue Zürcher Zeitung* 246:115 (2000))

*Auf den Kolchosen lagerten die Inlandpässe im Schrank des Direktors; ohne konnte man nicht abhauen.*  
 on the kolkhozy were.stored the inland.passports in.the cabinet of.the director; without could one not escape  
 ‘In the kolkhozy the inland passports were stored in the director’s cabinet; without them one could not escape.’

<sup>28</sup> The option of leftward displacement of *da(r)* apparently dates back at least to Old High German (Russ 1982).

(80) North Saxon (Lindow et al. 1998:274)  
*(Dar) kaamt se veel billiger **bi** weg.*  
 da kommen sie viel billiger bei weg [StdGer]  
 DAR come.3PL they much cheaper by away  
 ‘They come away much cheaper thereby.’

(81) East Pomeranian (Stübs 1938:140)  
*Se sünd doa sehr besorgt **üm**.*  
 sie sind da sehr besorgt um [StdGer]  
 they are DAR very worried about  
 ‘They are very worried about it.’

Indeed, Fleischer finds it not to be a coincidence that, in terms of geographical distribution, the possibility of separating *da(r)* from the preposition and the possibility of omitting *da(r)* altogether are attested in virtually identical dialect regions. He identifies the dialects where *da(r)* drop is attested as North Low Saxon, Mecklenburgish-Vorpommers, East Pomeranian, Middle Pomeranian, High and Low Prussian, Brandenburgish, Berlinish, Eastphalian, Westphalian, West Munsterish, Ripuarian, North Hessian, and Thuringian.

As an initial causal link between *da(r)* drop and *da(r)* displacement, Fleischer (2002:408) points out that if, as in (80), *da(r)* can be fronted to first position, then Topic Drop could explain its disappearance from that position (in a V2 clause). But there remain many examples, e.g., (82), (83), and (77b) above, that exclude this analysis because first position is filled. Such examples have been independently attested in corpus analyses by several authors: Breindl (1989), Negele (2012), Jürgens (2013), Otte-Ford (2016), Freywald (2017). Oppenrieder (1991) also draws attention to cases where Topic Drop is unavailable, presenting i.a. the examples in (84). On Fleischer’s analysis, the common property that makes *da(r)* both displaceable and deletable in the relevant dialects is its ability to appear (base-generated, in his view) in Spec-PP, but no one to our knowledge has anything to say about the nature of or conditions on the deletions that do not fall under Topic Drop.

(82) Hamburgish (Saltveit 1983: 323)  
*Also büst du wedder nich **bi** wesen.*  
 also bist du wieder nicht bei gewesen [StdGer]  
 so are you again not at been  
 ‘So you weren’t there again.’

(83) Brandenburgish (Lademann 1956: 338)  
 a. *Der hät den janßen Noamiddach **bei** tuejeracht.*  
 der hat den ganzen Nachmittag bei zugebracht [StdGer]  
 he has the whole afternoon at spent  
 ‘He spent the whole afternoon at it.’

b. *Der hät lange **föä** jespäält.*  
 der hat lange für gespielt [StdGer]  
 he has long for played  
 ‘He [an organ grinder] played [music] for a long time for it [a penny].’

- (84) a. *der Otto Flasnöcker kann ein Lied von singen*  
 the O. F. can a song from sing.INF  
 ‘Otto Flasnöcker can sing a song from it.’
- b. ...*dann sind sie abends oft so müde, daß sie sich überhaupt nicht mehr*  
 then are they evenings often so tired that they self at.all not more  
*zu auftraffen, dann sich auch noch mal um ihre Kinder zu kümmern*  
 to bring then self also still about their children to care (Breindl 1989:146)  
 ‘...then they are often so tired in the evenings that they no longer can bring themselves  
 to do it at all: to take care of their children once again.’

Fleischer demonstrates that the majority of prepositions that combine with *da(r)* allow *da(r)* drop<sup>29</sup>; thus, unlike OLPs (cf. §2.4), *da(r)* drop does not seem to be highly lexically restricted.

In later work Fleischer (2008) has sought to trace the history of *da(r)* drop. Putting aside examples with *mit*, he finds early attestations from the man who would become Frederick I of Prussia in 1670 (85a) and Goethe (in a letter to Sophe v. La Roche) in 1775 (85b), i.a.:

- (85) a. *Ich habe nicht die Zeit zu gehabt.* (Lasch 1928:306)  
 I have not the time to had  
 ‘I didn’t have the time for it.’
- b. *Ich weiß kein Wort von* (Paul 1919:159)  
 I know no word of  
 ‘I don’t know a word about it’

Other authors have documented *da(r)* drop in popular prose, e.g., Spiekermann (2010) cites the following examples from a newspaper interview (Mingels 2006) with musician James Last from Bremen (near Hamburg):

- (86) a. *Gibt’s keine Regeln für.*  
 gives=it no rules for  
 ‘There are no rules for that.’
- b. *Hab ich nichts gegen.*  
 have I nothing against  
 ‘I have nothing against that.’

We have so far been able to work with one speaker who allows *da(r)* drop (Anke Himmelreich, to whom we are most grateful for the following data—standard disclaimers apply). She allows leftward displacement of *da(r)* to the Mittelfeld as well as to first position in V2 clauses, which makes it possible to ask whether there is any evidence in German that would bear on the explanation for the Figure Extraction Restriction in OLPs in English, e.g., one involving

<sup>29</sup> The prepositions with which *da(r)* drop is attested, setting aside *mit*, are *ab, an, auf, aus, bei, für, gegen, hinter, in, mang* [‘between/among’], *nach, um, über, von, vor, wider, zu, zwischen*. The remainder (*achter/after* [≈*hinter*], *durch, längs* [≈*entlang, vorbei*], *neben, ob* [≈*wegen*], *ohne* [*darohne* is dialectally attested], *unter*) may well represent accidental gaps in attestation. Combining with *da(r)* in the first place is restricted roughly to “type A prepositions” in the sense of Zwarts (1997) for Dutch, which tend to be monomorphemic and not derived from other categories; in contrast, “type B prepositions” include, e.g., *außer, gemäß* and *dank*.

short movement of the (silent) complement of P to a position above the base position of the Figure, as in (69). The answer seems to be negative: in German, leftward movement of *da* does not block *wh*-movement (87a) or topicalization (87b,c) of another internal argument:

- (87) a. *Was<sub>i</sub> hast du dir da denn t<sub>i</sub> bei gedacht?*  
 what have you yourself DAR then by thought  
 ‘Now what did you mean by that?’
- b. *Die Zeit<sub>i</sub> hab ich da gar nicht t<sub>i</sub> zu gehabt.*  
 the time have I DAR at.all not to had  
 ‘I didn’t have the time for it at all.’
- c. *Nichts<sub>i</sub> hat er da t<sub>i</sub> mehr von gewußt.*  
 nothing has he DAR more of known  
 ‘He knew nothing more about it.’

However, when *da(r)* is dropped, a pattern parallel to the OLP Figure Extraction Restriction emerges: topicalization of the object becomes severely degraded (cf. (60)), as the following three paradigms demonstrate. (In (88) and (90) the questions provide context that facilitates *da(r)* drop in the answers.) In each paradigm, the (a) example establishes that *da(r)* drop is possible with canonical (subject-initial) word order—mildly degraded for this speaker. The (b) example shows topicalization of the object to initial position in the presence of a *da* that has been leftward displaced to the Mittelfeld, which is unproblematic. The (c) example shows the same object topicalization but now with *da(r)* dropped; the result is severely degraded. The (d) example confirms that the A-bar extraction restriction is limited to objects, since fronting an adjunct to first position is compatible with *da(r)* drop.

- (88) Q: *Was hast du dir dabei gedacht, als du mit ihm geredet hast?*  
 what have you yourself DAR.by thought when you with him spoken have  
 ‘What did you mean by that, when you spoke with him?’
- a. A: *?Ich hab mir GAR nichts bei gedacht.*  
 I have myself at.all nothing by thought
- b. A: *[GAR nichts]<sub>i</sub> hab ich mir da in der Situation t<sub>i</sub> bei gedacht.*  
 at.all nothing have I myself DAR in that situation by thought
- c. A: *?\*[GAR nichts]<sub>i</sub> hab ich mir t<sub>i</sub> bei gedacht.*  
 at.all nothing have I myself by thought
- d. A: *Gestern<sub>i</sub> hab ich mir t<sub>i</sub> GAR nichts bei gedacht.*  
 yesterday have I myself at.all nothing by thought  
 ‘(Yesterday) I didn’t mean anything at all by that (in that situation).’
- (89) a. *?Ich hab die ZEIT gar nicht zu gehabt.*  
 I have the time at.all not to had
- b. *[Die ZEIT]<sub>i</sub> hab ich da t<sub>i</sub> gar nicht zu gehabt.*  
 the time have I DAR at.all not to had
- c. *?\*[Die ZEIT]<sub>i</sub> hab ich t<sub>i</sub> gar nicht zu gehabt.*  
 the time have I at.all not to had
- d. *Heute<sub>i</sub> hab ich die ZEIT t<sub>i</sub> nicht zu gehabt.*

today have I the time not to had  
 ‘(Today) I didn’t have the time for it at all.’

(90) Q: *Was hat er noch **davon** gewußt?*  
 what has he more DAR.of known  
 ‘What more did he know about it?’

- a. A: *?Er hat GAR nichts mehr **von** gewußt, als ich ihn gefragt hab.*  
 he has at.all nothing more of known when I him asked have
- b. A: *[GAR nichts]<sub>i</sub> hat er **da** t<sub>i</sub> mehr **von** gewußt, als ich ihn gefragt hab.*  
 at.all nothing has he DAR more of known when I him asked have
- c. A: *?\*[GAR nichts]<sub>i</sub> hat er t<sub>i</sub> mehr **von** gewußt, als ich ihn gefragt hab.*  
 at.all nothing has he more of known when I him asked have
- d. A: *[Als ich ihn gefragt hab]<sub>i</sub> hat er GAR nichts mehr **von** gewußt t<sub>i</sub>.*  
 when I him asked have has he at.all nothing more of known  
 ‘He didn’t know anything more about it when I asked him.’

Could we seek relevant evidence from any other Germanic languages? Allen (1980:295–6) shows that Old English had some properties in common with dialectal German: the locative word for ‘there’ could also serve as an inanimate 3<sup>rd</sup> person pronominal proclitic complement to adpositions (91), and in both functions it could strand those adpositions by moving leftward (92):

(91) *...ðæt hi wære beon ðæs cwydes ðe ðæræfter gecweden is.*  
 that they attentive be the.GEN sentence.GEN that thereafter said is  
 ‘...that they be attentive to the sentence which is said after that.’

(92) *Be ðæm ðu meahst ongietan ðæt ðu ðær nane myrhðe on næfdest.*  
 by that you may understand that you there no joy in not.had  
 ‘By that, you may know that you had no joy in that.’

However, unlike German dialects, to our knowledge ‘there’ could not be dropped in Old English. Indeed, Fleischer (2002) is hard-pressed to find any Germanic languages besides German that display (the counterpart of) *da(r)* drop. The only candidates he puts forward are Jutlandic Danish (93) and North Frisian (94).

(93) *sådan en stor stykke noget stiv gullig papir med en klat rød lak på* (Jensen 1971:33)  
 such a big piece of.some stiff golden paper with a blood red blob on

(94) *Ik hee en Dääler **far** deen, wen’t ði wān weer* (Grünberg n.d.)  
 I have.SBJV a dollar for given if=it not been was  
 ‘I would have given a dollar for it, if it had not been (true).’

### 5.3. FRENCH “ORPHAN PREPOSITIONS”

Three facts about a superficially similar phenomenon in French are of interest (Zribi-Hertz 1984, Jones 1996, Rooryck 1996, Authier 2016, i.a.). French has two candidates for counterparts to (pieces of?) R-pronouns: *de* and *là* (95) (see Noonan (2009) for a detailed attempt to unify French and German).

(95) *Je l’ai mis {sur l’armoire / dessus/ là-dessus}.*  
 I it=have put on the=cabinet / DE-on / there=DE-on  
 ‘I have put it {on the cabinet/on it/on there}.’

First, these “pronouns” are excluded if the referent is human, as in Germanic (96).

- (96) *Il y a une mouche {sur Pierre/ sur lui /\* (là-)dessus}*.  
it there has a fly {on P / on him /\* (there=)DE-on}  
'There is a fly on Pierre/him.'

Second, these morphemes do not always surface, suggesting they can be silent (97).

- (97) a. *Le livre est {là-(\*)de)derrière / là-dessus /\*là-sur}*.  
the book is {there=(\*)DE-)behind / there=DE-on /\*there=on}
- b. *Ils y peindront (\*là-)dessus.* [dialectally restricted]  
they there will.paint (\*there=)DE-on

Third, not all spatial relations expressible as e.g. *dans* + *DP* are compatible with *dedans* paraphrases (cf. restrictions on OLPs in §2.4.2, (32c) in particular): (98) versus (99a) seems to hinge on containment and/or the difference between material and spatial Grounds (Vandeloise 2017). R-pronouns are similarly restricted in German (100).

- (98) *Cette eau, il y a du chlore dedans.*  
this water it there has of.the chlorine DE-in  
'This water, there is chlorine in (it).'

- (99) a. *\*Le ciel, des oiseaux volaient dedans.*  
the sky D birds were.flying DE-in  
('The sky, birds were flying in (it).')

- b. *Des oiseaux volaient dans le ciel.*  
D birds were.flying in the sky  
'The birds were flying in the sky.'

- (100) *Ein Flugzeug war am Himmel, und ein Vogel war auch {am Himmel/\*dran}*.  
an airplane was at.the sky and a bird was also {at.the sky /\*DAR.at}

## 6. Concluding remarks

In addition to providing arguments against an A-movement analysis, we hope to have sharpened the empirical landscape that an analysis of OLPs should account for: restrictions on the distribution and interpretation of OLPs; dialectal variation within BrEng as to which prepositions and senses thereof license OLPs; and the Figure Extraction Restriction.

The cross-linguistic observations in §5 suggest a program of inquiry for understanding OLPs. Some R-pronouns survive in present-day English, for North American as well as British speakers. Though they often sound archaic and/or legalistic, in (101) we provide some attempts at natural-sounding examples.

- (101)a. See the attached document and comments **therein**.  
b. The initials are engraved **thereon**.  
c. Rochester Bridge and the view **therefrom** beats being in Strood.  
d. He **thereby** established his innocence.  
e. A reception will be held **thereafter**.  
f. An act of stealing or attempt **thereat** is punishable by fine or jail.  
g. Parking costs \$20 per hour or part **thereof**.



- h. And the listing of water sources (and directions **thereto**) was much better in Jim Wolf's books. [www.backcountry.net]
- i. The true intent of this Code or the rules legally adopted **thereunder** have been incorrectly interpreted.
- j. Consider the following in connection **therewith**.

Taken together with *da(r)* drop and its attendant extraction restriction seen in §5.2, the existence of R-pronouns in English suggests a potential analysis of OLPs as involving a silent counterpart to *there*, along the lines of (102).

(102) This box has the papers ~~therein~~.

If this is the route by which OLPs entered British English, it might explain the possible restriction to 3<sup>rd</sup> person inanimates and the Figure Extraction Restriction.

There are immediate challenges, however. It remains to be explained why OLPs entered only British English and why not all R-pronouns allow *there* to be silenced: some of the prepositions in (101) do not license OLPs in any British dialect we are aware of. There seems to be nothing resembling the *have/with* licensing requirement in Germanic or French restricting R-pronouns or their omission,<sup>30</sup> and in Germanic also no restriction to spatial prepositions.<sup>31</sup>

As for how to characterize the parametric differences (i) between BrEng and Eng lacking OLPs, and (ii) among BrEng varieties with regard to the range of participating prepositions, we take the range of German dialects mentioned in §5.2 as suggestive that there are (micro)parametric choices in this domain. In bringing OLPs to the attention of comparative Germanic linguists, we hope to inspire further progress in this area. Despite the differences, the similarities between OLPs and *da(r)* drop seem too tantalizing to ignore.

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<sup>30</sup> That said, intriguingly, there was one German dialect (spoken in Cattenstedt, Nordharz, Eastphalian) that was described by Damköhler (1927: 37) as dropping *da(r)* just in the presence of the verbs *have*, *give* and *get* (and only before the preposition *von*):

- (i) a. *Jif mek wat fon.*  
gib mir was von [StdGer]  
give me some of  
'Give me some of it.'
- b. *Ek wil wat fon hebn.*  
ich will was von haben [StdGer]  
I want.to some of have  
'I want to have some of it.'
- c. *Dû drist nischt fon.*  
du kriegst nichts von [StdGer]  
you get nothing of  
'You get none of it.'

<sup>31</sup> In French, *là* is locational but *de-* forms are unrestricted.

## Appendix: Svenonius's (2010) Taxonomy of P elements

Projective P (head of PlaceP)	Bounded P	Extended P	Path	Particle
above behind below beyond in back of in front of inside on top of outside	against among beside between in near <sup>a</sup> next to on upon	across along around over past through under	from to Ø <sub>to</sub> <sup>b</sup>	away down in off on out up

<sup>a</sup> *Near* can be an adjective (allowing modification by *very*), in which case it allows a null complement, but with the prepositional intensifier *right* (for most speakers) it does not (Svenonius 2010): *I was very near (it)* versus *I was right near \*(it)*.

<sup>b</sup> A null version of *to*, typically licensed by motion verbs, sometimes alternating (perhaps marginally) with overt *to*, e.g., *The boat drifted (?to) beyond the city limits*.

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