Multi-preposition constructions in English

Evelien Keizer, Universiteit van Amsterdam, The Netherlands

Abstract

This paper examines the semantic and syntactic properties of English constructions containing a verb followed by two (or three) prepositions (including expressions like to walk out on, to talk someone out of, to go up to). First it is argued that, just like simple verb-preposition constructions (e.g. to come across, to switch off or to refer to), multipreposition construction (MP-construction) come in various types. By applying a large number of semantic and syntactic criteria to authentic examples, it is shown that a distinction needs to be made between two major construction types – the compositepredicate construction and the appositional construction - whereby the latter construction type can be further divided into a resultative construction and a Verb + PPconstruction. Subsequently, FDG representations are offered for each of these construction types, reflecting the differences between these types at the Representational Level. Finally, some important implications for the theory of FDG are considered concerning the categorization of lexical elements, in particular the viability of (a) the distinction between particles, locative adverbs and prepositions (where they all take the same form), (b) the distinction between grammatical and lexical prepositions, and (c) the distinction between prepositions and conjunctions (where they take the same form).

1. Introduction

Although a great deal of attention has been paid, in various theoretical frameworks, to verb-preposition constructions, very little research has been done on constructions with multiple prepositions. This paper intends to look at these constructions in some detail. Like simple verb-preposition constructions, multi-preposition constructions (henceforth MP-constructions) come in various kinds, illustrated in (1)-(4):

Construction I (cf. Collins Cobuild English Grammar, 1990:169-170): His girlfriend walked out on him. Intransitive: (1) b. I couldn't put up with his paranoia. Transitive: (2) We tried to talk her out of it. a. I'm sure they put him up to it. Construction II: Intransitive: (3) John went up to the roof. a. h He walked out into the garden. Transitive: **(4)** We put the junk down on the floor. a. Sue *left* the chairs *out in* the garden. b.

In examples (1) and (2), referred to for the time being as Construction I, we find what have traditionally been called phrasal verb constructions: fixed combinations of a verb and two prepositional elements (often called particles or adverbs). The verbal complex may take its own direct object (examples (2a&b)), but need not do so (examples

(1a&b)). In examples (3) and (4) (Construction II), the verb and the two prepositional elements are not generally regarded as forming one semantic or syntactic unit. The exact relation between the verb and the two prepositions, and the internal structure of the prepositional unit is, however, far from clear.

Part of this paper will be based on some recent work on prepositions and verb-preposition constructions in FGD (Keizer 2008, in press). It will be demonstrated that although there are important parallels between simple verb-preposition constructions and MP-constructions, these parallels are not perfect, and that MP-constructions definitely merit their own treatment and analysis. In addition, I will discuss some broader implications for the theory of FDG.

Before starting the discussion, I would like to comment briefly on the data and method used. Throughout the paper, use will be made of authentic data from a variety of sources: the ICE-GB-Corpus, the British National Corpus (BNC), the Corpus of Contemporary American English (COCA) and the Internet (Google search). These data will be used, first, to establish the semantic properties of the various MP-constructions (see A. below). Secondly, the data are used to find out to what extent any semantic differences between these constructions are reflected in their syntactic behaviour (see B. below), in accordance with the basic principle of FDG that only those semantic distinctions that are formally expressed in a language are relevant for the grammar of a language:

[FDG] is form-oriented in providing, for each of the languages analysed, an account of only those interpersonal and representational phenomena which are reflected in morphosyntactic or phonological form. (Hengeveld and Mackenzie 2008:39; see also Hengeveld and Mackenzie 2008:15).

Previous research into MP-constructions, supplemented by an analysis of the data, suggests that at least the following semantic and syntactic criteria are relevant to an understanding of the internal structure of MP-constructions. In what follows these criteria will therefore be applied to the constructions in (1)-(4):

A. Semantic criteria:

- (i) To what extent does the verb retain its original meaning?
- (ii) Does the verb have its usual valency?
- (iii) Is there a resultative relation between the prepositional unit and any of the arguments?
- (iv) Does the verb 'select' a particular preposition?

B. Syntactic criteria:

- (i) Does the construction allow 'extraction' (clefting, questioning and fronting) of the prepositional unit?
- (ii) Does the construction allow for coordination of the prepositional unit?
- (iii) Does the prepositional unit occur independently in other syntactic environments?
- (iv) Can either of the prepositional elements be omitted (without affecting the internal structure of the construction)?
- (v) Does the construction allow sequences of more than two prepositions?
- (vi) Does the construction allow for alternative word orders (reversibility)?

2. Earlier treatments

As mentioned before, MP-constructions have not been studied in much detail. Hengeveld and Mackenzie (2008:232-233) analyse sentences like (5a) as involving a directional argument (to the station) and a locative expression (down) modifying the verb; the string went down is, in other words, regarded as forming a semantic unit:

- (5) a. He went down to the station.
 - b. $(f_i: go_V(f_i): [(l_i: (f_j: down (f_j)) (l_i)) (f_i)_{\Phi}])$ Hengeveld and Mackenzie (2008:232)

Hengeveld and Mackenzie give the following reasons for adopting this analysis:

The close relationship of these modifiers with the verbs they modify shows up not only in the fact that they are restricted in use to movement verbs, but also in that many languages encode directional meanings lexically. (Hengeveld and Mackenzie 2008:232)

To illustrate the second point, Hengeveld and Mackenzie mention Spanish baj- \acute{o} 'he went down' and German her-kommen 'to come here'. One may doubt, however, the validity of this argument: the fact that a particular language uses a single lexeme to denote a certain concept does not mean that the combination of words used to denote that same concept in another language must also form a semantic unit. The first reason given for analysing $went\ down$ as one unit is also problematic: as shown by the examples in (6), modifiers like down, up and away are not restricted in use to movement verbs:

- (6) a. The next time I went down, I stayed down (BNC)
 - b. Safety experts recommend that children never sled head-first or while *lying down* on their stomachs. (COCA)
 - c. we didn't used to see much of it when we *lived up* in Manchester (BNC)
 - d. "I told you I'd be back, but perhaps I *stayed away* too long..." (BNC)

Moreover, as will be demonstrated in detail later on, there is compelling formal evidence that in (5a) it is *down to the station* which forms one unit, rather than the combination *went down*.

Within the generative framework, Den Dikken (1995:144) proposes an analysis of sentences like (7a) as involving two Small Clauses. In SC₂, the PP *on the shelf* is predicative, θ -marking *a book*. In SC₁, *down* is the SC-predicate, predicating over SC₂. This higher SC is the complement of the verb *put*:

- (7) a. John put (down) the book (down) on the shelf
 - a'. $[VP \text{ put } [SC1 \theta' [XP \text{ down } [SC2 \text{ the book } [PP \text{ on the shelf}]]]]]^4$

I agree with Den Dikken that the string *the book down on the shelf* forms one constituent. I do not, however, agree with the internal structure Den Dikken assigns to this phrase, as I find it semantically implausible (it would mean that 'the book being on the shelf' is 'down'). In what follows I will defend the view that *on the shelf* functions as a further specification (appositional modification) of *down*.⁵

3. Keizer (in press)

In the treatment of verb-preposition constructions presented in Keizer (in press), three different analyses are proposed to account for the distinctive semantic and syntactic properties of each group. Since the treatment of MP-constructions will be based on these analyses, I will start by giving a short overview of the data and proposed representations. The following three types of construction were distinguished:

- The composite predicate construction: [V + P]
- The resultative construction: V + [P + NP]
- The V + PP-construction: V + PP

Examples (8) to (10) give some of the relevant syntactic features of the constructions involved. Even a quick glance shows that, despite the superficial similarities between the three groups (illustrated in examples (8a), (9a) and (10a)), they differ considerably in syntactic behaviour:

- (8) a. Pete came across the letters.
 - b. *Pete came the letters across.
 - c. *The letters are across.
 - d. Pete came across them.
 - e. *Pete came them across
 - f. *It was across the letters that Pete came.
 - g. *Pete came across the letters and across some old photographs.
- (9) a. Pete switched off the lights.
 - b. Pete switched the lights off.
 - c. The lights are off.
 - d. *Pete switched off them.
 - e. Pete switched them off.
 - f. *It was off the lights that Pete switched.
 - g. *Pete switched off the lights and off the heating.⁶
- (10) a. Pete depends on his parents.
 - b. *Pete depends his parents on.
 - c. *His parents are on.
 - d. Pete depends on them.
 - e. *Pete depends them on
 - f. It is on his parents that Peter depends.
 - g. Pete depends on his parents and on his friends.

Thus, reversing the order between preposition and NP (b-sentences) and reformulating the result of the action in the form of a copular sentence (c-sentences) is possible in (9), but not in (8) and (10). The NP can be replaced by a proform when it follows the preposition (d-sentences) in (8) and (10), but not in (9); when the preposition follows the NP (e-sentences), using a proform is possible in (9), but not in (8) and (10). Finally, clefting (f-sentences) and coordination (g-sentences) of the 'P + NP'-string yields a grammatical construction in (10) but not in (8) and (9).

Analysis I: Composite predicate construction: [V + P]

Keizer (in press) analyses the expressions in (8) as composite predicate constructions, i.e. as constructions with a composite predicate consisting of a verb and a preposition. These constructions can be either intransitive or transitive. Other examples of such

combinations are the two-place composite predicates *stumble across*, *take after*, *stand by*, *make for*, *grow on*, *come by* (for the intransitive construction in (11)) and the three-place predicates *draw into*, *hold against*, *let into* (a secret), *talk into*, *get through* (the test), *keep off* (the premises) (for the transitive construction in (12)).

```
Intransitive:
(11)
                      Pete came across some letters.
                      (Past e_i: (f_i: [(f_i): [\bullet_V \bullet_P] (f_i)) (x_i)_A (x_i)_{Ref} (f_i)) (e_i))
                      \phi_{V} = \text{`come'}
           where
                      \blacklozenge_P = `across'
                      f<sub>i</sub> = 'come across' (composite predicate)
                      x_i = 'Pete' (first argument of 'come across' (Actor))
                      x_i = 'some letters' (second argument of 'come across' (Reference)<sup>7</sup>)
Transitive:
(12)
                      Sam showed us around the theatre.
                      (Past e_i: (f_i: [(f_i: [ \blacklozenge_V \blacklozenge_P ] (f_i)) (x_i)_A (x_i)_U (x_k)_{Ref} ] (f_i)) (e_i))
                     \phi_{V} = \text{`show'}
           where
                      f<sub>i</sub> = 'show around' (composite predicate)
                      x_i = 'Sam' (first argument of 'show around' (Actor))
                      x_i = \text{`us'} (second argument of 'show around' (Undergoer))
                      x_k = 'the theatre' (third argument of 'show around' (Reference))
```

In these constructions, the verb and the preposition behave semantically as one unit: together they denote the relation that is asserted to hold between the arguments. Syntactically, the tests of clefting and coordination (examples (8f&g)) clearly indicate that the preposition and the noun phrase do not act as one syntactic unit. The fact that adverbs can occasionally appear between the composite parts (and in the transitive construction also the direct object NP) suggests that the verb and the preposition do not form a single lexeme.

Analysis II: The resultative construction: V + [P + NP]

The examples in (9) are given a different analysis, in which the preposition functions as a non-verbal predicate in a resultative construction. These constructions, too, have an intransitive and a transitive form. Other prototypical examples of resultative verb-preposition constructions include back down/off, barge in, boil over, break out, catch on, die out, doze off, go back, melt away, lie down, stop by, stick around (for the intransitive construction in (13)) and bring down, call off, drag out, give back, have on, let in, leave behind, shut out (for the transitive construction in (14)).

```
Intransitive:
```

```
(13) \quad \text{a.} \quad \text{Sue came in.} \quad \text{(result: `Sue is in')} \\ \text{b.} \quad (e_i: (f_i: [(f_j) (x_i)_A (f_k: [(l_i) (x_i)_\varnothing] (f_k))_{Res}] (f_i)) (e_i)) \\ \text{where} \quad f_j = \text{`come'} \\ l_i = \text{`in'} \\ f_k = \text{`Sue (being) in' (second argument of `come' (Result))} \\ x_i = \text{`Sue' (first argument of `come' (Actor))}
```

```
 \begin{array}{lll} & \text{Transitive:} \\ \text{(14)} & \text{a.} & \text{Pete switched off the lights.} & \text{(result: 'the lights are off')} \\ & \text{b.} & \text{(e}_i\text{: } (f_i\text{: } [(f_j) \ (x_i)_A \ (x_j)_U \ (f_k\text{: } [(f_l) \ (x_j)_\varnothing] \ (f_k))_{Res}] \ (f_i\text{))} \ (e_i\text{))} \\ & \text{where} & f_j = \text{'switch'} \\ & f_l = \text{'off'} \\ & f_k = \text{'the lights (being) off' (third argument of 'switch' (Result))} \\ & x_i = \text{'Pete' (first argument of 'switch' (Actor))} \\ & x_j = \text{'the lights' (second argument of 'switch' (Undergoer))} \\ \end{array}
```

Semantically, these constructions differ considerably from composite predicate constructions. Firstly, the sentences in (13a) and (14a) inevitably result in a state ('Sue is in' in (13); 'The lights are off' in (14)). Another semantic difference concerns the fact that the actions denoted by the verb can quite easily be conceptualized independently from the meaning of the preposition; verb and preposition do not form one meaning unit.

Neither is it plausible to regard the preposition and the direct object NP as forming one prepositional phrase; witness example (9b), where the preposition follows the NP, and (9f&g), which show that the combination of P and NP cannot be clefted and coordinated. Instead, the P and the NP are analysed as a non-verbal Configurational Property (*Sue in the garden, the lights off*), 8 expressing the result of the action denoted (i.e. 'switching').

Analysis III: The V + PP-construction

The sentences in (10), finally, are analysed as straightforward V + PP-constructions. Once again, a distinction can be made between intransitive and transitive constructions. In addition, some verbs select a specific preposition (*depend on*), whereas other verbs combine with a range of different prepositions (*lead (in)to/from/up/off/across/over*) etc. Examples of the former can be found in (15) and (16):

```
Intransitive: (15) a.
```

```
b. (Past e;: [(f_i)](x_i)_A(f_k)](f_i)) (ei))
where f_j = 'convert'
x_i = 'he'
f_k = 'to Catholicism'

Transitive:
(16) a. They converted him to Catholicism.
b. (Past ei: (f_i): [(f_j)(x_i)_A(x_j)_U(f_k)](f_i)) (ei))
where f_j = 'convert'
x_i = 'they'
x_j = 'him'
f_k = 'to Catholicism'
```

He converted to Catholicism.

In all these construction the preposition and the following NP behave syntactically as one prepositional phrase. Semantically, too, they function as independent units, complementing – as a whole – the meaning of the verbal lexeme.

4 Multi-preposition constructions in FDG

Turning to MP-constructions, it will be argued that these, too, can be divided into different groups. Here two major construction types can be distinguished; the second type can be further divided into two subtypes:

- Construction I: The composite predicate construction (Section 4.1)
- Construction II: The appositional construction (Section 4.2)
 - o The resultative construction
 - \circ The V + PP-construction

4.1 Construction I: Composite predicate constructions

In this section it will be argued that constructions like those given in example (17) can justifiably be regarded as composite predicate constructions. Section 4.1.1 provide the semantic and some of the syntactic reasons for doing so (more details will be provided in Section 4.2.1). Section 4.1.2 will suggest an underlying representation for these constructions.

4.1.1 Characterization of the composite predicate construction

The first major construction type is exemplified by the sentences in (17) and (18):

- (17) Intransitive:
 - a. I couldn't *put up with* his paranoia. (= example (1b))
 - b. His girlfriend walked out on him.
- (18) Transitive:
 - a. We tried to *talk* her *out of* it. (= example (2b))
 - b. We *played* them *off against* each other.

English has a large number of such combinations, most of which intransitive; e.g. *come up against*, *boil down to*, *play along with* and *zero in on*. When we consider the semantic criteria listed in Section 1, we find that:

- (i) In most cases, the verb does not retain its original meaning. Sometimes, some of the original meaning may still present in a metaphorical sense (e.g. walk away from, come up with), but in other cases there is hardly a trace left (e.g. put up with, boil down to), while occasionally the verb cannot even be used independently (e.g. zero in on).
- (ii) Most of the verbs do not have their normal valency (*come* is normally one-place, *put* is normally three-place).
- (iii) In most cases, the SoAs denoted do not result in a state, although the evidence here is somewhat equivocal. Thus, a resultative reading is not possible in constructions with *cry out for, call out for, stick out for; miss out on; cry out against, kick out against; monkey about with; play around with; get on with; come up with; give up on; keep up with, put up with, take up with; face up to; lead up to; keep on at; look forward to; clean up after; cut back on; walk out on. In some cases, a resultative interpretation does seem possible, as in the case of*

get in on and walk off with. The same is true for transitive constructions: in some cases a resultative interpretations is available (the result of doing someone out of a job, for instance, is that this person 'is out of a job.'); such an interpretation or paraphrase is, however, not always available (e.g. with put down as, take out on, take up on).

(iv) In all of these expressions the verb 'selects' a particular set of prepositions; in other words, the combinations are all fixed.

Semantically, then, these constructions seem to behave very much like intransitive composite predicate constructions such as *come across* (see discussion in Section 3). Comparing these MP-constructions with the composite predicate construction in example (8), we immediately note some syntactic similarities as well. Thus, the order between the preposition and the NP cannot be reversed; i.e. the NP must follow the second preposition (cf. example (8b)). As a result, pronouns can (must) occur after the second preposition (cf. examples (cf. examples (8e&d)):

```
(19) He came across the letter/it. He put up with the mess/it.

*He came the letter/it across. *He put (the mess/it) up (the mess/it) with.
```

Finally, it turns out to be possible to place an adverb in between the composite parts; this can be taken as evidence that we are not dealing with one single lexeme:⁹

- (20) a. Following the 2002 election I was of course disappointed to *miss out narrowly on* a seat. (Google)
 - b. Peter Elliott took on the mantle to *miss narrowly out on* gold in Seoul (Google)

4.1.2 Analysis of the composite predicate construction

A more detailed discussion of the syntactic properties of these constructions will be presented in the next section, where these constructions will be compared to instances of the appositional MP-construction. On the basis of the evidence presented so far, it seems plausible to analyse the constructions in (17) and (18) as composite predicates. Example (17b), repeated here as (21a), will therefore be represented as in (21b):

```
(21) \quad \text{a.} \quad \text{His girlfriend walked out on him.} \\ \text{b.} \quad (\text{Past } e_i : (f_i : [(f_j : [ \blacklozenge_V \blacklozenge_{P1} \blacklozenge_{P2}] (f_j)) (x_i)_A (x_j)_{Ref}] (f_i)) (e_i))} \\ \text{where} \quad \blacklozenge_V = \quad \text{`walk'} \\ \blacklozenge_{P1} = \quad \text{`out'} \\ \blacklozenge_{P2} = \quad \text{`on'} \\ f_j = \quad \text{`walk out on' (composite predicate)} \\ x_i = \quad \text{`his girlfriend' (first argument of } f_j \text{ (Actor))} \\ x_j = \quad \text{`him' (second argument of } f_j \text{ (Reference))} \\ \end{cases}
```

Transitive expressions, like *play off against* in (22a) = (18b), will be analysed as three-place composite predicates:

```
(22) a. We played them off against each other.
b. (Past e_i: (f_i: [(f_j: [ \blacklozenge_V \blacklozenge_{P1} \blacklozenge_{P2}] (f_j)) (x_i)_A (x_j)_U (x_k)_{Ref}] (f_i)) (e_i))
where \blacklozenge_V = \text{`play'}
\blacklozenge_{P1} = \text{`off'}
\blacklozenge_{P2} = \text{`against'}
f_j = \text{`play off against' (composite predicate)}
x_i = \text{`we' (first argument of `play off against' (Actor))}
x_j = \text{`them' (second argument of `play off against' (Undergoer))}
x_k = \text{`each other' (third argument of `play off against' (Reference))}
```

4.2 Construction II: Appositional constructions

This section will be concerned with a characterization of the second type of MP-construction. Section 4.2.1 will discuss the semantic and syntactic properties of these constructions (following the lists of criteria provided in Section 1), which will bring out the difference between these constructions and the complex predicate constructions discussed in the previous section. In Section 4.2.2 it will be argued that the will be concerned with the internal structure of the prepositional unit; it will be argued that this unit is appositional in nature. Section 4.2.3 will present an FDG-analysis of these constructions.

4.2.1 Characterization of the appositional construction

Though superficially quite similar, the constructions in (23) and (24) differ radically from the composite predicate constructions discussed so far.

- (23) Intransitive:
 - a. at night we went up on the roof (COCA)
 - b. My parents had *stayed over in Middlesbrough* that night (BNC)
 - c. I mean she *lives out in the wilds* somewhere <ICE-GB:S1A-019 #362:1:A>
 - d. He *converted back to Catholicism* (after a brief stint as a Muslim) (Google)
- (24) Transitive:
 - a. read this, I brought it down from my cabin to show you (BNC)
 - b. I naturally assumed you were using your dust-pan and had *left it out in the hall* (COCA; Kazuo Ishiguro, *The Remains of the Day*)
 - c. Calmly, the SS officer placed his gun back in the holster (Google)
 - d. So he *passed them on to somebody else* (ICE-GB)

Starting again with the semantic criteria given in Section, we find that:

- (i) The verbs largely retain their original meaning; the meaning of the expression as a whole is completely transparent.
- (ii) The verbs have their usual valency; they may one-place predicates (*come*, *stay*), two-place predicates (*go*, *live*) or three-place predicates (*place* and *pass*).
- (iii) In many cases, there is an obvious resultative relation between the prepositional unit and one of the arguments of the verb: in *we went up on the roof*, for instance, the action of going results in being 'up on the roof'. In other cases, however, such an interpretation is not available, for instance with the stative SoAs in *She lives out in the wilds*.

(iv) Some verbs place severe semantic restrictions on the choice of prepositions (e.g. *convert back to*, *revert back to*). Other verbs do not select any particular combination of prepositions (e.g. *go* + *away/back/down/off/over/up* + *down/from/in(to)/to/up*).

Syntactically, too, there are important differences between these constructions and the composite predicate construction (compare Section 1, list B):

(i) 'Extraction'

Clefting, questioning and fronting of the prepositional unit is not possible with the composite predicate constructions in (25); the appositional constructions in (26), however, are fully acceptable:

- (25) a. *It was *up with his paranoia* that I couldn't put.
 - b. *Up with what did you have to put?
 - c. *Up with his paranoia I couldn't put.
- (26) a. It is back to Canada that he went.
 - b. Back to which country did he go?
 - c. Back to Canada he went.

Some attested examples are given in (27):

- (27) a. But it was *out on the hillside* that he spent his happiest hours. (Google)
 - b. Would you like to turn back the time? If yes, then *back to which moment*? (Google)
 - c. It was *back to the desert* that many Chilean communists would, years later, be sent to die. (COCA) (transitive)

(ii) Coordination

In composite predicate constructions the prepositional strings cannot be coordinated, irrespective of whether they are the same prepositional strings or different ones (both compatible with the verb); compare the examples in (28) to those in (29), where coordination is fully acceptable:¹⁰

- (28) a. *I couldn't put *up with his paranoia* and *up with his megalomania*.
 - b. *He went back on his word and along with our proposal.
- (29) a. Turner went back to skating and back to school at Northern Michigan University (COCA)
 - b. Every night after my mother falls asleep, I climb *out to the fire escape* and *up to the roof.* (COCA)

(iii) Independent occurrence of prepositional units

Strings like *up with his paranoia* and *out on him* only occur in combination with the verbs *put* and *talk*. Units like *up on the roof*, on the other hand, can occur in other environments:

- (30) a. SoA-modifier:
 - It's really cold up on the roof (COCA)
 - b. Argument of a preposition:
 The sun was out, blaring, and from *up on the roof* I could look out onto the Atlantic Ocean (COCA)
 - c. Subject PP:

Down in the cellar was a good bet, one of the few places she stood still for any length of time: washing, folding, ironing. (COCA)

(iv) Omissibility of the separate elements

In composite predicate constructions neither the first preposition nor the second preposition and the following NP can be omitted, as illustrated in (31):¹¹

- (31) a. *I can't put up with.
 - b. *I can't put up his paranoia.

In the sentences in (32), however, it is possible to leave out either of the two prepositional units, and be left with a sentence that is semantically and syntactically acceptable. Not surprisingly, leaving out the first preposition yields (semantically, and certainly pragmatically) the better result, as this is the least informative of the two prepositional units:

- (32) a. we went *up/on the roof*.
 - b. My parents had stayed *over/in Middlesbrough that night*.
 - c. Calmly, the SS officer placed his gun *back/in the holster*. (transitive)
 - d. read this, I brought it *down/from my cabin* to show you. (transitive)

(v) Sequences of more than two prepositions

In the case of a composite predicate construction, the number of prepositions is fixed (one in combinations like *come across*, two in MP-constructions like *put up with*); adding another preposition, if at all possible, changes the meaning of the composite predicate (e.g. from *get on* to *get in on*).

Appositional structures, on the other hand, are recursive: in example (33a), for instance, the first preposition (*back*) may be seen as being modified by the second preposition (*in*), which, in turn, is modified by a third preposition (*up*) (note that the PP *at the hood hinge* functions as an SoA-modifier) (see also Bolinger 1971:132-133):

- (33) a. But the hose itself runs out under part of the fender before coming *back in up* at the hood hinge ... (Google)
 - b. I feel the line draw tight once more, and I guess he's tugging me *on back down*. (COCA) (transitive)
 - c. They clamped on to him just short of breaking his skin, and starting dragging him *on back down the drive to where the shovel had landed*, just like Jackson had said they would. (COCA) (transitive)
 - c. We need more families to pass that *on down through the generations* and talk about it (COCA) (transitive)

(vi) Alternative word order¹²

In composite predicate constructions, the direct object NP can occasionally be placed after the first preposition; an example is given in (34):

(34) Saddam has showered many tribal 'sheikhs' with gifts and has *played off tribes against each other*. (Google)

This word order is, however, restricted to specific verb-preposition combinations (the only examples found are with *play off against*):

- (35) a. *They put up him to selling the house.
 - b. *They talked out the girl of jumping off the bridge.

In (36), however, reversing the direct object and the first preposition is completely unproblematic:¹³

- (36) a. I put down the telegram on the table. (Google)
 - b. Then when the snow melt ended and the spring drought arrived, he began *leaving out* water in a coffee can. (COCA)
 - c. Actually it was an English friend of Van Halen's who *passed on the tapes to them*. (BNC)

When we consider the possibility of extraposition of the direct object, we find more or less the same results. Thus, in composite predicate constructions such extraposition is possible, but again highly restricted (here too the only examples found are with *play off against*):

- (37) a. For nearly 30 years Elizabeth successfully *played off against each other the two great Catholic powers, France and Spain...* (Google)
 - b. The Amir received the delegation only in the middle of October with considerable reservation, and in the following weeks he apparently successfully *played off against each other the antagonistic factions within the Afghan elit...* (Google)

In appositional constructions, however, extraposition of the direct object is much more acceptable:

- (38) a. The mass culture is able to *put out into the marketplace what mass media finds itself incapable of reporting* (COCA)
 - b. and I'm sure I will bring back to the Chinese people a positive message of the desire of the American people for the further development and growth of our relations.

Having looked at the semantic and syntactic evidence, we can only conclude that, despite the superficial similarities, we are dealing with two completely different constructions: one in which the verb and the two prepositions form one unit (composite predicates), and one in which the two prepositions and the following NP form one unit.

4.2.2 Analysis of the prepositional unit

Now, before turning to the overall analysis of this second construction, let us concentrate on the internal structure of the prepositional unit (*up to the roof, down on the floor, over at the office*). Jackendoff (1973:349) and Burton-Roberts (1991:168) both describe these units as head-complement constructions. As we have seen, however, it is possible for either of the two elements to be left out. This seems to suggest that what we are dealing with here are cases of apposition – more specifically, cases of restrictive prepositional apposition. Although most work on apposition concerns nominal constructions, it is generally recognized that all lexical categories can appear in appositional constructions (e.g. Meyer 1992); Taylor (2002:235), for instance, provides the following general definition of apposition:

Apposition: In an expression XY, X and Y are in apposition if X and Y each designate one and the same entity

Taylor (2002:236) accordingly analyses the sequence *down there on the ground* as an appositive construction, in which 'a location is specified in two different ways, *down there* and *on the ground*; in combination, a more precise designation is achieved'.¹⁴

Further semantic, syntactic and phonological criteria can be taken from accounts of restrictive nominal apposition (see e.g. Keizer 2007, ch. 3). Thus it is generally accepted that in restrictive appositions

- the two elements form one tone unit (e.g. Quirk et al. 1985) and that the stress pattern is secondary-primary (Haugen 1953; cf. Francis 1958:302);
- the two parts must belong to the same major form class (Fries 1952:187; Hockett 1955:101; Francis 1958:301; Sopher 1971; Quirk et al. 1985);
- each of the elements can be separately omitted without affecting
 - o the syntactic acceptability of the sentence (Quirk et al. 1985)
 - o the meaning of the sentence (Sopher 1971; cf. Burton-Roberts 1975). 15

Since the MP-constructions in question fulfill all these criteria, they can safely be analysed as appositions; ¹⁶ following Keizer (2005, 2007), they will be regarded as head-modifier constructions. This would also account quite neatly for the fact that the direct object NP may appear between the preposition and the appositional PP: modifiers are, in general, more peripheral to the head, making it easier to place material in between the head and the modifier. The internal structure of these prepositional units can therefore be represented as in (39), where we have a location (l_i), which is restricted by a locational head (l_j) and a locational appositional modifier (l_k). That we are indeed dealing with an appositional construction here, and not just ordinary modification, can be derived from the fact that both locatives designate the same entity:

```
(39) \qquad \text{a.} \qquad \text{up on the roof} \\ \text{b.} \qquad (l_i : \left[ (l_j : (f_i) \ (l_j)) \right] \ (l_i) : \left[ (l_k : \left[ (f_j : \left[ (f_k) \ (x_i)_{Ref} \right] \ (f_j)) \right] \ (l_k)) \right] \ (l_i) ) \\ \text{where} \qquad l_j = \text{`up'(head of } l_i) \\ \qquad f_i = \text{ adpositional head of } l_j \ (\text{the property `up')} \\ \qquad l_k = \text{`on the roof' (appositional modifier of } l_i) \\ \qquad f_j = \text{configurational head of } l_k \ (\text{the property `on the roof')} \\ \qquad f_k = \text{adpositional head of } f_j \ (\text{the property `on')} \\ \qquad x_i = \text{`the roof'} \ (\text{argument of } f_k \ (\text{Ref}))
```

On the basis of the preceding we can now provide the following provisional definition of restrictive apposition in FDG:

- At the Interpersonal Level the apposition as a whole is analysed as one Subact (Ascriptive or Referential), consisting of two separate Ascriptive Subacts (the two component parts).¹⁷
- At the Representational Level appositions are analysed as head-modifier constructions, whereby head and modifier designate the same type of entity;
- At the Morphosyntactic Level both components take the same morpho-syntactic form, i.e. belong to the same type of phrase (headed by the same type of word).
- At the Phonological Level the apposition as a whole functions as one intonation unit; internally, stress is on the second component.

Now, it may be objected that since the two components of an apposition provide different descriptions of the same real world entity, they ought to be represented at the Representational Level as denoting (or designating) the same entity (reflected through co-indexing of their respective variables). As argued in Keizer (2008b), however, the (real-world) entities designated are not part of the grammatical component, as this component includes linguistic information only. Consequently, the variables at the Representational Level cannot represent extra-linguistic entities; instead, it was suggested that they should be regarded as symbolizing the denotation of the layer in question (a speaker's 'mental extension set', determined by the denotation of the lexical items contained in that layer). In the case of appositions, however, the denotations of the two elements are not identical – the expressions are not synonymous, they can simply be used to describe the same extra-linguistic entity. Therefore, coindexing of the variables is not an option.

4.2.3 Analysis of the appositional construction

Returning to the question of how to analyse the entire construction, we still have two options: the resultative analysis and the V + PP-analysis. In both cases the preposition and the following PP form one unit: a non-verbal predicate construction in the former, a PP in the latter

A. The appositional V + PP-construction

In many cases, appositional constructions do not allow for a resultative interpretation; i.e. the prepositional unit cannot be paraphrased by means of a copular construction. These constructions can therefore best be analysed as straightforward V + PP-constructions:

B. The appositional resultative construction

Other constructions, we have seen, do trigger a resultative interpretation. For these constructions, a resultative analysis may be preferable. Example (39) can thus be compared to the construction *Sue came in*; instead of the simple preposition *in*, we now have the appositional construction *up on the roof*:

```
Intransitive:
                    We went up on the roof. (result: 'we are up on the roof')
(42)
                    (Past e_i: (f_i: [(f_i)(x_i)_A(f_k): [(l_i)(x_i)_\varnothing](f_k)_{Res}](f_i)(e_i))
          where
                    l_i = \text{`up on the roof'}
                    f_k = 'we (being) on the roof' (second argument of 'come' (Result))
                    x_i = 'we' (first argument of 'come' (Actor))
Transitive:
(43)
                    Sue left the chairs out in the garden. (result: 'the chairs are in the garden')
          a.
                    (Past e_i: (f_i: [(f_i)(x_i)_A(x_i)_U(f_k): [(l_i)(x_i)_\varnothing](f_k)_{Res}(f_i))(e_i)])
                    f<sub>j</sub> = 'leave', a three-place verbal predicate; arguments: 'Sue' (Actor), the chairs'
                    (Undergoer) and 'the chairs (being) out in the garden' (Result)
                    l_i = 'out in the garden' (non-verbal predicate predicating over x_i)
                    x_i =  'Sue' (first argument of f_i (Actor))
                    x_i = 'the chairs' (second argument of f_i (Undergoer); argument of l_i (Zero))
                    f_k = 'the chairs (being) out in the garden' (third argument of f_i (Result))
```

5. Further implications

We have now come to the point where we have to consider the broader implications of these proposals for the theory of FDG, in particular with regard to lexical categorization. The first important consequence of the proposals concerns the recategorization of those elements traditionally referred to as particles (e.g. above, along, across, around, below, down, in, off, on, over, out, through, up) and locative adverbs (away, back, upstairs/downstairs) as prepositions. There are various reasons for doing this:

- (1) Form:
 Particles have the same form as prepositions (see also Emonds 1972). 18
- (2) Distribution:
 - As Burton-Roberts (1991) points out, elements such as *away*, *back*, *home*¹⁹ and *upstairs*, which have traditionally been classified as adverbs, do in fact not share any of the distinctive features of typical adverbs (i.e. adverbs ending in *-ly*); instead their distributional behaviour is that of regular PPs. The same turns out to be true for particles. The following features are mentioned by Burton-Roberts to support this claim (see also Emonds 1972, Jackendoff 1973):²⁰
 - a. Like PPs, particles and locative adverbs can be used predicatively (*John is in/back*); adverbs cannot (**John is angrily*);
 - b. Like PPs, particles and locative adverbs cannot function as premodifiers of adjectives/adverbs (*in/*back normal; *in/*back quickly), whereas adverbs can (perfectly normal; surprisingly quickly);
 - c. Like PPs, particles and locative adverbs can follow prepositions (*from up in the sky*); adverbs cannot (**from slowly*);
 - d. Like PPs, particles and locative adverbs can be premodified by right/straight/just (right in/back), whereas adverbs cannot (*right slowly);
 - e. Like PPs, they can postmodify nouns (*the journey back/the road out*); adverbs cannot; (**the journey smoothly*);
 - f. Like PPs, they can be followed by PPs (back to the future/out in the country); adverbs cannot (*down locally; *out remotely).

g. Like (directional) PPs they allow ('exclamatory') fronting (*Into the house/In he ran!*; *Down the street/Away rolled the carriage!*); adverbs cannot (**Noisily he ran!*/**Crazily rolled the carriage!*) (Burton-Roberts 1991:169-170; see also Jackendoff 1973:346-347).

In addition, PPs, particles and locative adverbs can all be used as the second argument of the verb *put* (*He put the books on the shelf/down/back*), while each of them can also occur in the so-called *with*-construction (*Into the dungeon with the traitors!/Off with his nose!/Outdoors with these noisy machines!*; Jackendoff 1973:347).

(3) Meaning and use:

Prepositional phrases, particles and locative adverbs designate the same type of entity: all three are typically used to indicate the location of an individual or SoA. In many cases this can be explained historically. Thus, as McMichael (2006) points out, the majority of what he describes as spatial adverbs (some of which are perhaps more commonly regarded as particles; e.g. Bolinger (1971:17-18)) are morphologically complex, having derived from prepositional phrases (including the large number of locative adverbs/particles starting with a-, such as about, across, after, above, ahead, along, around, aside, astray and away; a smaller set starting with be- (e.g. before, behind, below, beside, between); as well as some other frequently used adverbs/particles (back, down and over)). One of the reasons that these adverbs/particles need not (or cannot) be used relationally, McMichael (2006:47) continues, is that the (original) argument is already contained in the grammaticalized form (e.g. side in aside ('on side') and beside ('by side'); head in ahead ('on head') and dune in down ('of dune', i.e. from the hill).

Secondly, the proposals allow for an important generalization at the Representational Level, in the sense that now each of the main types of predicates (verbal, nominal, adjectival and prepositional) can be used relationally or non-relationally (cf. Emonds 1972, 1976; Jackendoff 1973; 1983:187; Huddleston 1984:349; Aarts 1992, 2008; Keizer 2008a etc.); or, as Huddleston (1984) puts it:

If ... we take the view that prepositions occur as heads of phrases ..., then there is no reason in principle why the above items [i.e. particles] should not simply be classified as prepositions which can occur either with or without a complement (just as many verbs, nouns and adjectives can occur with or without a complement) ... (Huddleston 1984:349)

Items like *away*, *back*, *upstairs/downstairs*²¹ can then be classified as obligatorily non-relational; prepositions like *at*, *from*, *to*, *towards*, *via*, *with*²², *during*, *for*, *of*, *until* as obligatorily relational.

Given the appositional structure of PP such as *up to the roof*, and considering the relational or non-relational nature of prepositions, we can now explain some of the differences in distribution between prepositions in these constructions:

- exclusively relational prepositions cannot occur in first position (*He glanced at from behind);²³
- exclusively non-relational prepositions easily occur in first position (back to the station; home to his parents; upstairs to his room), but can also occur in final position (back home, up back (as in when I went up back for air (Google)); down

• prepositions that can be used both relationally and non-relationally can occur in both positions (e.g. up *on the roof*; *back* up *the roof*)

Further restrictions on the possible combinations of prepositions, as well as the (preferred) order in which they appear, are of a semantic nature. Thus incongruous combinations (like *on off) are excluded, while, according to Bolinger (1971:132) there also seem to be "a ranking whereby the last particle is most resultant-condition-like, while preceding ones are more direction-like or aspect-like" (hence *It slipped down off* rather than 'It slipped off down). Not surpringly, the choice of the prepositions in resultative constructions is restricted to those that can indicate a resultant state (i.e. locative prepositions like *up*, out, down, in, but not directional ones like into, from or towards), while combinations of two prepositions indicating result are unlikely to co-occur (*They broke the door down out; Bolinger 1971:134). In addition, the order of occurrence seems to be determined by the specificity of the information provided (with the more specific information typically following the more general information – hence also the tendency for the second element to be a full PP).

Thirdly, it will not have gone unnoticed that in this paper all prepositions have been analysed as lexical elements. FDG, however, makes a distinction between lexical adpositions (functioning as lexical heads) and grammatical adpositions (expressing semantic functions) (e.g. Hengeveld and Mackenzie 2008:259). For English, the latter group consists of a relatively small group: *at*, *from*, *via*, *for*, *to*, *until/till*, *towards* and *of* (Mackenzie 1992, 2001). One of the reasons for regarding these prepositions as grammatical is that they cannot be used by themselves as non-verbal predicates (as illustrated in (40a); Mackenzie 1992:12).²⁴ On the present approach, however, there is no need to regard these prepositions as grammatical: they are simply obligatorily relational. Note in this respect that it is equally impossible to use obligatorily relational adjectives by themselves as non-verbal predicates (example (44)): yet we do not conclude that these are grammatical adjectives.

- (44) a. *John is at/from/of/to.
 - b. **John is fond/loath*.

Let us finally briefly consider the representation of prepositions and prepositional phrases at the Morphosyntactic Level. At this level, verbal, nominal and adjectival words appear in different morphosyntactic templates. Although not explicitly mentioned in Hengeveld and Mackenzie (2008), it will be will assumed that there are also adpositional words. Again, it turns out that these adpositional words behave just like the other word classes in that they allow for different types of complements (see Huddleston 1984:344f.):

Table 1: Adpositional templates at the Morphosyntactic Level

Template	Examples
$(Adp_i: [(Adw_i) (Np_i)] (Adp_i))$	under the table, before the revolution, in three weeks
$(Adp_i: [(Adw_i) (Adp_i)] (Adp_i))$	from under the table, until after the revolution, back to the station
$(Adp_i: [(Adw_i) (Ap_i)] (Adp_i))$	(he left her) for dead, (well-wishers) from poor to rich
$(Adp_i: [(Adw_i) (Advp_i)] (Adp_i))$	from there, until now, since then
$(Adp_i: [(Adw_i) (Cl_i)] (Adp_i))$	
finite decl. clause:	before he went off to America to become a Broadway star (BNC)
-ing clause:	(And she insisted) on being chauffeured round in a Daimler (BNC)
interrogative clause:	(quit worrying) about who is most important (COCA)

The final category, of prepositions with clausal complements, is of particular interest. Traditionally, when items such as *before*, *after*, *since* and *until* introduce a finite declarative clause, they are analysed as conjunctions; when what follows is an *-ing*-clause or an interrogative clause, they are analysed as prepositions. Various linguists, however, have objected to such a division; Huddleston (1984), for instance, wonders

... why we should make a primary part-of-speech division on the basis of such a specific distinction in the kind of complement – tensed declarative clause vs NP or clause of some other kind. As we have seen, members of the three major parts of speech have to be subclassified according to what complements they take ... there is much to be said for conflating prepositions and conjunctions into a single class, which would then similarly be subclassified according to the kind of complements permitted (Huddleston 1984:340).²⁵

It seems therefore justified to classify lexical items like *before* and *until* as prepositions, irrespective of the type of complement they take.

6. Conclusion

On the basis of semantic and syntactic evidence I have argued that English MP-constructions can be divided into various types. Each of these types has subsequently been provided with an analysis at the Representational Level, reflecting the distinctive features of these construction types. The analyses, it was pointed out, were based on an earlier proposal for the treatment of simple verb-preposition constructions; applying these analyses to MP-constructions was seen as a way of testing this earlier proposal.

As it turned out, the previous analyses presented proved also relevant to the treatment of MP-constructions. Thus, the composite predicate construction, analysed as a combination a verb and a preposition which together function as one (one-place or two-place) predicate (e.g. *come across, show around*), can also be found in constructions with two prepositions (e.g. *walk out on, play off against*). The same was true for the other two constructions: the resultative construction (e.g. *We went up on the roof; Sue left the chairs out in the garden*) and the more straightforward V + PP construction (*I climbed out to the fire escape; I took him back to the station*). Interestingly, however, these turned out to be subtypes of a new major constructions type, the appositional MP-construction, which was shown to contrast semantically and syntactically with the composite predicate construction. This in turn led to a preliminary definition of restrictive apposition (not just prepositional, but of any type) in FDG, specifying the characteristics of this construction at each of the four levels.

Finally, the paper considered some of the wider implications of these proposals for the theory of FDG. These implications primarily concerned the categorization of some of the lexical elements involved. It was argued that

- (a) what are traditionally referred to as particles or locative adverbs are better regarded as prepositions
- (b) there is no need to distinguish a set of grammatical prepositions; these can be regarded instead as obligatorily relational prepositions
- (c) the elements *before*, *until* etc., when followed by a finite declarative clause, are to be regarded not as conjunctions, but as prepositions.

These changes, it is felt, will enhance the elegancy, efficiency and consistency of the theory of FDG.

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Notes

- For a detailed discussion of verb-preposition constructions and brief overviews of the literature see e.g. Gries (1999) and Dehé (2002).
- The *Collins Cobuild English Grammar* (1990:169-170) provides (non-exhaustive) lists of transitive and intransitive three-word phrasal verbs, but offers no analysis. Hill (1968) offers a detailed classification of possible 'patterns' with particles (combinations of prepositions and particles with other linguistic elements), including patterns with more than one prepositions/particle. Bolinger (1971) devotes one chapter to phrasal verb constructions with more than one particle. Brief discussions of occasional examples of MP-constructions can be found in Den Dikken (1995:144) and Gries (1999:110). For a historical account, see Visser (1970:407-410).
- Note, for instance, that in the case of complex verbs formed through object (or Undergoer) incorporation, the English equivalents do not typically form one unit at the Representational Level (e.g. Dutch *tandenpoetsen* 'to brush one's teeth'), since verb and second argument do not form a separate layer. The same is true for such Asian languages as Kri, a Loa language, which has verbs to denote complex SoAs like 'to be washed away by flowing water' or 'to measure something by hand spans' (see Enfield and Diffloth 2007); once again, the English equivalents do not form one semantic unit at the Representational Level.
- Where XP is a phrase headed by the particle *down*; θ ' is in Spec SC₁, while *the books* (as the subject) is in Spec SC₂.
- Note, however, that elsewhere Den Dikken (1995:69) claims that in these constructions 'it is the particle-cum-PP complex which is responsible for θ -marking the books', which can only mean that *down on the shelf* is to be regarded as one unit.
- When the order of preposition and direct object NP is reversed, coordination is possible:
- (i) Pete turned the lights off and the heating on/off. This can be taken to indicate that direct object NP and preposition do form one unit; they do, not however, form a PP. (NB: PPs can be clefted, SCs cannot; compare (9f) and (10f).)
- In the original proposal (Keizer, in press), this argument was analysed as an abstract Locative; alternatively it might be regarded as a Recipient. Given the highly abstract nature of the relation between this argument and the verb, it may, however, be more appropriate to analyse the arguments in question simply as a second or third participant in the SoA denoted. This seems to be captured most accurately by assigning it the semantic function Reference.
- Note that in the analysis proposed here, the non-verbal construction is not represented as a SoA, but as the Configurational Property which functions as the head of a SoA. This reflects the fact that these non-verbal constructions cannot take SoA-modifiers (e.g. *yesterday*) or operators (e.g. tense).
- Note that some combinations are more accessible than others, both in terms of the set of adverbs allowed in this position and in terms of the position in which they can appear (between verb and first preposition; between the two prepositions). No doubt this degree in accessibility is directly related to an expression's degree of idiomaticity/transparency. Thus *put up with* seems to allow only manner adverbs; these can appear only in between the preposition and the verb The combination *walk out on*

also allows for frequency adverbs and even prepositional phrases, but again in one position only; *miss out on*, however, allows manner adverbs in both positions.

- (ia) ... he is condemned to *put up patiently with* everything (Google)
- (ib) It turns out his father left his first wife when he returned from the navy to find out she had been unfaithful and he *walked out immediately on* her (Google)
- (ic) There have been lots of furious rows and I've threatened to *walk out for good on dozens of occasions*, (Google)
- (id) Following the 2002 election I was of course disappointed *to miss out narrowly on* a seat. (Google)
- (ie) Mike East showed glimpses of his 2004 form ..., almost catching German Carsten Schlangen on the line, to *miss narrowly out on* a final berth in the men's 1500m. (Google)

Both positions for adverb placement are also available with Construction II (e.g. *He went quickly back to the house/He went back quickly to the house*), although here too there may be slight differences depending on the particular combination of verb and prepositions, as well as on the adverb in question. Since there seem to be no systematic differences in this respect between the various types of MP-construction, this has not been used as a criterion to distinguish these types.

When we look at the possibility of coordinating only the second prepositional unit, results vary. Although I have not been able to find any authentic examples, the sentences in (ia&b) are definitely more acceptable than those in (27), especially when the coordinator is emphasized (ia'&b'):

- (ia) ??I couldn't put up with his paranoia and with his megalomania.
- (ia') I couldn't put up with his paranoia AND with his megalomania.
- (ib) She walked out on her family and on her friends.
- (ib') She walked out on her family AND on her friends.

When we consider transitive composite predicate constructions, there appear to be clear differences in acceptability between the various combinations:

- (iia) I put him down as shy, not as arrogant.
- (iia') *I put him down as shy, not down as arrogant.
- (iib) *I talked her out of resigning, but not of moving to New York.
- (iib') I talked her out of resigning, but not out of moving to New York.

A number of (interacting) factors thus seem to determine the acceptability of such coordinated constructions, including prosodic features, transitivity,

fixedness/transparency of the combination, choice of preposition (measure of semantic content), etc.

That is, not without changing the meaning; thus we can have both e.g. *She walked out* and *She walked on him*, but neither can be used as a paraphrase of *She walked out on him*. Similarly, leaving out the second preposition in a sentence like *They put up with blockades* yields a sentence that is grammatical (*They put up blockades*), but which has an entirely different meaning/semantic representation.

See Gries (1999:109-113) for a list of factors governing the alternation in verbparticle constructions like *John picked up the book/John picked the book up*.

As pointed out by Bolinger (1971:142-143), placing the direct object between the two prepositions is possible only when the second preposition is used relationally (i.e. heads a prepositional phrase), not when it is used non-relationally, as in the following examples:

- (i) a. *I tried to push back the catchbolt in.
 - b. *Bring on your friends over.
 - c. *They brought back the children home.

It is likely that such combinations are excluded because the second preposition is both semantically (in terms of specificity) and syntactically (in terms of complexity) too light to appear in final position. Note in this respect that many prepositions (or locative adverbs) beginning with *a*- are acceptable in this position, as they are historically derived from prepositional phrases (Bolinger 1971:142-143; see also Section (5) below):

- (ii) a. They pulled back the divers aboard.
 - b. He reeled in the catch astern.
- Although I agree with Taylor that we are dealing with a case of apposition here, I do not think his analysis is complete, or necessarily correct. It is incomplete in that it does not provide an analysis of the first part (down there), which in itself may be argued to involve apposition. It may also be incorrect, since it seems to be more plausible to divide the phrase in question into the component parts down and there on the ground (where the second part would involve another case of apposition). Note for instance that it is possible to place the direct object immediately after down (He put down the box on the floor; an attested example would be We used to go up there and bomb, put down all the bombs there on Iwo Jima (Google)), but not after down there (*He put down there the box on the floor). Obviously, these constructions need further consideration; unfortunately it is outside the scope of this paper to discuss them in any more detail.
- In addition, it has been claimed that the two parts of a nominal appositional construction are arbitrarily reversible (e.g. Sopher 1971). As pointed out by Keizer (2005:292-293; 2007:37-38), this is not necessarily the case.
- Occasionally, omitting the final PP can lead to semantically and syntactically ill-formed constructions, as in:
 - (i) He lives over/out/up *(in Wales).

The question that arises is whether it is still plausible to analyse the PP *in Wales* here as an appositional modifier. As I see it, there are two possible solutions:

- (a) Either we accept that in these constructions *in Wales* is an argument, not a modifier; in other words that the prepositions *over/out/up* are used relationally;
- (b) Or we hold on to an analysis in which *in Wales* is used as an appositional modifier and *over/out/up* as non-relational prepositions. We account for the obligatoriness of the second element by saying that the verb *live* imposes restrictions on its argument.

The latter view seems to be supported by the fact that in similar constructions the prepositions *over/out/up* etc. can be used non-relationally (example (iia)); this seems to indicate that it is indeed the verb *live* that imposes the restrictions, not the prepositions. Moreover, even in such constructions as (iib), involving the element *back*, the following PP cannot be omitted. It is, however, generally accepted that *back* is non-relational (see also below); the following PP must therefore be a modifier. I will therefore assume that even in these constructions the prepositional units are appositional constructions.

- (iia) He stayed over (in London); out (in the field); up (in his room)
- (iib) He lives back in the woods (Google)
- For a detailed justification for the view that the two component parts (of restrictive nominal appositions in English) are non-referential, see Keizer (2007:ch. 3).

- It might also be claimed that prepositions form a subclass of the class of particles, which is a very diverse class, comprising all kinds of elements that linguists are hard put to place in any of the other categories. What is meant here is that the kind of elements that have been referred to as particles in the kind of constructions discussed in this paper (phrasal verbs, verb-particle constructions) take the form as prepositions.
- Classifying *home* and *back* as prepositions may also account for the fact that they can combine with the derivational ending –wards, which is typically attached to directional prepositions, as in *upwards*, *downwards*, *inwards*, *outwards*, *towards* and *forwards*. This, in turn, can be taken as evidence that all these prepositions are indeed lexical, as they can engage in derivational processes.
- Burton-Roberts (1991) takes this even one step further, arguing that not only particles and locative adverbs are (intransitive) prepositions, but that adverbs like here/there, now/then and where/when are also to be regarded as prepositions. His proposal is based on the fact that these traditional adverbs share the distributional features listed in (a)-(g) with PPs, while typical adverbs (i.e. adverbs ending in -ly) exhibit none of these features. As I have not been able to ascertain the consequences of this extra step for FDG, I will for the present defer judgement on the matter.
- Hengeveld and Mackenzie (2008:250) analyse *away*, *inside* and *aloft* as location-identifying adverbs, when used non-relationally and not as a preposition.
- Note, however, that in certain parts of the USA, *with* can be used intransitively in combination with the verb *come*:
 - (ia) "I'm through for the night," she said. "I'll come with." (COCA, Fiction 1998)
 - (ib) Within the first week after the school's reopening, the football team bused back to New Orleans to play a game. "You coming with?" one of the players asked Wuerffel. (Google)
- Obligatorily relational prepositions can, of course, be followed by another PP; in that case, however, we are not dealing with an appositional construction, but with a head-argument construction. In a phrase like *from under the table*, for instance, *under the table* functions as the argument of *from*. Note that, unlike in appositional constructions, the two prepositional elements in such constructions do not denote the same entity.
- Other important distinctive features of 'grammatical' prepositions are (1) that they do not allow for modification (*right at/from/to etc.) and (2) that they can only combine with lexical prepositions (not with other grammatical prepositions: from under vs. *from at). As it turns out, however, such combinations do occur (The Bush Administration has also incurred severe criticism from at home and abroad (COCA Academic)), also with the modifier right (e.g. a close-up view from right at the edge (Google)). Note that since these prepositions always take an argument is it impossible to determine whether the modifier right modifies the preposition or the entire PP. For an extensive justification of the idea that all prepositions are lexical, see Keizer (2008a); see also Pérez Quintero (2004).
- See also Huddleston and Pullum (2002:1012-1013), who provide an additional argument: "items like *before* which occur with both kinds of complement take the same range of prehead modifiers" (an hour before the meeting ended/an hour before the end of the meeting).