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Études réunies par

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From unusual word order to phraseological pattern: the case of Predicator + Adjunct + Complement in English

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1. Introduction

There is a general rule of thumb in English grammar that you should not place an adverb or any other phrase between a Predicator (the main verb in a clause) and its Complement (a noun group with the function of object)[1]. Thus in the following pair of examples, (1a) appears to be more acceptable than (1b):
(1a) I **always** make the same thing.
(1b) ?I make **always** the same thing.
Interestingly, example (1b) comes from the British National Corpus (BNC). It is an authentic quotation from the French designer Jean-Paul Gaultier. This example raises a number of theoretical and empirical issues. But most speakers of English would agree that the word order Predicator + Adjunct + Complement (PAC) in (1b) is more unusual or 'marked' than the sequence Adjunct + Predicator + Complement (APC) in (1a). Grammarians usually explain this restriction either in terms of clause structure or the particular semantics of the Adjunct. However, my aim in this paper is to examine whether there are other factors at work. In particular, my hypothesis is that many Adjuncts (phrases which are neither Subject, Predicator or Complement) occur in PAC word order not because of syntactic constraints, but because they have been co-selected as stretches of more or less pre-constructed patterns.

This paper has two parts. In the first section, I examine the standard explanations for the restriction on PAC word order in English. In the second half, I set out an alternative perspective, which downplays purely syntactic or semantic explanations for the placement of Adjuncts in PAC position, and emphasises instead the more integrated role of Adjuncts in what appear to be lexicalised patterns. The notion of 'lexicalisation' is well-known in typology studies and historical linguistics (Brinton & Traugott 2005)[2]: it refers to the gradual coalescence of a complex grammatical sequence of words into a single, simple lexical expression. Examples range from lightly lexicalised phrases such as *after dark, take care,* moderately lexicalised compounds *afternoon, caretaker,* and finally completely lexicalised items *afterwards, careful*. In this paper, I would argue that many examples of PAC (as they are observed in a corpus such as the BNC) can be seen as sequences of signs which have undergone a degree of lexicalisation.

However, I would also go further than this, and argue that all instances of PAC are potentially examples of a more general 'phraseological pattern'. In this paper, the term 'phraseology' refers to a broad set of ideas which have emerged in systemic functional grammar (SFG, Halliday and Matthiessen 2004, Legallois & François 2006), as well as related work in corpus linguistics and phraseology studies (Stubbs 1995, Matthiessen 1998,

[1] Following the usual convention in Systemic Functional Grammar (SFG), the terms for structural functions (Subject, Predicate etc.) and semantic roles (Agent, Material Process etc) are capitalised here.
[2] In the SFG approach and in some other approaches, the term 'lexicalisation' also refers to the realisation of a cluster of lexical features as a lexical item (e.g. *I disagree*) as opposed to realisation by grammatical or other resources (e.g. *I don't agree*). I am not referring to this sense here.

Tucker 1998, Hunston & Francis 2000, Ball and Tucker 2004, Gledhill 2011). Among the core assumptions shared by these analysts are the notions, first formulated by Firth (1957) that:

a) the meaning of a word or sign does not have an independent value in an abstract language system, but is rather determined by its 'habitual context of use', i.e. its 'function in discourse',

b) each word or sign is used in a more or less predictable set of lexical contexts, its 'collocations', and

c) each text is made up of more or less predictable grammatical structures or 'colligations'. The combination of lexical collocation and grammatical colligation is a 'lexicogrammatical pattern'.

In this paper, I argue that all three notions can be adequately accounted for in terms of the **phraseological pattern,** here defined as 'a predictable (but also productive) sequence of signs which has evolved to express a conventional discourse function.' Each phraseological pattern takes the form of a particular lexicogrammatical structure (such as 'preposition + noun'), but the pattern's habitual context of use usually extends well beyond the lexical items or grammatical structure which make up the pattern. For example, the prepositional phrase *with relish* is typically found in either PAC position or PCA position in the British National Corpus. In each position, the phrase is associated with a different meaning. When *with relish* means 'with delight' it routinely co-occurs ('collocates') with the verbs *observe, quote, read,* and occurs ('colligates') more often than not in PAC position. On the other hand, when *with relish* refers to 'condiment, seasoning', it co-occurs with the verbs *eat, gobble, munch* and it tends to occur in PCA position. Thus while it might be predicted that each meaning of the phrase *with relish* is habitually used with a different set of verbs, it is surprising to learn that each particular meaning of the phrase is also associated with two different structural positions within the clause.

Observations such as these raise a number of issues for grammatical theory. However, before examining these questions, it is necessary to discuss the standard explanations that grammarians have proposed for PAC word order in English.

2. Standard accounts of Adjunct placement in PAC order

A n **Adjunct** can be defined as any element in a clause which does not express a core structural function (i.e. Subject, Predicator, Complement).[3] This entails various properties, such as: (a) Adjuncts are typically realized by adverbial and prepositional groups or, less typically, nominal groups and subordinate clauses (the last two are not explored in this paper), (b) Adjuncts are optional and thus not determined by other elements in the clause (this means that several can modify the same clause simultaneously), and (c) Adjuncts are mobile and can potentially occupy almost any position in the clause. However, this last property has a number of restrictions, largely because the different positions in a clause are contrastive and signal different meanings. In particular, as discussed below, there is one very general constraint in English, namely: an Adjunct rarely interrupts a Predicator and its Complement.

The restriction on PAC word order is not a universal constraint. For example, Adjuncts regularly occupy PAC position in French, and this is often unmarked or even the optimal word order, as can be seen in the following example (2a) taken from a French news channel ('LCI', 23 March 2007):

2a. La candidate PS à l'élection présidentielle critique **vertement** les hauts fonctionnaires proches des socialistes.

[3] In SFG, a distinction is made between Adjuncts at the rank of clause and 'modifiers' which have an adverbial function at the rank of group. Modifiers at the level of group are not considered here.

To render this in English, the optimal (but not necessarily obligatory) position for the Adjunct is in front of the Predicator, in other words the order APC:

2b. The Socialist Party candidate for the presidential elections **strongly** [literally 'greenly'] criticizes senior civil servants who are close to the socialists.

Examples such as these have suggested to formal and generative grammarians that Adjunct placement is dependent on the particular 'parameter settings' for each language. Thus in French, the standard position for clitic pronouns (both Subject and Complement) is in pre-verbal position (2c), whereas in English the position reserved for object pronouns is post-verbal (2d):

2c. La candidate PS à l'élection présidentielle **les** critique vertement [les hauts fonctionnaires proches des socialistes].

2d. The Socialist Party candidate for the presidential elections strongly criticizes **them** [senior civil servants who are close to the socialists.]

The pronominal positions of English and French are so fundamental to each language that very little other material is allowed to interrupt them. As far as English is concerned, this means that even adverbial particles (which 'belong' to the verb, so to speak) cannot be placed in PAC position in the presence of a pronoun (3a-b), although PAC position is available when the Complement is a noun group (3c-d):

3a. ?Pat gave **away** it.

3b. Pat gave it **away**

3c. Pat gave **away** the ring

3d. Pat gave the ring **away**.

How do formal grammarians account for the general restriction on PAC position in English? One major generative account (Ernst 2002) has suggested that PAC as a word order is essentially derived from some other more basic structure:

> *Any theory must account for a number of basic word order facts for English complements and postverbal adjuncts. First, adjuncts do not occur between the verb and a nonheavy direct object* […]. (Ernst 2002:207).

Ernst then discusses a handful of attested exceptions to this rule (2002: 208-209) in a section called 'non-canonical adjunct placement'. For example:

(4) They read **with relish** both T. Rex and the Crater of Doom and Passion of the Western Mind.

(5) Nathalie put **on the shelf** every piece of fiddle music she had collected in Nova Scotia.

Ernst does not comment on the potential ambiguity of *with relish* in (4). In addition, he does not mention the fact that *on the shelf* is an obligatory element in (5), introduced by a ditransitive / locative verb *put*. However, Ernst does make the important point that it is easier to place Adjuncts in PAC position before 'heavy' Complements and non-nominal Complements (i.e. clauses and prepositional phrases). Ernst thus proposes a heuristic to account for instances of PAC, which he calls the 'heavy-NP movement rule': when a noun phrase (NP) is heavy (longer or structurally more complex than the Adjunct), it is moved to the end of the clause:

> […] *orders in which a postverbal adjunct precedes a complement […] must be the result of rightward movement of the complement*. (Ernst 2002:226).

As a descriptive mechanism, this seems reasonable. However, Ernst is also claiming here that there are no explanations for PAC word order other than 'end-weight'. He thus shares an assumption common among many grammarians that the formal or structural features of a clause are the only relevant factors for non-canonical word order. As a corollary of this, it is

implicitly assumed that any example of non-canonical word order (such as PAC) is interchangeable with, and thus has the same meaning as the equivalent clause with canonical word order (APC or PCA). It is also interesting in this respect to note that 'end-weight' does not explain why PAC word order is not only possible but sometimes the optimal word order in languages such as French (as seen above for example 2a). In fact, the problem of PAC word order in French (Kayne 1975, Harris 1978, Mélis 1983) and the various mechanisms proposed to deal with it provided the initial impetus for most later work on 'movement' in the generative model (cf. the discussion in Boeckx 2006: 56-7). This is how the problem was expressed by Roberts:

> *How can X'-theory allow [Adjuncts] to intervene between the verb and its complement in the French examples […]? We certainly don't want to say that X'-theory allows French to have a different hierarchical structure inside VP as compared with English. Whatever the final verdict is on parameters of linear order, everyone agrees that hierarchical structure should not differ across languages*. (Roberts 1997: 32).

To save the 'adjacency condition' (the principle of a universal hierarchical structure across languages), Roberts gives an account of verb-movement for French in which the verb is generated first within a verb phrase 'shell' (VP), and then rises to 'inflection position' (IP), thus ensuring that the object is postponed after the adverbial, as in example (2a): *critique vertement les hauts fonctionnaires...* as opposed to (2b) *strongly criticizes senior civil servants*. Thus the difference between English and French, according to this account, would be that the V moves in French, but not English: only English auxiliaries are 'light' enough for VP-to-IP movement. This account has since been questioned (Alexiadou 1997, Cinque 1999). Nevertheless, the original point of Roberts' proposal, i.e. the principle of underlying movement as an explanation for surface word order, is still central to the generative model (Haegeman 2002, Boeckx 2006, Nakajima 2006). And, of course, many of these linguists still also share Chomsky's (1957) initial assumption that different word orders (for English, French and other languages) are derived from the same underlying structure.

I would argue that such a purely structural account of PAC is misleading. For the moment, it is sufficient to consider some counter-examples which suggest that end-weight cannot be the only explanation. For example, examples (6) and (7) below show that some Adjuncts can be quite comfortable in PAC position, despite being relatively 'heavy' in comparison with the Complement (these are taken from an early corpus-based survey by Jacobson 1964: 142-3, 181):

(6) But it is difficult to judge **in a cold and calculating way** one who suffered so much.
(7) It ties together **in a haphazard but useful way** a host of human experiences.

These examples are clearly 'marked', in that the Adjunct is given a degree of contrastive focus. But it is also significant that in (6) and (7) only a certain type of Adjunct is used (co-ordinated Manner Adjuncts, with 'way' as the pivotal element: *in a N and N way, in a N but N way*). Thus although end-weight is clearly an important explanation for many cases of PAC, it may also be the case that certain types of Adjunct, as opposed to others, fit more comfortably in PAC position.

The notion of end-weight was first proposed as an explanation for PAC word order by prescriptive and descriptive grammarians (Fowler 1926, Jacobson 1964, Quirk et al. 1985). In particular, Jacobson (1964) conducted one of the first large-scale corpus-based surveys of Adjunct placement. He explained PAC word order in the following terms: "The longer and heavier the adverbial phrase or clause is, the longer and heavier the object must be to balance it." (Jacobson 1964: 143). Although this account resembles Ernst's heavy-NP movement rule,

there is an important difference of emphasis: Jacobson is suggesting here that the different components of the clause are not pre-processed and then re-arranged, but rather come to balance each other out in the on-line production of the utterance. A similar point has been made by Hawkins (1994) and Wasow (1997), who emphasise the performer's as well as the audience's point of view in speech production, and question whether the performer needs to calculate the relative weight (or length, or structural complexity) of a sequence of clause elements before uttering them as a linear sequence. Wasow (1997: 81) concludes that "accounts of end-weight cannot be purely structure-based, but must take lexical factors into consideration." However, by 'lexical factors' Wasow is not referring to concepts of collocation or phraseological patterning. Wasow's approach is that of generative semantics: according to this view, the essential lexical meaning of an Adjunct determines the different positions that the Adjunct may occupy in the clause.

Up to this point I have considered what might be called **syntactic** accounts of PAC word order, that is to say explanations which reply on the structure of the clause. A second major category of explanation involves various **stylistic** factors. This includes a particular phenomenon known as 'prosodic detachment' (Huddleston & Pullum 2002: 577), that is to say examples of PAC in which the intonation contour of the clause is clearly interrupted. In the written language, this is sometimes marked by commas, as in (8) from the BNC:

(8) To clean up dirty land efficiently and cheaply will need**, above all,** pragmatism and moderation.

In this example, *above all* is given two types of focus at the same time. In the first instance, the Adjunct is emphasised by punctuation, and in the second it is given special prominence by being placed in marked PAC position (the alternative order, APC, would also involve prosodic detachment, but it would be in an unmarked position: …*will, above all, need*….). Although it is difficult to observe examples of prosodic detachment in a corpus of largely written texts, this type of emphasis must clearly be a major factor in many examples of PAC word order.

A related point has been made by Hannay (2007). He uses an example from Ian McEwan's *Amsterdam* in which the composer, Clive Lindley, prepares to go for an inspirational walk in the Lake District (here I present a shorter version of his example):

(9a) […] Clive stood to receive his packed lunch from the waitress who had brought it out to him. Such was the exalted nature of his mission, and of his ambition. Beethoven. He knelt on the car park gravel to stow **in his daypack** the grated cheese sandwiches**.** He slung the pack across his shoulder and set off along the track into the valley. (McEwan, Ian. 1998. *Amsterdam*. London: Anchor Books, p76.)

Hannay points out that instead of opting for this sequence, McEwan could have just as well placed the Adjunct in a 'newsworthy' or Rheme position, at the end of the clause:

(9b) He knelt on the car park gravel to stow the grated cheese sandwiches **in his daypack**.

Hannay suggests that by 'postponing' the Complement (in 9a), McEwan has chosen to contrast Clive Lindley's self-conscious *exalted mission* (with religious and romantic overtones) with the 'bathos' of such prosaic items as a *cheese sandwich*. Thus PAC word order in (9a) is a matter of stylistic choice: the author chooses to give contrastive focus to the Complement in end-position. I am broadly in agreement with Hannay's account, apart of course from his choice of the term 'postponement' (which recalls generative notions of 'detachment' and thus 'movement'). However, it is perhaps worth stating that part of the reason why PAC is a plausible word order in (9a) may also have to do with the fact that verbs like *stow, place*, *put* require an indirect Complement in order to express an end-point or 'location', and so it may also be the case that prepositional phrases may occur more comfortably in this position. A similar point can be made about Ernst's example of *put on the shelf* in (5), mentioned above. Thus in examples such as (5) and (9a/b), we are dealing with

phrases that do not correspond to Adjuncts in the traditional sense, but are in effect extensions of the Predicate or Complements with (in Halliday's terms) the semantic role of 'Range'.

So far I have briefly considered syntactic and structural accounts for PAC word order. A third important category involves **semantic scope,** that is to say the degree to which our interpretation of the Adjunct depends on its position relative to other elements in the clause. Many examples of scope do not involve Adjuncts but rather adverbials which are used as post-verbal or pre-nominal modifiers. In such cases, we are dealing with sequences which are not clear examples of PAC word order. Quirk *et al*. (1985: 612) mention a number of intensive or specifying adverbs such as *almost, always, just* and *only* which can either post-modify or pre-modify the following clause element. Thus *only* appears to express 'rightwards scope' in the following examples:

(10a) They **only** won one game.
(10b) They won **only** one game.

In (10a) the speaker expresses a disappointed comment about the act of winning (perhaps 'they' were expected to win more than one game). In (10b) the comment confirms the speaker's expectation that 'they' would not win more than one game.

The notion of 'scope' also refers to the particular impact of individual Adjuncts on the interpretation of the clause. Thus Quirk et al. (1985: 566, 612) cite examples of what they call 'domain' or 'process' Adjuncts, which are decisive in determining the type of process involved:

(11) The play presents **visually** a sharp challenge to a discerning audience.

In such cases, PAC does not appear to be a marked word order. This is probably also the case of 'obligatory' modifiers or extensions of the Predicator, as discussed in section 3.4 below.

I mentioned above that from a generative semantics perspective (Bellert 1977, Pollock 1989), the potential position of an Adjunct is essentially determined by its meaning. Thus as Jackendoff says "knowing the meaning of the adverb is sufficient to predict in what position it can occur" (1972: 67). This perspective is also adopted by Huddleston & Pullum (2002: 575-580), who propose a typology of Adjuncts according to positional distribution. Unfortunately, only a few of their examples involve PAC. In the following list, I have set out only the examples for which Huddleston & Pullum give PAC order (I have retained their marks for ungrammatical (*) and debatable (?) forms):

(12) (Manner) ?Contentedly they ?contentedly would contentedly watch *contentedly TV contentedly for hours contentedly.
(13) (Domain) Politically this ?politically will ?politically become ?politically very unpleasant politically.
(14) (Speech-act) Frankly this ?frankly is ?frankly becoming ?frankly a joke ?frankly.
(15) (Connective) However the plan however had ?however one serious flaw however.

Halliday & Matthiessen (2004: 133) have suggested that Modal and Conjunctive Adjuncts (as in examples 14 'Speech act' and 15 'Connective') fit more comfortably in PAC position than Circumstantials (12 'Manner', 13 'Domain'), because this corresponds to an important boundary in English syntax between the Mood (the Subject plus Finite element of the verb) and the Residue (the rest of the Predicate, including any Complements). But Huddleston & Pullum also make the interesting point that the proximity of an Adjunct to the Predicator is linked to the expression of a much more integrated type of process:

> […] *the closeness of the Adjuncts in linear proximity to the Predicator at the heart of a clause tends to correlate with the closeness of what the Adjuncts express to the content of the proposition.* (Huddleston & Pullum, 2002 : 576).

Huddleston & Pullum thus acknowledge that some Adjuncts contribute directly to the expression of semantic processes. However, this is not quite the same as stating that some

Adjuncts in PAC word order are co-selected as part of a longer 'lexicalised' pattern. It is to this idea that I now turn in the remaining sections of this article.

3. The role of Adjuncts in examples of PAC and in phraseological patterns

There has in fact been a considerable amount of research on the collocational and phraseological properties of adverbs and adverbial constructions (Kim 1963, Greenbaum 1969, Bäcklund 1973, Rissanen 1980, Douglas-Kozlowksa 1991, Virtanen 1992, Sick 1993, Tottie 1996, Cairncross 1997, Maniez 1998, Gledhill 2005). However, many linguists still seem to consider that Adjuncts are 'optional' and thus do not have much of a role to play in phraseological patterns. Even Hunston & Francis (2000), pioneers in the study of 'pattern grammar', choose to omit adverbial constructions from their general study of complementation in English, because:

> […] patterns of adverbs are hard to capture […and since] there is no parallel to complementation patterns, adverbs can be better described in positional terms. (Hunston & Francis 2000: 45-60).

But a number of recent studies have shown that not all adverbials are 'optional' and that, at least in some contexts, they have a role to play in complementation patterns. Lysvåg (1999) and Ball & Tucker (2004) have shown that adverbials of degree and intensity are involved in collocational patterns, typically expressing behavioural processes (*love deeply, get on famously*). From a historical perspective, Gisborne (2002:53) has argued that the verbs in examples like *feel badly, look solemnly, smell sweetly* have come to resemble phrasal verbs or light verbs, which are 'complemented by adverbs.' A similar point is made by Goldberg & Ackerman (2001) who use the term 'obligatory adverbs' for lexicalised phrases such as *to behave badly* and *to treat someone fairly*. The notion is even introduced briefly in Biber et al.'s general grammar of English (1999), where obligatory sequences such as *take into consideration* are labeled 'lexical bundles'. In section 3.4 below, I show that this type of construction is an important pattern in English, representing 30% of all examples of PAC in the British National Corpus.

In the remaining parts of this section, I explore the hypothesis that many Adjuncts (in the form of the adverbial and prepositional phrases) occur in PAC position in English not because they are selected as independent clause elements, but rather because they have been co-selected as part of a regular or 'lexicalised' pattern of speech. Terms such as 'lexical phrase', 'lexical pattern' and so on have often been discussed in SFG and corpus-based studies (for example in Tucker 1998, Hunston & Francis 2000, Legallois & François 2006). As mentioned in the introduction to this paper (following work by Frath & Gledhill 2005a/b and Gledhill 2011), I propose a cover term to refer to these different notions: the phraseological pattern.

In the following sections, I set out a survey of PAC sequences in the British National Corpus (BNC). Even though the BNC is tagged, it is not possible to find PAC sequences automatically, since items in the corpus are only marked up in terms of parts of speech. However, using the tool 'Query Builder' included with the BNC package, it is possible carry out an indirect search by looking for sequences of tags such as VV + AV0 + DT/NN (lexical verb + lexical adverb + determiner or noun), or VV + PRP + DT/ NN + DT/NN (lexical verb + preposition + determiner or noun + determiner or lexical noun). Searches of this type are rather coarse. They do not reveal examples of Adjuncts expressed as clauses or as nominal groups, and they throw up many thousands of examples involving Finite auxiliaries or modal verbs as well as the operators *have* and *be*. The sequence *have* + Adjunct + Complement is a frequent word order in English. Although it would be desirable to analyse sequences of this type (looking, for example, for constructions such as *to have* + *in mind* + noun group), for the purposes of this study I have decided to concentrate on examples in which the Predicate is

unambiguously a lexical verb. In order to isolate examples of PAC, it is necessary to carry out a search without *be* and *have* as well as the modals (represented by the tags VB, VH, VM in the BNC) as well as adverbial particles (tagged as AVP). This search results in 2863 occurrences. But it is then still necessary to carry out a manual analysis of these examples, since particles such as *ahead* and *away* are often mis-labelled as lexical adverbs (AV0). After a manual search of this type, I arrived at a list of 287 'valid' examples of PAC. It is perhaps ironic that a relatively large corpus (of some 100 million words) reveals only 287 examples of PAC, whereas Jacobson (1964) found 302 examples in a corpus of literary and technical texts which was twenty times smaller (some 500 000 words). Yet this is in fact a meaningful finding: in comparative terms, PAC word order is rare in English, but it clearly appears proportionally more often in Jacobson's corpus of literary texts, book reviews and technical manuals.

In the discussion below, I categorise the different types of PAC found in the BNC according to the types of Adjunct proposed in Halliday and Matthiessen (2004: 128-132). The frequency of the PAC word order in each category is set out in Table 1.

Table 1. Proportion of Adjunct types found in PAC order in the BNC.

Adjunct Type (in SFG terms)	**Frequency**	**Percentage**
Modal Adjuncts and other adverbials	140	48.7
Conjunctive Adjuncts	16	5.6
Circumstantial Adjuncts	45	15.6
Extended Predicators	86	30
	287	100%

As mentioned above, an important fourth category emerges from the data: adverbial and prepositional phrases which are not Adjuncts but rather extensions of the Predicator. This category is discussed in a separate section from the other examples.

3.1 Modal Adjuncts and adverbials in PAC position

As noted above, by far the largest number of Adjuncts found in PAC position are post-verbal modifiers (nearly 49%). Most of these examples are epistemic adverbs (*maybe*, *perhaps*), frequentatives (*again, sometimes*) and intensives (*almost, nearly*). The following sample is fairly typical of the corpus data. It is notable that the processes modified by these adverbs are generally Relational (expressing attribution, representation, symbolisation):

(16) You sound **almost** Hemingway.
(17) Each later overflow record will require **nearly** a full revolution.
(18) Britain became **probably** the most open market in the world.
(19) Is it because our faith's too cheerful that we miss **sometimes** the wit.

A second series of examples involves Modal Comments, usually based on lexical adverbs:

(20) you're gonna be paying **basically** the same rate.
(21) It gave **easily** the best value.
(22) 'I don't say **exactly** the same thing every time,' he insists afterwards.
(23) Foulkes won **practically** every honour in the game as a defender in the Busby Babes team.

These items express an evaluation linked to a quantifier or a comparative element in the Complement (*the best, the same*, *every*).

3.2 Conjunctive Adjuncts in PAC position

Conjunctive (and Disjunctive) Adjuncts are markers of textual organization. They make up just over 5% of all examples of PAC in the BNC, although they often involve the same items, most notably: *for example* and *for instance*. A less frequent, but more interesting pattern involves the adverbs *here* and *now*. Strictly speaking, these are Circumstantials and they can be probed by cleft constructions, as in *it is here / now that we consider a somewhat different example* (a structure which is not normally available to Modal or Conjunctive Adjuncts as in: *it is *probably / *however that* etc.). However, I would suggest that when *here* and *now* occur in PAC position they have a Conjunctive function, while in other positions these adverbials are Circumstantial. This can be seen in the following examples, where *here* contributes to a thematic transition introduced by a process of communication (*discuss, note, interpolate* etc.) It is noteworthy that the verb is expressed in a simple performative present tense in all of these contexts:

(24) We discuss **here** some relevant work on the siting of facilities for the disposal of nuclear wastes.
(25) We discuss **here** the same problem as that in §2.10.2, but vary the treatment.
(26) We note **here** the work of the applied geochemistry group at Imperial College…
(27) For completeness, we interpolate **here** a brief discussion of the reverse procedure.

If we compare these examples with APC order (both orders have approximately the same frequency in the BNC: 41 PAC, 43 APC), it appears that *here* is used to signal that a textual theme is about to be defined or explained in the following discourse. In these examples, *here* is no longer Conjunctive, but can be considered to be Circumstantial or a post-modifier of the preceding Subject (the test being to see whether the adverb is integrated into the tone group of the Subject or of the following Predicate):

(28) The context **here** makes the other possible reading, that the speaker is characteristically nervous all of the time
(29) One important issue **here** concerns the comparability as well as the validity of measures of achievement.
(30) 'Logical' **here** means those records that are processed as if they were on the track.
(31) But Sartre's own text **here** develops a dialogism in the tension between these two possibilities …

It is interesting to note that the adverb *now* occurs in the same pattern. When *now* is used in PAC position (which is less frequent: 35 PAC compared with 293 APC), it marks a change of direction in the argumentation, and tends to occur with performative or imperative forms:

(32) Let us consider **now** a somewhat different example where instead of uniform translation the loop rotates in a constant magnetic field.
(33) We shall introduce **now** a scalar function by the relationship [formula].
(34) Let us replace **now** the mathematical curve by thin wire.
(35) Take **now** a finite line charge as shown in Fig. 2.9(a) and (b) using different scales.

In contrast, the APC order for *now* is Circumstantial, with *now* referring to narrative time. It is interesting to note that in these examples PAC position would in many cases be rather marked:

(36) These expressions **now** complete all the metric functions contained in the line element (11.4)…
(37) Corbett **now** examined the blackened remains of the water bucket.
(38) The Dragons **now** play Illawarra next weekend to see who will meet the Brisbane Broncos.
(39) Edward **now** wore the manic look of some animal …

Out of context, *here* and *now* are not prototypical examples of Conjunctive Adjuncts. However, the examples above show that these adverbs are not used in free distribution in the clause, and have come to be used in at least two contrasting phraseological patterns: (1) PAC order (Conjunctive: performative) and (2) APC order (Circumstantial: narrative).

3.3 Circumstantial Adjuncts in PAC position

Just over 15% of Adjuncts in PAC position are Circumstantials, and nearly a half of these (20 occurrences) belong to just one phraseological pattern: *with + delight, interest, relish*. Rather interestingly, as mentioned in section 2 above, Thomas Ernst uses an example of *with relish* (4) in his study of non-canonical Adjunct positions (2002: 208-209). It is possible that this reflects a broader tendency for Adjuncts introduced by *with* to be used in PAC position (although this empirical point is not noted by Ernst). And as mentioned above, the phrase *with relish* has two patterns of use in the BNC. In PAC position (examples 40-43), *with relish* refers to a Mental (cognitive or communicative) process in which the Subject anticipates the (metaphorical) consumption of an idea or report. In PCA position (examples 44-47), *with relish* refers to a Manner or Accompaniment which modifies a Material process of consumption. Here are some examples of the PAC pattern:

(40) On this occasion City accepted **with relish** the chances which came their way and inflicted serious psychological damage on their dejected opponents.
(41) He contemplated **with relish** large retinues of clients singing the praises of their patrons.
(42) He tells **with relish** a spine tinglingly gory story of self mutilation
(43) the press reported **with relish** the 'grotesque' attitudes of Muslim parents…

These examples would appear to confirm Ernst's rule of thumb concerning end-weight: the Complement is heavier than the Adjunct, so it comes later on in the clause. However, these examples contrast with the alternative PCA word order, the PCA pattern:

(44) The food followed quickly, and they both ate the delicious fresh fish **with relish**…
(45) Meryl crunched a piece of celery **with relish** and made a covert appraisal of the other guests at the long table.
(46) …she picked up her glass again and swallowed a mouthful of brandy **with relish**.
(47) She swigged a mouthful of wine **with relish**, irrigating her tongue to savour the bitter fruitiness.

If the explanation of end-weight appears to work for examples (40-43), then it is rather strange to find that the relatively 'light' Adjuncts in (44-47) have been left in PCA position. Whatever the structural explanation for this difference, it seems to me that none of the examples observed can be usefully described as result of 'postponement', either of the Complement or of the Adjunct. Rather, each of these occurrences coincides with a regular discourse pattern. The phrase *with relish* in PAC order is used in a regular lexical pattern to refer to a Mental (or 'communicative') process; while *with relish* in PCA order is used to refer to a Material process. The essential question then is how can the same phrase refer to two different meanings? The explanation must be that the process to which the Adjunct refers to in each case is at least partially determined by the clause as a whole. In the (rarer and relatively marked) PAC position, the Adjunct refers to a degree of intensity which is positively willed by the Subject; in PCA position, the Adjunct refers to the process expressed by the Predicator. This division of labour is maintained even in cases where the reference is perhaps ambiguous: in examples (44-47) does *relish* mean 'delight' or 'seasoning'? Perhaps it means both?

3.4 Extended Predicates and PAC word order

In this section I consider examples of PAC which appear to involve Circumstantial Adjuncts, but in fact involve clause constituents that are 'obligatory' extensions of the Predicator. The expressions *take seriously, bear in mind, bring into consideration* are prototypical examples of this. In expressions such as these, the Predicate is headed by a semantically 'light' or generic verb (*take, bear, bring...*), but it is the adverbial or prepositional phrase (*seriously, in mind, into consideration* etc.) which specifies the semantic process of the clause. In Halliday's terms, the semantic role expressed by this element is 'Process Range', a notion that has until recently only been used to describe Complements in light verb constructions such as *have a break, make sense, take a bath,* etc. (Halliday and Matthiessen 2004:193). In Gledhill (2005) I suggested that any adverbial or prepositional phrase which plays this role can be analysed as an Extended Predicator. In other words, the adverbials or prepositional phrases in these expressions are analogous to particles in phrasal verbs, such as *bear up, take away, take up,* and so on. The following table illustrates how one example (48a, cited below) would be analysed in SFG terms:

(48a) I	take	**seriously**	any allegations of misbehaviour …
Subject	Finite / Predicator	Extended Predicator	Complement
Participant: Senser	Process: Generic	Process Range: Mental	Participant: Phenomenon

In this example (48a), the adverbial *seriously* is an Extended Predicator, and its semantic role of Range specifies the main Process in the clause (a Mental process of cognition). This contrasts with the invented example (48b), below, in which the verb *consider* expresses the main Process of the clause, and this is merely modified by *seriously* as an (optional) Adjunct of Degree:

(48b) I	consider	**seriously**	such allegations of misbehaviour …
Subject	Finite / Predicator	Adjunct	Complement
Participant: Senser	Process: Mental	Circumstantial: Intensity	Participant: Phenomenon

An alternative analysis would be to consider *seriously* in (48a) to be a secondary (attributive) Complement. However, whatever terms we use, pattern (48a) clearly involves a higher degree of lexicalisation than pattern (48b).

In considering the following examples, it is important to note that the status of each phraseological pattern does not simply depend on the 'co-selection' of an adverbial with a particular verb. It is also important to observe that each of these expressions has developed a very specific context of use, in other words a particular discourse function. Since there are many examples of this type, I examine just three patterns involving the verbs *take* and *bring*.

The expression *take seriously* refers to an affective or cognitive Mental process, with a similar meaning to the verb *to consider*. Its Complements are typically controversial arguments or debatable offers:

(48) I have always made it clear that I take **seriously** any allegations of misbehaviour …

(49) But few people took **seriously** the idea of such a hulk of a man going without food.

(50) I couldn't take **seriously** a political debate about the name….
(51) [the cabinet] was ready to take **seriously** a scheme put up by Lionel Rothschild for an international trust fund,…

Although *take seriously* (and a handful of other expressions such as *take lightly*) involves an adverbial, most other examples of this type involve prepositional phrases. The verbs in these expressions are light verbs which express a generic Material or Behavioural process (*bear, bring, call, keep, take*). These verbs are then specified by (obligatory) prepositional phrases indicating a caused movement towards a 'Location' (standing for a 'mental state' or 'act': *into account, on board, into consideration, into doubt, into light, to issue, in mind, to mind, into play, in question, to question* etc.). The Complements in the *take + into / on + N* pattern typically correspond to reasoned arguments and administrative decisions:

(52) [his speech did not seem] to **take into account** the fact that this was the first time he had come out of a Punjabi-speaking environment....
(53) [factors] hat **take into account** the interventions that have to be performed to achieve the physiological result.
(54) When granting approval, planners **took into consideration**, roads, design of the course, conservation and effect on wildlife.
(55) In particular it has attempted to **take on board** community aspirations and local authority plans rather than ride roughshod over local wishes

The third major type of expression in this class involves *bring + into / to + N*. The Complement in this pattern typically refers to an argument that has been (previously) ignored or set aside, with a meaning similar to that of *recall* or *emphasise*:

(56) Rare has been the computer project which did not, in the course of execution, **bring to light** an initial overestimation of the technical possibilities,...
(57) Hodgkiss said it **brought to mind** Henry James's simile for the dress of Sarah Pocock, "scarlet like the scream of someone falling through a skylight".
(58) The man could both paint and name a chair, and **bring into play** his own terrors and hopes, and behind it, the culture of Europe, north and south, the Church itself.
(59) ... she **brings into question** the demarcation point between private and public life which is assumed by most of the philosophical tradition she is working in.

In previous sections, I pointed out the contrastive function of the PAC sequence as opposed to APC or PCA order. In this final section, however, we have seen many examples in which the Adjunct (or rather an adverbial / prepositional phrase) has become at least partially lexicalised as part of a complex predicator. In such cases, the PAC position loses its contrastive function, and it could be argued that there is no interruption of Predicate + Complement. It is no accident that these expressions make up nearly a third of the examples found in my survey of the BNC: for many of these expressions, PAC appears to represent the default, unmarked word order. The only restriction to this would be that object pronouns, often considered to be grammaticalised 'clitics', must occur adjacent to the Predicator in English (thus we could not say **I take seriously it*), a restriction which, as mentioned above, would apply in the same way to phrasal verbs.

Conclusion

In this paper, I have presented a survey of the word order Predicator + Adjunct + Complement (PAC). This is often a 'marked' or unusual sequence in English. However, as the above analysis of the British National Corpus shows, many examples of PAC are not exceptional variations derived from a more basic underlying structure, or the results of a relatively free

stylistic choice. Instead, many instances of PAC correspond to one of four highly predictable patterns:

(1) (any) Process + Modal Adjunct (*do exactly the same thing…*),
(2) Mental Process + Conjunctive Adjunct (*consider now a somewhat different example…*)
(3) Mental Process + Manner Adjunct (*read with relish T. Rex…*)
(4) Mental Process + Process Range (*take seriously, bear in mind…*)

Patterns 1-3 are essentially contrastive (the Adjunct would not have the same meaning or impact in APC or PCA position), whereas in pattern 4 there is no such contrast: the adverbial or prepositional phrase here is an obligatory extension of the Predicator, and as such is no longer in a marked PAC position.

The finding that many occurrences of PAC correspond to a small set of phraseological patterns does mean that I reject structural explanations of PAC word order, such as 'end-weight'. End-weight can clearly account for many examples of PAC word order, including many of the examples cited above. However, I do object to explanations of PAC word order which refer to the 'movement' or 'detachment' of the Adjunct or Complement to various positions around the clause. When grammarians put forward this type of explanation, it seems to me that they are in fact only describing the result of online processing. In addition, when purely structural explanations are put forward, it is also often assumed that 'non-canonical' word orders such as PAC are interchangeable and synonymous with other more 'basic' ones. In a previous study of French students' problems with PAC word order in English (Gledhill 2005), I wondered why 'end-weight' was so often proposed as an explanation for the restriction on PAC in English, whereas speakers of French, who presumably have the same processing requirements as English, do not appear to be concerned with it. Wasow (1997) appears to be asking the same question about speakers of English: 'end-weight' is a useful structural observation, but other factors, partly semantic and partly stylistic are also involved. Of course, it is not surprising to learn that formal theories of syntax have nothing to say about the communicative or textual function of different types of word order.

However, in one respect at least the formal grammarians are right. Far from being a marginal feature of English syntax, the general restriction on post-verbal Adjuncts in English appears to lie at the heart of the syntax of English, a language that is extremely sensitive to word order variation and is not likely to have the same processing constraints or norms of structural balance within the clause as even relatively closely-related languages, such as French. Indeed, by looking for examples of PAC word order in the British National Corpus, I have stumbled across two patterns in English which turn out to be central to the metaphorical expression of evaluation and of cognitive processes in this language. These patterns may have started out their lives as marginal exceptions, derived from some more basic word order. But now they are very productive patterns of speech, which no fluent speaker of English can do without.

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