Chapter X
Title Hyperbaton and Haplology

1. Introduction*

The present paper highlights an apparent parallelism between the phenomena of hyperbaton and haplology that can be drawn as the consequence of previous work by Fanselow and Ćavar (2001) – F&Ć, henceforth. Although the connection is at first rather appealing, after a detailed analysis of the properties of hyperbaton, the parallelism is dismissed. Other phonological accounts of hyperbaton are also examined, including F&Ć’s Distributed Deletion analysis.

The hypothesis defended in this paper is that hyperbaton is not due to phonological properties of the two split elements themselves, but simply to a visibility requirement associated with the left periphery of the clause. The conclusion will be that one cannot steer away from the movement analysis of the bare operator (or its base-generation in Spec-CP). Minimally, a bare operator satisfies the relevant morpho-syntactic features in the left field and therefore bare operator movement is the default option cross-linguistically. As an answer to the question as to why full pied-piping is possible when phonological material has already been pied-piped, it will be argued that full movement (of the bare operator and the remnant) is motivated, not by morpho-syntactic features, but by semantico-pragmatic properties.

This contribution is part of a larger work on split-XPs that began with Mathieu (2002). Here I concentrate on the phonological properties of split-XPs, a topic that I have not discussed before. As a defence for my case against the phonological account, I will rely on Butler and Mathieu (2004a, b), and Mathieu and Sitaridou (2004a, b).

Section 2 introduces examples of hyperbaton. Then, three phonological accounts of the phenomenon are introduced: section 3 looks at the clitic approach; section 4 introduces F&Ć’s Distributed Deletion account; section 5 concentrates on F&Ć’s alternative suggestion about DP-splitting and develops an apparent parallelism between hyperbaton and haplology based on that suggestion. After all three phonological approaches are dismissed, section 6 offers an alternative account of hyperbaton, and gives a rationale
for why at least one element must moved to the left periphery in hyperbaton configurations, and also why full pied-piping is also allowed in (apparent) blatant violation of economy. The conclusion can be found in section 7.

2. Hyperbaton

The term 'hyperbaton' comes from a combination of hyper and the aorist participle of baino 'to come' and means 'stepped over' or 'passed over'. It is a rhetorical device with the discourse function to highlight certain constituents. It is frequently found in poetry and has been claimed to also be present in colloquial/spoken registers. This is certainly the situation found today in languages that allow rearrangement of basic DP word order. For example, in Polish and Russian, this process is possible both in literary and colloquial registers (see Sekerina, 1997).

The most basic form of hyperbaton involves movement of a noun out of a prepositional phrase (sometimes called phrasal wrapping, also found in Latin). The extracted element is stressed and receives a strong or contrastive interpretation. To illustrate, in (1) the emphatic genitive dinameos precedes the word which governs it (i.e. ekino).

(1) a. d' is ekino dinameos monon vlepo.  
and to this force-GEN only see-1SG  
'I only see power in this.'

b. DINAMEOS, d'is ekino t; monon vlepo.  
'I only see POWER in this.'  
(Denniston, 1997, p. 47)

(2) illustrates extraction of an emphatic quantifier:

(2) a. Echei elpidas pollas.  
had-3SG hopes-ACC.FEM.PL many-ACC.FEM.PL  
'He had many hopes.'

b. POLLAS, echei t elpidas.  
'He had MANY hopes (e.g. not a few).'  
(Herodotus 5.36)
Example (3) shows extraction of a demonstrative:

(3) a. Tous chrômenous
    those-MASC.PL use-MASC.PL
    té tautê ergasia.
    the-DAT.MASC.FEM.SG this-DAT.MASC.FEM.SG profession-DAT.MASC.FEM.SG
    'Those that exercise this profession.'

b. Tous TAUTE chrômenous té tê ergasia.
    'Those that exercise THIS profession (e.g. not that one).'
    (Aeschines 1.119)

Next, in (4b) extraction of a negative quantifier is exhibited:

(4) a. Hymas pothein akousai
    you-ACC.PL desire-INF hear-INF.PAST
    oudemian prophasin.
    no-ACC.FEM.SG excuse-ACC.FEM.SG
    'That you desire to hear no excuse.'

b. OUDEMIAN i hymas pothein akousai ti prophasin.
    'That you desire to hear NO excuse.'
    (Lysias 14.1)

Adjectives can split too. It is clear from the context in which they appear that such discontinuous structures in Classical Greek involved a set of alternates, i.e. involved strong focus. This is well-documented in Devine and Stephens (2000). In (5b) the interpretation is: ‘private, not public’.

(5) a. Kateskeuakasin oikias tas
    build-PLUPERFECT.J.PL house-FEM.PL the-FEM.PL
    idias.
    private-FEM.PL

b. Kateskeuakasin oudemian oikias tas idias.
    'Those that build houses privately.'
    (Plato, Protagoras 318b)
b. **TAS IDIAS** kateskeuaskin tì **oikias**.
   ‘They have built their private homes  (e.g. not their public ones).’
   (Demosthenes 23.208)

Finally, (6) involves an interrogative (here the extracted element receives informational rather than contrastive focus):

(6)  

   a. **Tína**  **dynamin** ἔχει τί? 
   what-ACC.FEM.SG power-ACC.FEM.SG  has-3SG
   (Plato *Laws* 643a)

   b. **Tína** ἔχει τί  **dynamin**? 
   what-ACC.FEM.SG has-3SG  power-ACC.FEM.SG
   ‘What power does it have?’
   (Plato *Republic* 358b)

Turning now to Modern Greek, the same patterns can be found, except for (6b).

(7b) demonstrates extraction of a quantifier.

(7)  

   a. ἐξε ὑπὸ **poles**  **elpides**. 
   have-PAST.3SG  many-ACC.FEM.PL hope-ACC.FEM.PL
   ‘He had many hopes.’

   b. **POLES, ēxε tì  elpides**. 
   ‘He had MANY hopes (e.g. not a few).’

(8b) shows extraction of a demonstrative:

(8)  

   a. ἰδα **afto**  **to** 
   see-PAST.1SG  this-ACC.NEUT.SG  the-ACC.NEUT.SG
   forema. 
   dress-ACC.NEUT.SG
   ‘I saw this dress.’

   b. **AFTO, īda tì  to forema**. 
   ‘I saw THIS dress (e.g. not that one).’

(9b) is an illustration of negative extraction:
(9) a. Den thelo na akuso
    not want1SG PRT-SUBJ listen1SG
    kamia dikeologia.
    noACC.FEM.SG excuseACC.FEM.SG
    ‘I want to hear no excuse.’

b. KAMIA, den thelo na akuso t, dikeologia.
    ‘I want to hear NO excuse.’

Next, whereas in (10a) the adjective kokino ‘red’ is adjacent to the noun it modifies, i.e. forema ‘dress’, in (10b) the adjective has been extracted on its own. If the condition that the extracted element must receive stress in order to be interpreted contrastively is not met, the sentence is ungrammatical, as illustrated by (10c).

(10) a. Agorase to kokino
    buy-PAST.3SG theACC.NEUT.SG redACC.NEUT.SG
    forema.
    dressACC.NEUT.SG
    ‘She bought the red dress.’

b. To KOKINO, agorase t, forema.

c. *To kokino, agorase t, forema.
    ‘She bought the RED dress (e.g. not the blue one).’

The type of example illustrated in (10b) was first introduced by Androutsopoulou (1997:2). A variant of (10b), originally discussed by Horrocks and Stavrou (1987:91), is introduced in (11). It is identical to (10b) apart from the additional determiner present to the left of the stranded nominal; a process dubbed Determiner Spreading (the choice to have an additional determiner appears to be dialectal/a matter of register):

(11) To KOKINO, agorase t, to
    theACC.NEUT.SG redACC.NEUT.SG buy-PAST.3SG theACC.NEUT.SG
    forema.
    dressACC.NEUT.SG
    ‘She bought the RED dress (e.g. not the blue one).’
In Classical Greek, the situation was more straightforward, since in the canonical word-order (Adjective-Noun, as in the modern form of the language), a doubled determiner never appeared in this kind of constructions (cf. Devine and Stephens 2000, and Manolessou 2000).¹

Finally, it must noted that WH-elements like *ti can no longer undergo splitting in Modern Greek (note also that *ti is no longer marked for case, gender or number). The reason behind this diachronic change need not concern us in this paper. I simply add that there are two exceptions to the rule against WH-splitting in Modern Greek: for some (but not all speakers) both *tinos ‘whose’, a genitive remnant of Classical Greek (13b) and pianu ‘whose’, its modern counterpart (14b) can split. In Mathieu and Sitaridou (2004b), an account of this contrast is given, together with an explanation for the general loss of WH-splitting in Modern Greek, as well as for the dialectal variation.

(12) a. *Ti di
ami
exi? 
what power-ACC.FEM.SG have-3SG
b. *Ti, exi ti di
ami?  
‘What power does it have?’

(13) a. Tinos to vivlio 
whose-GEN.SG the-ACC.NEUT.SG book-ACC.NEUT.SG 
eferes? 
bring-PAST.2SG
b. Tinos, eferes ti to vivlio?  
‘Whose book did you bring?’
(Horrocks and Stavrou, 1987:89)

(14) a. Pianu to vivlio 
whose-GEN.MASC.SG the-ACC.NEUT.SG book-ACC.NEUT.SG 
eferes? 
bring-PAST.2SG
b. Pianu, eferes ti to vivlio?  
‘Whose book did you bring?’

Hyperbaton is found in a wide range of languages. The following constructions from French (15b), German (16b) and Dutch (17b) can be grouped together with the split constructions introduced above:
Languages are not wholly consistent with respect to whether it allows split-DPs. Modern Greek is a good example. Some DPs can split (tinos, pianu, adjectives, indefinites, and negative elements), while others cannot (ti,pios). Thus, there cannot be such thing as a split- versus a non split-DP language. Cross-linguistically, different combinations arise. For example, bare *combien extraction is possible in French, as shown by (15b), whereas the equivalent construction is not possible in Modern Greek (18b). On the other hand, whereas bare demonstrative extraction is available in Modern Greek (8b), it is impossible in French (19b).
(19) a. J’ai acheté cette robe.
    I have bought this dress.
    ‘I have bought this dress.’

b. *CETTE j’ai acheté de robe.
    this I have bought of dress
    ‘I have bought THIS dress (e.g. not that one).’

For a parameterization account, see Mathieu and Sitaridou (2004a, b).

3. Phonology account I: the clitic approach

A well-known analysis of hyperbaton is that of the so-called trompe-l’oeil approach. The clitic approach, as it is also called, argues that splitting is an illusion. Rather than an XP splitting into two, rightward movement of an element originally to the left is what creates variation in word order. For example, in (20b), although one might be tempted to think that the nominal has raised above the preposition, the proposal is that, in fact, it is the preposition that has moved to a second position as illustrated by (21):

(20) a. Apo melainaon neon.
    from the-black ships

b. Melainaon, apo ti neon.
    the-black from ships
    ‘From the black ships.’
    (II 16.304)

(21) ti melainaon, apo neon.
    the-black from ships
    ‘From the black ships.’

The idea behind this proposal is that prepositions are reduced clitics (reduced in accentuation) and therefore need something to host them. The prepositional head therefore moves for prosodic reasons. Since phrase initial clitics can in fact be either in first or second position, it is expected that prepositions will also be in first position from time to time. Proponents of this theory for Greek are for example: Golston (1988).
A similar analysis for Serbo-Croatian split-XPs has been proposed independently. As discussed in Fanselow and Čavar (2002), Zec and Inkelas (1990) argue that syntactic constituents are split by clitics in Serbo-Croatian. A clitic cluster may appear after a complex DP (22a) or inside the complex DP (22b) – the clitic cluster is in italics:

\[(22)\]

\[\text{a. } \text{Taj } \text{čovjek } jaj \text{ ga } je \text{ poklonio.}\]
\[\text{b. } \text{Taj, } jaj \text{ ga } je \text{ ti } \text{čovjek } \text{poklonio.}\]

'This man presented it to her.'

(Fanselow and Čavar, 2002, p. 80)

As shown by Devine and Stephens (2000), the main problem for this approach is that prepositions need not be in first or second position in Classical Greek: material can also intervene between the preposition and the nominal. The conclusion thus must be that they are not clitics:

\[(23)\]

\[\text{basilikon } \text{domon } \text{huper.}\]
\[\text{the.royal } \text{palace } \text{for}\]

'For the royal palace.'

(Phoen 1326)

On a similar note, if one adheres to the clitic theory, then it is no longer possible to explain the availability of hyperbaton with interogatives, since in this case the intervening material cannot be considered a clitic (for example, verbs were not clitics in Classical Greek, cf. Devine and Stephens, 2000):

\[(24)\]

\[\text{Tina } \text{boais } \text{logon?}\]
\[\text{what } \text{shout-PRES.2SG } \text{words}\]

'What words are you shouting?'

(Hipp 571)

Fanselow and Čavar (2002) independently make more or less the same point with regard to Serbo-Croatian. In that language too, material other than clitics can intervene between the two parts of the split construction (see Browne, 1976):
(25) **Kakav je Ivan kupio auto?**
what-kind-of be-3SG Ivan buy-PTC car
'What kind of car has Ivan bought?'
(Fanselow and Ćavar, 2002, p. 80)

In fact, as shown by Ćavar (1999) and Fanselow and Ćavar (2002), the same type of syntactic discontinuity is possible with the constructions discussed by Zec and Inkelas (1990). In (26) a demonstrative is topicalized and is separated from the head noun of the complex DP by the subject *Ivan*, and not simply by clitics:

(26) **Taj je Ivan kupio auto.**
this be-3SG Ivan buy-PTC car
'Ivan bought this car.'
(Fanselow and Ćavar, 2002, p. 80)

To conclude, the clitic solution to XP-splitting cannot be right.

### 4. Phonological account II: Distributed deletion

In this section F&Ć’s (2001), (2002) Distributed Deletion account and their tentative solution to the problem as to what motivates splitting are introduced. These authors argue that split-XP constructions are best analysed via distributed deletion of phonological copies at LF. Assuming Chomsky’s approach to movement (Chomsky, 1995), where raising of elements in the phrase-marker leaves copies behind, which are subsequently deleted, the authors argue that the deletion operation may affect both copies and that it is the best way to account for split-XPs (it is not clear that this idea is in fact consistent with Minimalism, since scattering of phonological features is not expected, but I will leave this point aside).

The theory aims to offer a unified account of both PP-extraction as in (27b) and noun extraction as in (28b). F&Ć call (27b) a pull split (the order of the split elements is preserved A ... B) and (28b) an inverted split (the order of the split elements is not preserved B ... A):

(27) a. **Na jaki dach Marek kocił?**
on what-kind roof Marek jumped
b. Na jaki Marek dach koci?
   'On what kind of roof did Marek jump?'

      books none have I read
b. Bücher habe ich keine gelesen.
      'As for books, I haven’t read any.'

The second part of the proposal is that in split constructions, a DP or a PP
is split up in case its phonetic material is linked to at least two different
pragmatic features. On the assumption that focus is checked in a specific
position, they argue that the two spread elements split up because the fea-
ture that they each bear cannot both be checked in the same position. One
bears a +WH or a +TOP feature and is checked in a higher interrogative
position and the other carries a Focus feature that is checked in a lower
focus position. (29) and (30) illustrate the proposal.

(29) [F+WH Na jakiWH Marek [F+Foc dach+Foc koci]]?
      'On what kind of roof did Marek jump?'

(30) [F+TOP Bücher+TOP habe ich [F+Foc keine+Foc gelesen]].
      books have I none read

'As for books, I haven’t read any.'

In the case where everything raises to the left, only one feature is involved,
namely the +WH feature for the case of (31) and the +TOP feature in the
case of (32):

(31) [F+WH [Na jaki dach]-WH Marek koci]]?
      on what-kind roof Marek jumped

(32) [F+TOP [Keine Bücher]-TOP habe ich gelesen].
      none books have I read

'No books, I have read.'

(33) and (34) give the derivations for (31) and (32) respectively:
(33) Marek na jaki dach kocił?
   → movement + copying
   Na jaki dach Marek na jaki dach?
   → distributed deletion
   Na jaki dach Marek na jaki dach kocił?

(34) Ich habe keine Bücher gelesen.
   → movement + copying
   Keine Bücher habe ich keine Bücher gelesen.
   → deletion
   Keine Bücher habe ich keine Bücher gelesen.

For sake of completeness, the derivations for full movement are represented in (35) and (36):

(35) Marek na jaki dach kocił?
    → movement + copying
    Na jaki dach Marek na jaki dach?
    → distributed deletion
    Na jaki dach Marek na jaki dach kocił?

(36) Ich habe keine Bücher gelesen.
    → movement = copying
    Keine Bücher habe ich keine Bücher gelesen.
    → deletion
    Keine Bücher habe ich keine Bücher gelesen.

The two main motivations for this proposal are (i) instances where both parts of the copy are pronounced, and (ii) constraints and anti-constraints on movement. Fanselow and Ćavar take the case of the 'Copy-construction' (Hiemstra, 1986; Höhle, 1990; Fanselow and Mahajan, 2000; Nunes, 2001) in German as evidence that it is possible for two copies to be pronounced.

(37) Wer denkst du denn wer du bist?
    who think you that who you are
    'Who do you think you are?'
    (Fanselow and Ćavar, 2002, p. 83)
Moreover, they argue that certain resumptive pronouns (e.g. Hebrew (38)) reflect the failure of copies of movement to delete completely (on resumptive pronouns, see Doron, 1982; McCloskey, 1990; Demirdache, 1992, 1997; Shlonsky, 1992).

(38) Ha-šiš še pagašti ‘oto.
the-man that I-met him
‘the man that I met.’

Next, F&C want to show that simple movement analyses of a bare operator is problematic and that a Distributed Deletion account is preferable (they also argue against a treatment according to which both split parts are base-generated in situ, but for lack of space I will not review their critique of such approaches).

Movement theories posit extraction of an element $x$ out of a constituent $y$. Although problematic for pre-Abney (1987) theories of NPs, extraction of Bücher in (39) is no longer problematic now we have a better understanding of the internal architecture of noun phrases (Bücher is not a submaximal projection).

(39) [Bücher], habe ich [keine ti] gelesen.

As pointed out by F&C, the case of PPs is more complicated. Since (or rather on the assumption that, see below) the extracted preposition and the determiner do not in fact form a constituent, like others F&C assume remnant movement (in the sense of den Besten and Webelhuth, 1990; Müller, 1998, etc.). First, the nominal is extracted from the PP, then the remnant [na kakav ti] raises to Spec-CP.

(40) [Na kakav t] je Ivan [krov] skočio t,
on what-kind has Ivan roof jumped
‘On what kind of roof has Ivan jumped?’

In other words, this case reduces to the previous one. We have extraction of a nominal. The only difference between (39) and (40) is that in (40) (further) movement is required (but not in (39)).

The arguments that F&C put forward against the traditional movement account are as follows. First, they notice that the two split parts can contain more phonetic material than fits into a single constituent. In (41a) two prepositions surface, while in (42a) two determiners appear. Full topicalization is not possible when the decuplicatated element is present: preposition doubling is not possible within one consituent (41b) and the indefinite article and
the negative quantifier *kein* compete for the same position in German, therefore they cannot appear together (42b):

(41) a. In Schlössern habe ich noch in keinen gewohnt.
    'As for castles, so far I have not lived in any.'
    b. *In keinen in Schlössen haben ich gewohnt.

(42) a. Einen amerikanischen Wagen kann ich mir keinen neuen leisten.
    'An American car can I afford no new.'
    b. *Keinen neuen einen amerikanischen Wagen.
(Fanselow and Čavar, 2002, p. 71)

The second problem concerns extraction out of PPs. These are normally islands for WH-extraction (43b), topicalization (43c), and scrambling (43d).

(43) a. Ivan se popeo [PP na veliko drvo].
    'Ivan climbed on a big tree.'
    b. *Što se Ivan popeo [PP na veliko t].
    c. *Drvo se Ivan popeo [PP na veliko t].
    d. *Ivan se drvo se popeo [PP na veliko t].
(Fanselow and Čavar, 2002, p. 72)

These examples are taken to suggest that in (44) the nominal is not extracted out of the PP:

(44) Na veliko se Ivan drvo popeo.
    'On a big tree Ivan climbed.'
The same kind of problem arises in the case of split-topics in German. For instance, these do not respect three types of islands (I discuss only one of them, i.e. the subject island. I refer the reader to F&Ć (2002) for the remaining two). (45) shows that subjects (of non-unaccusative verbs) are islands for the extraction of PPs. Fanselow (1988, 1993) argues that subjects can nevertheless be split up (46).

(45) a. *[An **Maria**]haben mir [**keine** Briefe ti] to Mary have me no letters gefallen. pleased.
b. *[An **Maria**], hat mich [**kein** Brief ti] to Mary has me no letter erschreckt. frightened

'No letter to Mary has frightened me.'
(Fanselow and Ćavar, 2002, p. 72)

(46) a. **Briefe an Maria** gefallen mir **keine**. letters to Mary please me no

'As for letters to Mary, they do not please me.'
b. **Briefe an Maria** haben mich **keine** erschreckt. Letters to Mary have me no frightened

'As for letters to Mary, they have not frightened me.'
(Fanselow and Ćavar, 2002, p. 72)

F&Ć demonstrate that, although split-topics do not exhibit strong islands effects of the subject condition kind, they respect the complex noun phrase kind (47).

(47) *Bücher habe ich [eine Geschichte dass book have I a story that sie **keine** liest] gehört. she no reads heard
(Fanselow and Ćavar, 2002, p. 78)

According to F&Ć (2002), the apparent paradox (evidence for movement and evidence against movement) is solved in the following way. Movement is involved in split constructions (which is reflected by the availability of
copies), but movement is not out of a constituent. "A movement barrier \( \Sigma \) does not block the formation of a split XP if and only if \( \Sigma \) itself is the XP to be split up" (F&C, 2002, p. 13). Although sympathetic to the idea that no extraction out of an element is ever involved in split constructions (for independent reasons, see discussion below), I do not actually think that there is a paradox in the first place. Many native speakers of German that I have consulted do not accept sentences such as (46). The status of these sentences is thus not clear. In French split constructions, extraction from a subject position is clearly unavailable, as shown by (48).

\[
(48) \quad \ast \text{Combien, tu penses que t, de } \text{de personnes ont éternué?} \quad \text{'How many people do you think sneezed?'}
\]

Second, it is not actually clear that examples in (41a) and (42a) can receive an account on the DD approach, because the two elements are certainly not two identical copies created by movement. In fact, the example in (41a) is reminiscent of the case in (11), repeated here. In this example, two determiners surface.

\[
(11) \quad \text{To TO KOKINO agorase to the-ACC.NEUT.SG red-ACC.NEUT.SG buy\textsuperscript{*PAST.3SG} the-ACC.NEUT.SG forema.}
\]

'dShe bought the RED dress (e.g. not the blue one).'

These examples in fact seem to suggest that two separate constituents are involved, each one headed by a different element: a determiner in the case of (11) and a preposition in the case of (41a). More precisely, the configuration before movement in (41a) for instance must be [In Schlössern] [in keinen] side by side. On this view, movement involves, not extraction of an element out of a constituent, but a whole phrase. We develop this analysis in Section 6.

The same account can be given for the case in (38). I would like to argue that this kind of example is not really good evidence for the claim that DD is a possible operation in the grammar. The moved element and the resumptive pronoun do not appear to be part of the same copy. For example, (49) is not possible.
Instead, we can think of the extracted element and the resumptive pronoun as forming a phrasal complex in the base (from which the nominal is extracted along the lines of Kayne, 2002 and Boeckx, 2003), or alternatively as involving movement of a null operator (Demirdache, 1992, 1997).

Third, the DD account overgenerates. The fact that some PPs can be split, but not others remains a mystery under such a view. In (50b) extraction of à combien is possible, but in (51b) extraction of en combien is not.

(50)  a. A combien de personnes, as-tu écrit ti?
    'To how many people have you written?'
  
    b. A combien, as-tu écrit ti de personnes?
    'To how many people have you written?'

(51)  a. En combien d’années, as-tu fini ta thèse ti?
    'How many years have you taken to finish your thesis?'
  
    b. *En combien, as-tu fini ta thèse ti d’années?
    'How many years have you taken to finish your thesis?'

The difference between (50b) and (51b) has to do with differences in thematic relations. What raises in (51b) is an adjunct, whereas an argument raises in (50b) (for other contrasts of this sort in split combien constructions and an explanation of these facts, see Mathieu, 2004).

One final problem is that in the case of split WH-constructions and pull splits in general, it is not clear that we are dealing with two different pragmatic functions. Devine & Stephens (2000) have shown that a pull split construction A ... B that leaves the order of A and B intact may arise whenever A bears a pragmatic function, while an inverted hyperbaton structure is possible only if A and B have a special informational value.

Interestingly, F&Ć do not appear content with the idea that there should be specific focus positions involved in the case of pull splits. In a footnote, they consider the idea that XPs are split because of their suboptimal phono-
logical properties. Following a personal communication made to them by Caroline Féry, they speculate that two prominent accents should not be adjacent in a string and XP-splitting follows from that. If an NP has two independent, but otherwise similar, foci, it must realize two prominent accents. The splitting of the phrase avoids a situation according to which these two accents would be too close to each other, since they are otherwise identical. Although not spelled in any detail, the idea behind F&C’s remark about adjacency of prominent accent must be the process of haplology well-motivated in the domain of morphology, and which consists of the avoidance of repeated morphemes. That haplology should be extended to the domain of syntax has recently been given full empirical support in Neeleman and van de Koot (2002). In the case at hand, the hypothesis is that haplology interacts with other phonological properties, e.g. prosodic structure and thus that it sometimes depends on the suprasegmental properties of the complex word in question, such as syllabic structure and stress.

This idea is very interesting and although it might seem unfair to pronounce a judgement on a theory that is not developed yet, their proposal has prompted me to make a possible link between hyperbaton and haplology. I believe that the suggestion is worth pursuing a priori. However, it will turn out to be incorrect for reasons that will be discussed in the section after next, where an alternative phonological proposal suggested by reviewer #2 is also assessed.

5. Phonological account III: Hyperbaton and Haplology

In this section, I explore the relation between hyperbaton and haplology. What needs to be establish is whether XP-splitting is due to the avoidance of two identical prosodic forms. The answer is negative. There are mainly two arguments against the view that haplology is involved in hyperbaton: (i) in an interrogative where at least one element has raised to Spec-CP, the two split-XPs do not in fact receive identical accents; (ii) isomorphy in stress patterns is neither sufficient nor necessary for XP-splitting.

First a word about haplology. Haplology is a deletion process best described as the avoidance of identical phonetic or phonological material in morphologically complex words. It occurs in almost any language with enough morphology to create phonetically identical sequences which requires adjacent phonemes to be contrastive. The principle is reminiscent of the Obligatory Contour Principle in phonology (Leben, 1973; Goldsmith,
1979; and much subsequent work). For example, the existence of Greek
ampʰoreús beside Homeric ampʰipʰoreús 'two-handled pitcher or jar' has
been explained by haplology. In (52) examples from English can be found:

(52)  a. *feminizize feminize
    b. *minimumizize minimize
    c. *metathesisizize metathesize

Haplology appears not to be totally universal in that it is not only language-
specific but construction specific. More precisely, it is *affix*-specific. This
means that there are many exceptions. For example, in German adjectival
inflection sequences such as eigen-en 'own.pl' are possible (Plag, 1999).

At the morpho-syntactic level, well-known examples include the sen-
tences like (53) and (54). In Mandarin Chinese (53) the perfective marker le
and the particle le, which marks a 'new situation', trigger deletion when
adjacent (Yip, 1998 and references cited there). Grimshaw (1997) points
out that in some dialects of Spanish a sequence of a reflexive and an im-
personal clitic, expected to surface as se se, in fact surfaces as a single clitic
(54).

(53)  Bing dou hua le (*le).
    ice all melt PERF CHANGE-OF-STATE
    'The ice melted'.

(54)  Se (*se) lava.
    one oneself washes
    'One washes oneself.'

Like in the case of affixes, the process of haplology at the morpho-syntactic
level is not completely rule-governed (see Neeleman and Van de Koot,
2001 for details).

Pushing the idea that there is a parallelism between hyperbaton and hap-
lology would lead us to the following two schemas. (55) for split WH-
constructions and (56) for split topics.

(55)  ↓  ↓
      FOCUS FOCUS
      na jaki=WH dach=Foc
The idea is that because the two adjacent elements both receive a prominent accent, they cannot remain side by side. Here one hidden assumption behind F&C’s suggestion is that, although a topic, the bare extracted element receives a prominent accent.

However, as pointed by reviewer #1, avoiding identical tones is not the only (and perhaps not even the most plausible) way of spelling out a phonological account. Rather, topicality and focus may be linked to specific tones (on this view the extracted bare topic and the stranded focused element bear distinctive tones), and splitting up noun phrases may be a way of making the specific tone melody easier to pronounce. In other words, the pragmatic roles which the parts of the Noun Phrase bear may imply a certain contour of prosodic phrasing, and the splitting of noun phrases may serve the need of balancing the prosodic phrases in a clause. According to this approach, haplology is thus irrelevant. I shall argue, however, that this alternative phonological account cannot be on the right track.

But before we come to that, let me point that a problem arises in connection with (55) if we are to follow F&C’s conjecture. In a split question, the raised WH-element does not appear to involve a prominent accent; only the in-situ element does.

(57) Combien, as-tu lu t de LIVRES?
'How many books have you read?'

Let me say a little more about focus to illustrate the point more clearly. The notion of focus presented here stems from Chomsky (1971, 1976), Jackendoff (1972) and Zubizarreta (1998) – see also Reinhart (1995) and Neeleman and Reinhart (1998). In particular, I adopt Zubizarreta’s recent thesis about focus. According to her analysis, in Germanic and Romance, the most embedded word in the sentence receives default (weak) focus. This is made to follow from the Nuclear Stress Rule (NSR):³
(58) **Nuclear Stress Rule** (Romance)

Given two sisters $C_i$ and $C_j$, the one lower in the asymmetric c-command ordering is more prominent.

(Zubizarreta, 1998, p. 150)

Take French as an example. To a question like (59a), an answer such as (59b) is appropriate.

(59)  a. 'What did you do?'
   
   b. **Nous avons rendu le livre [à MARIE]$_F$**.
      we have returned the book to Marie
      'We returned the book to MARIE.'

The symmetry between syntactic ordering and phrasal prominence may be broken because of an independent requirement that a focused constituent must contain the most prominent element in the sentence. If *le livre* receives focus, the PP *à Marie* is defocalized and thus becomes 'metrically invisible'. Then, *le livre* is more prominent (the defocalized element is in italics):

(60)  a. 'What did you return to Marie?'
   
   b. **Nous avons rendu [le LIVRE]$_F$ à Marie.**
      we have returned the book to Marie
      'We returned the BOOK to Marie.'

This is made to follow from the **Focus Prominence Rule** (FPR):

(61) **Focus Prominence Rule**

Given two sister nodes $C_i$ (marked [+F]) and $C_j$ (marked [-F]), $C_i$ is more prominent than $C_j$. (Zubizarreta, 1998, p. 150)

In languages like Spanish, all phonologically specified material is metrically visible. Spanish has recourse to a different mechanism to resolve cases of conflict between the FPR and the NSR:

(62)  a. **Volvimos el libro [a MARIA]$_F$.**
      returned the book to Maria
      'We returned the book to MARIA.'
   
   b. **Volvimos a Maria, [el LIBRO]$_F$.**
      'We returned the BOOK to Maria.'
The PP *a Maria* undergoes so-called P-movement which is prosodically motivated.

As Zubizarreta shows, the case of French is in fact more complicated, since it is also possible in French for a defocalised element to undergo P-movement:5

(63) Nous avons rendu à Marie, [le LIVRE]p t.
  we have returned to Marie the book
  'We returned the BOOK to Marie.'

Importantly, Germanic and Romance focus is licensed prosodically in statements, but syntactically in questions. A fronted WH phrase is licensed in virtue of occupying the specifier position of a functional category bearing the feature [+WH] (i.e., via the feature-checking mechanism) (Zubizarreta, 1998, p. 92). According to Zubizarreta, whereas in statements, the nuclear stress is contained within the focused constituent, in questions it is contained within the presupposed part of the sentence. I assume that even in the case of split-WH constructions. French single-WH-in-situ constructions, focus is licensed syntactically. So, it is not the case that the bare WH operator is licensed prosodically. The FCP is revised accordingly:

(64)  **Focus Prominence Rule**
  Given two sister nodes $C_i$ (marked [+F]) and $C_j$ (marked [-F]), $C_i$ is more prominent than $C_j$, unless $C_i$ is a WH phrase and is syntactically licensed by the WH head of $C_j$.

In summary, in an interrogative the raised element that targets the Spec-CP position is not sensitive to prosodic structure. Since it is not licensed prosodically, but syntactically, the Focus Prominence Rule is irrelevant in the case at hand. This indicates that at least in the case of split-WH constructions, haplology has nothing to do with the availability of splitting.

It also turns out that splitting can occur even when two adjacent elements are contrastive and therefore should be fine together. For the haplology account, this means that the notion of tonal identity as relevant for splitting is not obligatory. For example, the in-situ equivalent of (11) is equally possible in Modern Greek. The element *KOKINO* receives contrastive focus while *forema* receives a informational focus interpretation. Splitting should not be possible, but it is (cf. (11)).
(65) Agorase to KOKINO to buy, PAST.3SG the-ACC.NEUT.SG red-ACC.NEUT.SG the-ACC.NEUT.SG forema.
dress-ACC.NEUT.SG
‘She bought the RED dress (e.g. not the blue one).’

Examples from other languages illustrate more or less the same point, but this time they provide counter-arguments to the specific tones account (from reviewer #2). (66) is a special type of NP-construction in Sardinian where the head noun is introduced by de and placed to the right of a modifier or complement which, in other constructions, would normally follow the head noun (cf. Jones, 1993):6

(66) a. Préstami sa tua de pinna.
lend-me the your of pen
‘Lend me YOUR pen (i.e. not his).’

b. Keljo comporare sa ruja de mákkina.
‘I want to buy the RED car (e.g. not the blue one).’
(Jones, 1993:76)

This construction is fairly common in colloquial Sardinian and is used primarily to emphasize the modifier (sa tua and ruja are contrastively focused and receive heavy stress) at the expense of the head noun (which is always unstressed).7 The crucial observation is that the modifier complex can be detached from the NP despite the fact that sa manna is stressed and de ampulla distressed. These examples invalidate the specific tones phonological account.

(67) a. Appo postu sa manna de ampulla
have-1SG put the big of bottle
in mesa.
on table

b. Sa manna appo postu de ampulla in mesa.
‘I have put the BIG bottle on the table (e.g. not the small one).’ (Jones, 1993:78)
Further evidence against phonological accounts is that a split construction has very different properties from its full movement counterpart. To mention only one of them, split constructions exhibit intervention effects (Obenauer, 1976, 1983, 1994; Rizzi, 1990; de Swart, 1992; Honcoop, 1998; Butler & Mathieu, 2004a), whereas the full movement alternative does not.

\[(68)\]  
a. **Combien de livres, n'as tu pas lu t?**  
'bHow many books have you not read?'

If splitting is motivated by prosodic structure, then it becomes a mystery why intervention effects should start appearing in split constructions. It is generally accepted that island and intervention effects are core (narrow) syntactic or for others semantic phenomena that have nothing to do with PF constraints.

To summarise, phonological accounts have difficulties explaining most properties associated with split constructions. The trigger for splitting does not appear to have anything to do with prosody or tonal properties of the moved elements. It thus appears to be the case that a bare operator movement account is unavoidable.

### 6. An alternative account

In this section I wish to address the following puzzle: if we cannot steer away from the fact that split XP-constructions arise via movement (or base-generation) of the bare operator (or adjective or noun) involved in hyperbaton, then it becomes a mystery why pied-piping of both the split element and the nominal or other element with which it is associated should ever raise. Presumably, the element that has undergone raising has checked the relevant features associated with C. For example, in (27b) *na jaki* has checked the strong D(WH) feature of C. Once features have checked and deleted, they are no longer accessible to the computation (cf. Chomsky, 1995). I follow essentially Mathieu & Sitaridou (2004a, b) for the question as to why splitting is possible in the first place, and Butler & Mathieu
(2004b) for the triggers behind movement of the bare operator and for why full pied-piping is possible.

6.1. The two DP hypothesis

Following and adapting a series of unrelated proposals (Fanselow, 1988; Androutsopoulou, 1997; Van Geenhoven, 1998; and Devine and Stephens, 2000), Mathieu & Sitaridou (2004a, b) – M&S, henceforth – put forward the hypothesis that two XPs are involved in hyperbaton: an NP and a DP (thus incidentally the Left Branch Condition is not violated).^8 Whereas on Devine and Stephens’ view the two DPs are in apposition, M&S argue that the two XPs are part of a hierarchical structure (on their view, Classical Greek is thus a configurational language). The structure that they propose for split-DPs has the advantage to conform to the well-accepted view that phrase structure is binary, and secondly it allows Φ-feature matching between the first and the second XP. The DP consists of a modifier (i.e. an adjective) and an empty nominal. Following Devine and Stephens (2000), the modifier is referred to as ‘null head modifier’, which definition can be given as follows: a modifier that can stand by itself in place of a noun phrase without the support of a noun or an overt pronoun. The idea that it is a whole XP that moves rather than a part of a constituent is most obvious in the case of bare adjectival extraction, since not only the adjective raises, but so does the determiner (cf. (10b) and (11)).

M&S adopt Androutsopoulou’s (1997) basic insight that DP-splitting is possible in Modern Greek because null head adjectives/DP fragments are available independently (M&S add to this generalisation the connected fact that Determiner Spreading is also possible because of the availability of noun ellipsis). In English very few null head modifiers/DP fragments are possible, which explains why DP-splitting is virtually impossible. Whereas (69a) is possible in Modern Greek, (69b) is not possible in English (one support is needed).

(69) Which dress did you buy? Speaker A
    a. to kokino Speaker B
       the.acc.neut.sg red.acc.neut.sg
    b. *the red.
No agreement marking is present on English red, which explains why noun ellipsis is not possible (the empty nominal cannot be licensed).

The second XP is an NP; it contains a bare noun that behaves like a predicate rather than an argument (for full details about the predicative nature of the stranded nominal, see Mathieu, 2002, 2004; Mathieu and Sitaridou, 2004a).

Furthermore, M&S argue that the modifier is base-generated in the predicate position within a Small Clause, and that it then undergoes predicate inversion. Motivation for such a structure comes from the fact that splitting is possible only with predicative adjectives. Non-predicative adjectives cannot be split, as shown by (70).

(70) *TON IPOTITHEMENO_1 t_1
    the-ACC.MASC.SG alleged-ACC.MASC.SG see.PAST.1SG
dolofono.
murderer-ACC.MASC.SG
'I saw the ALLEGED murderer (e.g. not the real one).'

Besides, only predicative adjectives can be used as fragments, as (71a) shows.

(71) Which criminal did you arrest? Speaker A
    a. *ton ipotithemen. Speaker B
       the-ACC.MASC.SG alleged-ACC.NEUT.SG
    b. *the alleged.

The technical implementation of their proposal is as follows. In (72a) the subject of the Small Clause is forema ‘dress’ while kokino ‘red’ is the predicate. The adjective kokino is part of a DP that contains a determiner and an empty nominal standing for forema. The double DP analysis does not follow from den Dikken’s (1998) original analysis of DP internal predicate inversion, but is motivated by the facts about DP-splitting (namely, that what raises is not an adjective, but a DP). In those dialects/registers where to does not surface they assume that the head of the Small Clause is simply not spelled out. The nominal copula is not spelled out either in Greek. In languages like French it surfaces as de (den Dikken 1998). They also give the structure for the Classical Greek example (6b) in (72b). In this case, tina is the predicate while dynamin is the subject of the Small Clause (e stands for the null head; coindexation shows binding of the null head by the nominal).9
The predicate undergoes inversion as shown in (73a) and (73b). In this case, they assume it raises to the specifier of an agreement projection, which following den Dikken they call FP. Adjectival agreement in Modern Greek is rich and therefore the movement is triggered by an EPP feature on F.

This is a variant of what Alexiadou and Wilder (1998) have proposed for predicative adjectives. The difference with M&S's proposal is that they assume that no CP is projected and that the second to is the spell-out of the head of the Small Clause. Determiner Spreading is thus a misnomer.

Next, in order to account for the focus reading of split-constructions, M&S assume that the predicate further raises to Spec-DP, which, like many others, they take to be an A'-position in Modern Greek (for DP-internal focus and topics in Greek, see Horrocks and Stavrou, 1987, and for other languages, Cinque, 1980; Szabolcsi, 1983; Stowell, 1991; and Giorgi and Longobardi, 1991). M&S assume that movement of the adjectival complex is forced by an EPP feature present on D. This EPP feature is correlated to the richness of the adjective involved in the empty nominal complex. Finally, since the predicate raises as high as Spec-DP, further raising of the predicate is possible, in which case we get a split-construction. The last step is not feature driven, see Mathieu and Sitaridou (2002) for details.
To recapitulate, the steps of a split-DP derivation are the following: (i) the extracted element must be an adjective, and not a determiner; (ii) rich agreement on the adjective is compulsory so that the empty noun can be licensed; (iii) the adjective undergoes inversion and raises to Spec-FP because of an EPP feature on F; (iv) the predicate raises to Spec-DP because of an EPP feature on D; (v) the predicate further raises to the C area.

It is interesting to note that in their 2002 paper F&Ć report that the stranded element in a German split-topic construction must often bear rich inflection and that this correlates with noun ellipsis (in fact, as they point out, for German the observation is an old one, cf. Haider, 1985).

\[(76)\]

\[
a. \quad \text{Geld hat er \textit{keines}*/kein.}
\]

\[
\text{money has he no}
\]

\[
b. \quad \text{Er hat \textit{keines}*/kein aus Deutschland.}
\]

\[
\text{he has none from Germany}
\]

(Fanselow & Ćavar, 2002, p. 93)

From these data, they conclude that the split element takes the shape of a well-formed complete independent noun phrase. However, if I understand their suggestion correctly, they relegate these inflectional properties to a post copying and deletion level, thus leaving aside the possibility that it is these properties (i.e. agreement, independent phrase) that are responsible for the existence of split constructions. The fact that the two parts of the noun phrase in a split construction behave like two independent XPs motivate an account like the one presented in this section, and if it is on the right track, the DD account simply becomes superfluous.

6.2. Triggers and semantics

In this final section I wish to concentrate on the motivation behind rising of (at least) one element in Spec-CP in the case of WH-elements. Here, I essentially follow Butler and Mathieu’s (2004b) analysis.

Checking of the EPP feature associated with Q/WH appears to be universal (cf. Watanabe 1992; Chomsky, 1995). However, the way such checking is achieved can vary from one language to another. It can be via Merge: in-situ languages like Chinese have Q particles that can be base generated in the C domain; or via Move: in multiple WH questions at least
one question word needs to raise to Spec-CP, while in single WH questions raising of the single WH element is necessary.

Since French does not have question particles, movement of material susceptible to check the EPP feature in C is standardly required for a question interpretation. That is, minimally, a WH element should raise. The case of split \textit{combien} constructions is a good illustration of this. However, it is also possible for no morphological element to be present in Spec-CP, as (77a) illustrates. In such cases a special intonation is required, which wclain satisfies the visibility requirement for the interrogative. That is, the special intonation pattern signals the presence of a null operator that is able to check the EPP feature associated with Q/WH (cf. Cheng and Rooryck 2000). It follows that a WH in-situ question like (77a) gives rise to a split configuration, much as a split \textit{combien} construction would (77b). Thus, visibility is not only achieved morphologically, but also phonologically. This shows that phonology is not completely irrelevant for the cases at hand. However, it must be stressed that the visibility requirement is encoded, and does not simply follow from phonology.

\begin{equation}
(77) \begin{align*}
\text{a. } & [\text{Op Elle a vu qui}]? \\
& \text{'Who has she seen'}?
\end{align*}
\end{equation}

\begin{equation}
\begin{align*}
\text{b. } & \text{Tu as lu combien de livres?} \\
& \text{'How many books have you read'}?
\end{align*}
\end{equation}

That a special intonation is required for signaling interrogation is independently motivated. In French, alongside the possibility of inserting a Q particle (\textit{est-ce que}) (78a) and inverting the subject and the verb (78b), there is a third option for asking a yes-no question, that of using a rising tone (78c):

\begin{equation}
(78) \begin{align*}
\text{a. } & \text{Voulez-vous un café?} \\
& \text{want-you a coffee}
\end{align*}
\end{equation}

\begin{equation}
\begin{align*}
\text{b. } & \text{Est-ce que vous voulez un café?} \\
& \text{Q particle you want a coffee}
\end{align*}
\end{equation}

\begin{equation}
\begin{align*}
\text{c. } & \text{Vous voulez un café?} \\
& \text{you want a coffee}
\end{align*}
\end{equation}

'Do you want a coffee?"
In Japanese *ga* is a marker that indicates that the subject represents new information. On the other hand, *wa* is used for old information (Kuno 1972). In (79a), the generic subject counts as old information. In (79b) *John* is treated anaphorically, thus it represents old information. (79c) is odd, unless it is contrastive, e.g. ‘rain is falling, not snow.’

(79) a. Kuzira  wa  honnyuu-doobutu desu.  
whale  WA  mammal  is  
'A whale is a mammal.'

b. John  wa  watakushi no  tomodati desu.  
John  WA  I  's  friend  is  
'John is my friend.'

c. #Ame  wa  hutte  imasu.  
rain  WA  falling  is  
'It is raining.'

In (80), *ga* is for descriptive use or represents exhaustive interpretation/new information.

(80) John  ga  kimesita.  
John  GA  came  
'John came.'

Another illustration comes from Berber. The item *ay* is used as a focus marker in that language (Ouhalla, 1990).

(81) a. MOHAND  ay-ushi-gh i.  
Mohand  AY-saw\(_{\text{1SG}}\)  
'I saw MOHAND.'

b. Nni-gh-ak  qa  TIN’ASHIN  ay-ushi-gh  
said\(_{\text{SG}}\)-you  that  money  AY-gave\(_{\text{1SG}}\)  
to Mohand.  
'I told you that I gave Mohand MONEY.'

Hungarian is a language where focus is encoded syntactically. In that language, focused phrases move to the Comp domain, as shown by (82a), and cannot remain in-situ, as illustrated by (82b). In addition, the focused phrase must be adjacent to the verb as shown by (82c).
In English, focus is encoded phonologically. It involves special stress patterns. In (83b), Mary receives default main stress, whereas in (83b), Mary is heavily accented.

In sum, asking a question is like focus, it can be achieved morphologically, syntactically or phonologically. The question that arises is why there should be a special marking for questions (or focus generally). The hypothesis is that the visibility requirement associated with the Q/WH feature is exactly this: the speaker has to make explicit that this criterion is met. That is, asking an interrogative, just like focus, cannot be carried out covertly. Information/communication is necessarily overt. In the case of split constructions, the bare extracted element checks the relevant feature: the visibility requirement has been met and the competent addressee has the relevant cue in order to interpret the sentence (see also Platzack 1998).

I now turn to the question as to why pied-piping is required when an intervener is present? Here I follow Butler and Mathieu (2004a) – B&M, henceforth. Like Honcoop (1998), B&M take the dynamic semantics stance on interpretation as their starting point. This is basically the observation that, for a discourse to be interpretable, information pertaining to the discourse itself is needed. They call this usage information. An archetypal example is the contrast between (85) and (86) (due to B. Partee).

(85) I dropped ten marbles and found all of them, except for one. It is probably under the sofa.

(86) I dropped ten marbles and found only nine of them. ??It is probably under the sofa.
The first sentences in (85) and (86) are truth-conditionally equivalent: they provide the same information about the world. But unlike (85), the first sentence of (86) does not give sufficient usage information to allow for the resolution of the anaphoric link.

B&M adopt a perspective on usage information due to Dekker (2002) that sees it as providing information as to the possibly intended referents that support an utterance (the ideas of Dekker 2002 are in turn based on ideas from Kamp 1990; Van Rooy 1997; Stalnaker 1998 and Zimmermann 1999). Dekker shows how adding such general pragmatic information to a classical, referentially based notion of meaning has the effect of deriving a dynamic semantics (and this without any shift in the notion of meaning). For example, the occurrence of one in the first sentence of (85) comes with an usage instruction and so is assumed to make available an ‘intentionally present’ individual (i.e. the lost marble) that the pronoun in the second sentence can take as its referent. In contrast, (86) is bad because there is no such intentionally present individual. Note that the referential intentions associated with the use of indefinites like one in (84) are to be attributed to the speaker, who is supposed to be able to support what she says. The hearer has no such requirements, and so can generally take an occurrence to introduce a new subject. Now consider the speaker’s support for (87).

(87) There isn’t a person in sight.

This can be characterized as a ban on an update of her state with (88).

(88) A person is in sight.

Consequently, the requirement of referential intentions is replaced by the requirement to have evidence that she, as a hearer, bans any update with (88), no matter who, with whatever intentions, would try to attempt to bring about such an update. This situation arises because the usage instruction a person makes available is assumed to only be visible from within the scope of the negation. From outside negation’s scope, $\exists$ is opaque, accounting for the absence of referential intentions, which in turn accounts for the absence of any potential anaphoric pick up.

B&M argue that there is a related visibility requirement on the C domain for interrogative sentences to meet. They propose that this arises because cross-linguistically interrogatives come with a bare interrogative operator Q base generated as the highest element. Thus, all interrogatives give rise to
split configurations. To have values under question to impart to variables, Q is taken to rely on the presence of ‘wh’ usage instructions. Whenever WH-phrases carry wh, they must be in a visible relation with the C domain, in the sense of not falling underneath a scopal operator, for Q to function as a binder of WH variables. This explains why (89) is well-formed, but (90) is not.

(89)  **Op** Combien de livres, n'as-tu pas lu t?  
Q **wh** of books NE-have-you **scopal-op** read**MAS.PL**  
Q x[y[wh x = |y| books(y)] Neg you_read(y)

(90)  *Op Combien, ’ n'as-tu pas lu t de livres?  
Q **wh** NE-have-you **scopal-op** read of books  
Q Neg (you_read(y) [y[wh x = |y|books(y)])

(89) is bad, with Q left to ask a question without the support required to bind any variables. That is, (89) is incoherent. On the one hand, because of the intervening scopal operator, it fails to show any wh usage information, and thus no values under question are introduced (hence the plain Q in the interpretable representation), and on the other hand, it really does have a WH-phrase primed to receive values under question (the free x). The approach generalizes as in (91) and can be seen as a rationalization of Pesetsky’s (2000) Intervention Effect Condition and other related proposals.

(91)  Op [Matrix ... (**scopal_op**) [ ... [Restriction ... usage-instruction ... ] ... ] ... ]

Stated thus, the approach is close to a reworking of Honcoop’s (1998) analysis, which can be pictured as in (92).

(92)  Op x[Matrix ... (**scopal_op**) [ ... [Restriction ... φ ... ] ... ] ... and x equals dynamically bound y]

Under this perspective, a usage instruction equates approximately to the function of a dynamic existential quantifier. That is, it ensures that a new value will be present in the evaluation.

Cases of split-topics in German are to be treated differently, however. This is because what is stranded is an indefinite. The intervention facts that such constructions display easily fall out of systems of dynamic interpretation à la Honcoop (1998). On the other hand, the case of PP fronting in
Serbo-Croatian and in other languages are amenable to the usage conditions analysis described above.

With these considerations in mind, let us now turn to one last question (another that was posed at the outset): why raising of the nominal in French is ever possible if bare operator movement can satisfy the visibility requirement? B&M have established that intervention effects arise out of the interpretation procedure crashing, and so syntax itself cannot be sensitive to intervention effects. It follows that the optionality syntax displays follows from it blindly applying movement to meet coverage demands. For example, the full DP movement in (89) is necessary, else the speaker would lack the ability to ask the question, there being no grammatical split alternative ((90) is ruled out since it brings about an intervention effect). In contrast, for a question without an intervener, full movement is not required, as the speaker can ask the same question with a split-DP. It follows that syntax allows potentially vacuous movement 'just in case' the worst happens and an intervener is present in the structure.

7. Conclusion

This paper was an attempt to link hyperbaton with haplology. However, I have reviewed a number of arguments that indicate that hyperbaton has nothing to do with haplology. It was argued that with respect to interrogatives, the split version is the default alternative. The trigger for movement is a standard strong +WH/Q feature in the C domain. If this assumption is correct, then it becomes a mystery why the nominal with which the bare operator is associated should ever raise, since economy is satisfied. Once a feature has been checked it is not longer accessible to the computation. Thus, raising of the stranded nominal could not be motivated. It was argued that raising of both the operator and the nominal is motivated by semantic considerations.


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1 In Classical Greek, it appears that Determiner Spreading was only possible when an adjective followed a noun, but the process was optional, and not obligatory like the case of Modern Greek.

2 The presence of *de* is usually required in many split constructions in French.

3 I concentrate here on Romance and ignore the differences between Germanic and Romance with regard to the NSR.


5 The fact that French allows both metrical invisibility and P-movement is seen a reflex of the fact that French is in a transitional stage of language change with respect to certain aspects of its prosodic properties. The metrical invisibility option belongs to one grammar, while the P-movement alternative belongs to another (on dual grammars, see Kroch 1989).

6 Reviewer #1 points out that these constructions are also possible in Italian.

7 The use of the singular suggests that these constructions are not analogous to partitive structures such as *una de sas pinnas meas* (‘one of my pens’).

8 The underlying structure M&S propose for split-DP constructions is closer to Fanselow’s earlier work on split-DPs. However, there are several crucial differences between his and M&S’s proposal. To account for split topic constructions, Fanselow assumes that, in German, two NPs are generated in the so-called Middle-field, one of which contains the empty pronoun *pro*. The other NP is non-referential, denoting a property, and is coindexed with *pro*. For the *pro* NP to satisfy Principle C of the Binding Theory (which excludes that referential expression are A-bound), the non-referential NP raises to the sentence-initial non-argumental position. Although there are two XPs, Fanselow argues that the Case Filter is not violated because the nominal is adjoined to *V* in order to get accusative case from the verb (it does not move there but is base-generated in that position). Thus, both NPs receive case. The stranded XP via government; the topicalized nominal via adjunction to V. As for the 0-Criterion, the claim is that it is not violated because it applies only to term-denoting argument NPs. Non-argument NPs without a 0-role are possible. Fanselow’s account faces several problem. As argued by Kuhn (1999), the reasons for case matching between the raised topicalized element and the remnant remain vague in Fanselow’s analysis. Although the two discontinuous elements form two separate units in split-topics, it has been observed that the two NPs have to agree in number, case and gender. The alternative solution proposed by M&S captures the agreement problem as well as the case problem in a straightforward manner, since the two XPs interact in a Spec-Head configuration where agreement and case properties can be satisfied.
In so-called N of N constructions, the nominal copula *de* surfaces in French. However, the head of the Small Clause is not spelt out (i). In English, both are available (translation of (i) and (ii)). On the other hand, as shown by (ii) in Modern Greek although the head of the SC is spelt out (as *o*, i.e. before *jatros*), the nominal copula is not morphologically marked (there is no element between *vlakas* and the second occurrence of *to*). According to den Dikken (1998) and Moro (1997), a copula is obligatory when predicate inversion arises. However, this does not appear to be the case in Greek. We discuss facts about the nominal and the clausal copula and its non obligatoriness in Greek in Mathieu and Sitaridou (2004b).

(i)  
*Cet idiot de docteur!*

that idiot of doctor

(ii)  
*Aftos o vlakas o jatros!*

that a idiot a doctor

'That idiot of a doctor!'

French is consistent in that respect in that the nominal copula also surfaces in bare adjectival constructions.

(iii)  
*Le grand, je veux de café latte!*

the tall I want of café latte

'I want the TALL café latte (i.e. not the small one).'</ref