Postpositions in English*

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1. Introduction

It is sometimes pointed out that English, which is obviously a prepositional (PO) language, has a few "postpositions" (Aarts (2011: 78)) or "exceptional PP constructions in which the complement precedes the head" (Huddleston and Pullum 2002; H&P henceforth, p. 632). Consider the following examples.

- (1) a. [Notwithstanding these objections], they pressed ahead with their proposal.
 - b. [These objections *notwithstanding*], they pressed ahead with their proposal.
- (2) a. [Apart/aside from this], he performed very creditably.
 - b. [This apart/aside], he performed very creditably.

(H&P, p. 631)

As shown in (1a, b), *notwithstanding* can either precede or follow its complement DP. The same holds for *apart/aside*, though it must take *from* when it precedes a DP, as in (2a, b). According to Aarts (2011: 79), "postpositions" are identified with the following items:

(3) ago, apart, aside, notwithstanding, through 1

One might assume that the presence of postpositions in English is not very surprising since several other West Germanic languages, e.g. Dutch, German, Frisian, have prepositions and postpositions as well (cf. Hoekstra 1995). Notice, however, that these are all OV-languages in which VO word order can also be derived. Given that English is a strict head-initial language, the presence of postpositions, if true, *is* surprising.

Dictionaries and traditional grammar books categorize these "postpositions" as adverbs, presumably regarding the adjacent DPs as some kind of modifiers (see section 3.2). Explanation of this kind, however, remains an ad hoc stipulation unless it can account for what kind of modifying DP can appear with what kind of adverbs, and how the cooccurrence is restricted.

The purpose of this paper is to make clear the status of what Aarts calls postpositions. Specifically, I claim that they are not postpositions, but a collection of different grammatical items. The paper is organized as follows. In section 2 I argue that some postposition-like items are *intransitive* prepositions that can take a null complement. This basically follows the discussion by H&P, but I show that there are a wider variety of intransitive prepositions than H&P assume. It is also proposed that the PPs differ in whether the null complement needs licensing or not. In section 3 it is argued that some postposition-like items are *intensives*, i.e. modifiers that intensify the meaning of a null preposition. In this case, too, the PPs differ in whether the null P needs licensing or not. So-called postpositions thus fall into either of these two categories. Section 4 concludes that there are no postpositions in English.

2. Intransitive prepositions

Let us first consider cases where a degree DP precedes a P. (For the sake of convenience, I refer to prepositions and postposition-like items as Ps.) Consider the following examples:

(4) a. The dart was [one inch off]. (Svenonius (2010: 154))

b. We finally found the boomerang [sixty yards down]. (adapted from Ibid.)

c. He'd left [two hours before]. (H&P, p. 613)

d. She was here [just a minute ago]. (OALD⁸, s.v. ago)

Apparently they are examples of postpositions. As far as I know, however, no linguists have called the Ps in (4a-c) postpositions, presumably because a genuine complement can be added to the right of the P, as illustrated in (5a-c).

(5) a. The dart was [one inch off the target]. (Svenonius (2010: 154))

b. We finally found the boomerang [sixty yards down the hill]. (adapted from Ibid.)

c. He'd left [two hours before *the end*]. (H&P, p. 613)

The genuine complement is a *datum point* based on which the location/direction of an object/event is measured. For example, in (5a) the distance between the dart and the target is one inch. Notice that datum points are not absent in (4a-c), either: we would not say that the dart was one inch off if we had no target, for example. There must be a datum point reproducible from the context. I assume that a tacit datum point appears in syntax as [e]. Examples (4a-c) thus have the following structures:

- (6) a. The dart was [one inch off [e]].
 - b. We finally found the boomerang [sixty yards down [e]].
 - c. He'd left [two hours before [e]].

The DP preceding P in each (6a-c) is therefore not a complement of P, but an adjunct degree DP. Accordingly, (4a-c) are not examples of *post* position phrases, but of *pre* position phrases with a null complement and an adjunct degree DP.

As H&P (p. 600) correctly point out, some complement-taking Vs, Ns and As can do without their complements, as in *She was eating (an apple), She's the director (of the company),* and *I'm certain (it's genuine)*. It therefore seems reasonable to assume that some Ps can also do without their complements. Henceforth I refer to those Ps that take a null complement as *intransitive* prepositions, following H&P.

An apparent problem remains with *ago* as in (4d). As the deviant (7b) demonstrates, *ago* cannot take an overt datum point.

(7) a. She died [ten years ago].

(H&P, p. 632)

- b. *She died [ten years ago *now*].
- c. *She died [ago].

Ago means "before the present" (COD⁷, s.v. ago). Namely, the datum point of ago is always identified with the speech time (now), from which the temporal distance of the denoted event is measured. However, the overt datum point never occurs with ago ((7b)). Moreover, ago cannot stand without a degree DP, as the deviant (7c) illustrates. Does this mean that ago selects a degree DP? Then (7a) should be regarded as a case of postposition. In fact, H&P give up the analysis of a phrase involving ago (and durative on), regarding its syntax as "highly exceptional" (p. 632).

The problem, however, disappears if we take Svenonius's (2010) observation of off/down into consideration. He observes that locational off/down must appear either with an overt complement or with a degree DP.² The crucial examples below are taken from Svenonius (2010: 154), with null complements ([e]) added by the author:

- (8) I threw a dart at the target with my eyes closed, and when I opened them ...
 - a. *... the dart was [off [e]].
 - b. ... the dart was [off the target].
 - c. ... the dart was [one inch off [e]].
 - d. ... the dart was [one inch off the target].
 - e. *...the dart was [right off [e]].
- (9) We lost a boomerang in the wind. We looked all over for it at the top of the hill, but we finally found it

. . .

- a. *... [down [e]].
- b. ... [down the hill].
- c. ... [sixty yards down [e]].
- d. ... [sixty yards down the hill].
- e. *... [right down [e]].

Svenonius suggests that the [P+[e]] constituent undergo obligatory movement, and the movement is licensed by an overt degree DP in some way. Without going into the question of how this is so, I just provide the following descriptive generalization:

(10) The Measurement Constraint:

Some Ps can take a null complement only when they are modified by a degree DP.

Off and down are subject to this constraint. (8a, e) and (9a, e) are deviant since the [P+[e]] structure is not supported by a degree DP.

Many other Ps are not subject to the Measurement Constraint. Since the constraint concerns the licensing of a null complement, it has no relevance to Ps which obligatorily take an overt complement, e.g.

for, to, between, near, against (cf. Svenonius 2010). Among Ps that can take a null complement, some are not subject to the Measurement Constraint. *Before* and *inside*, for example, can appear without an overt complement or a degree DP, as illustrated by (11a, b).

(11) a. I have done this [before [e]]. (adapted from H&P, p. 613)b. Let's go [inside [e]]. (adapted from TGD, s.v. *inside*)

With this in mind, let us go back to the case of *ago*. Recall that the datum point of *ago* is always identified with the speech time (now), but it must be null ((7b)). Recall also that a degree DP must appear with *ago* ((7c)). Given that a complement can be null and some null complements need licensing by a degree DP, the above facts will be restated as follows: *ago* obligatorily takes a null complement, and is subject to the Measurement Constraint.³

To conclude, the Ps in (4a-d) are not postpositions, but intransitive prepositions. Ps differ in the availability of a null complement and in whether they are subject to the Measurement Constraint. The variety is summarized in the table below:

(12)

		(I) Availability of a null complement		
		(a) Not allowed	(b) Possible	(c) Obligatory
(II) Relevance of the Measurement Constraint	(a) Not relevant	between, near	before, inside	ashore, downstairs
	(b) Relevant		off, down	ago, on

First, Ps such as *between* and *near* always take an overt complement. The Ps in this category are not subject to the Measurement Constraint since the constraint concerns the licensing of a null complement. Second, some other Ps such as *before*, *inside*, *off* and *down* optionally take a null complement. A degree DP can also occur as an adjunct, as in [PP] DP [PP] P [PP] DP DP [PP] P [PP] DP [PP] P [PP] DP [PP] P [PP] P [PP] DP [PP] P [PP]

Constraint, which makes them look like postpositions since an adjunct degree DP is necessary when they take a null complement. Third, some Ps (e.g. *ago*, durative *on*) must take a null complement. If the Measurement Constraint is relevant, a degree DP obligatorily precedes the P. Consequently, such Ps look like postpositions. In fact, however, a degree DP is obligatory not because it is selected by the P, but because it is necessary for the licensing of a null complement.

We have not yet discussed what if Ps in the third category are not subject to the Measurement Constraint. Since such Ps can constitute a PP by themselves, they will be indistinguishable from adverbs and particles. H&P provide a list of such Ps (p. 614). Some examples are: *ashore, back, downstairs, indoors, forward(s)*.

To sum up, the "highly exceptional" behavior of *ago* results from its strict intransitivity and the Measurement Constraint: *ago* obligatorily takes a null complement, which is to be licensed by a degree DP. If this is on the right track, *ago* should be excluded from the list of "postpositions" in (3).

Before leaving this section, I would like to make a brief comment on questions that an anonymous reviewer asks. The proposed analysis is silent about how adjunct degree DPs license null complements, and why some Ps are subject to the Measurement Constraint while others are not. The Measurement Constraint is a just generalization to be reduced to more fundamental principles. At present I have no idea how to do this, but note an interesting fact related to the second question. Hiroyuki Nawata (p.c.) has mentioned that Ps which are not subject to the Measurement Constraint, e.g. before, inside, ashore, downstairs, apparently involve a nominal morpheme (fore, side, shore, stairs). It might be the case that the nominal complement is incorporated into P and therefore the null complement is actually a trace of the incorporated N. If this analysis were adopted, we might be able to make more explicit the status of the Measurement Constraint: all Ps taking a null complement are subject to the constraint. Complex Ps (like before and ashore) are not subject to the constraint because they take an overt argument. Although attractive, I do not explore this possibility any further here. One possible difficulty is that if the complement were occupied by a nominal to be incorporated, there would be no position for the datum point. I leave the status of the Measurement Constraint for future research.

3. Intensives

Let us then consider the other type of postposition-like items. Unlike Ps dealt with in the previous section, these Ps seem to take their genuine complement either on their right or on their left. Some examples

are given below:

(13) a. all through this month/all year through

b. all *over* the world/ the world *over*

c. notwithstanding these objections/ these objections notwithstanding

d. apart from this/ this apart

In this section it is argued the Ps preceded by a DP are not postpositions, but intensives for a null P as in (14).

(14) $[PP [P \emptyset]]$ all year through

Null Ps differ in whether they need licensing or not. Some null Ps must be licensed by their designated intensive, which makes the intensive word look like a postposition. In the following four sections I take up null Ps of different semantic types and their designated intensives.

A note is in order. I remain open about the analysis of these Ps when they look like *pre* positions. If, say, postposition-like *through* is an intensive as in (14), one might want to claim that preposition-like *through* is also an intensive as in (15).

(15) $[PP through [P \emptyset] all year]$

This approach is obviously preferable since it accounts for properties of these peculiar Ps in a paradigmatic way. But I do not go into this possibility since it is beyond the scope of this paper. In this paper I just assume that preposition-like Ps are genuine prepositions.

3.1 Durative intensives

Let us begin with PPs denoting a period of time over which a denoted action or a state continues. Consider the following examples:

(16) a. all through this month

b. all year through (Aarts (2011: 79))

c. the whole night *through*/the whole summer *through* (Quirk et al. (1985: 452, 527))

(17) a. round the year

b. all (the) year *round*/ the whole year *round* (adapted from Quirk et al. (1985: 452))

Prepositional *through* and *round* select a DP complement denoting a period of time, as in (16a) and (17a). What interests us is the fact that the DP can precede the Ps as well, as (16b, c) and (17b) illustrate.⁴ These DPs cannot be adjuncts since the DPs bearing the same semantic role occupy a complement position in (16a) and (17a).

Quirk et al. (1985: 527) make an interesting observation with regard to time adverbials. Some adjuncts of time can be realized as DPs, e.g. *last year, every month, that afternoon, next Monday, a while*. According to them, adjuncts denoting duration are most likely to be realized as DPs. They assume that they are in fact PPs headed by an omitted (or, null) P denoting duration, as illustrated below:

(18) a. They stayed (for) a while.

b. They lived (for) several years in Italy. (Quirk et al. (1985: 527))

They also claim that "[w]ith or without *for*, time units can be postposed by *round* (with years) or *through*, especially when the reference is habitual" (p. 527), providing the following example for illustration:

(19) The Stewarts now stay in Italy {the whole summer through/ the whole year round/all the year round}.

(Ibid.)

If we follow their analysis, durative phrases will be construed as in (20):

(20) $[PP][P\emptyset]$ the whole year *through/round*]

Durative P is optionally null. *Through/round* is not a head, but an intensive optionally associated with durative P. As correctly pointed out by Quirk et al., the P can be overt:

(21) for all year through/round

The presence of an overt P suggests that postposition-like *through/round* is not a head, but some kind of adjunct. If this is on the right track, then the DPs in (16b, c) and (17b) should be in the complement of a null P.

Let us now consider the status of *through/round*. As the following examples illustrate, *all (the) year* or *the whole year* can appear without *through/round*.

(22) a. Tomatoes can be raised *all year* in hothouses.

(RHD², s.v. raise)

b. She has had almost no absences the whole year.

(KND, s.v. kesseki)

It can therefore be said that the null P denoting duration is not subject to the following licensing condition:

(23) The Intensity Constraint

Some null Ps must be licensed by their designated intensives.

The designated intensives for durative P are *through* and *round*. Since null durative P is not subject to the above constraint, the bare DPs in (22a, b) can occur without *through/round*.

To wrap up, *through* and *round* are not postpositions, but intensives for durative P. Durative P can be overt (e.g. *for the whole year round*) or null (e.g. *the whole year round*). When null, it need not be licensed by its designated intensives. Hence durative DPs can be bare adverbials (e.g. *(stay in Italy) the whole year)*. *Through/round* looks like a postposition when it appears with a null P and a DP. However, the DP is not a complement of *through/round*, but of a null P.

3.2 Spatial intensives

Let us then consider phrases which denote a spatial range over which a denoted action/state extends. Such phrases can be headed by *over* or *round*, as in (24a), and these Ps can be preceded by a region DP, as in (24b). Although Aarts (2011) does not include *over* or *round* in his list of postpositions, Poutsma (1926) and Konishi (1955) mention the unique behavior of these Ps.

(24) a. all over/round the world/ all over/round the country

b. (all) the world over/round

(adapted from Konishi (1955: 80-81))

One might notice that spatial *over/round* is similar to temporal *through/round* observed in the previous section. Both compose a constituent of temporal or spatial range for which the denoted event or state holds true. Hence one might assume that *over/round* is also an intensive for a null P denoting a spatial range. If this is correct, it is predicted that the null P can alternate with an overt P. The prediction is borne out. As the following example demonstrates, *over* is compatible with an overt P:

(25) He traveled [through/round the world over].

(Do not confuse prepositional *through/round* in this example with intensive *through/round* discussed in the previous section.) Given this, postposition-like spatial Ps are not actually postpositions, but intensives for a P denoting a spatial range. (24b) is thus given the following structure:

(26) [PP (all) [P Ø] the world *over/round*]

However, *over/round* is different from intensive *through/round* in at least one point. As has been shown in (22a, b), temporal durative DPs can be used as bare adverbials. In contrast, DPs denoting a spatial range cannot be bare adverbials: they need to be either headed by overt Ps or followed by *over/round*. The following examples illustrate this:

(27) a. He is well-known all the world *(over).

(adapted from TGD, s.v. over)

b. People are basically the same *the world* *(over).

(adapted from OALD⁸, s.v. world)

c. His name is ringing the country *(over).

(adapted from KDC, s.v. ⁴ring)

This fact can be captured by the Intensity Constraint given in (23). Namely, the PP denoting a spatial range is optionally headed by a null P, but the null P, subject to the constraint (23), must be licensed by its designated intensive *over/round*. The DP denoting a spatial range thus must appear either with an overt P or with *over/round*.

Before closing this section, I briefly look over Poutsma's (1926) analysis of similar data. Consider the following example:

(28) He sailed the world round.

(Poutsma (1926: 809))

Poutsma claims that *the world* modifies the adverb *round* since it "is felt as an intensifying adjunct to *round*, approximating in meaning and function to such an adverb as *entirely*" (p. 809). However, this analysis is problematic since it would be hard to predict when *the world* can be an adverbial equivalent and when it cannot. For example, why can we say as in (28) but not as in (29)?

(29) *He is *the world* tired/ignorant/absolved from blame.

Moreover, *the world* does show a nominal property in syntax. As the contrast between (30a) and (30b) demonstrates, the antecedent of a pronoun must be nominal.

(30) a. $Italy \dot{s}_i$ announcement that it_i would invade Albania caused a stir.

b. ?? The *Italian*; announcement that *it*; would invade Albania caused a stir. (Baker (2003: 126))

With this in mind, observe the following sentence:

(31) Magellan's sailing the world_i round made a big change to it_i .

Since *the world* can be an antecedent of the pronoun *it*, it should bear a nominal property. Considering these problems, Poutsma's analysis is hard to support.

To summarize, *over/round* used as in (24b) is not a postposition, but an intensive for a P denoting a spatial range. Unlike the temporal durative P, the spatial P is subject to the Intensity Constraint. Since a [null P + DP (spatial range)] structure must be licensed by a designated intensive *over/round*, the resulting structure [null P + DP + over/round] apparently looks like an example of postposition.

3.3 Adversative intensive

Let us now move on to *notwithstanding*, which is regarded as a postposition both in H&P and Aarts (2011). The relevant examples (1a, b) are repeated here as (32a, b).

- (32) a. [Notwithstanding these objections], they pressed ahead with their proposal.
 - b. [These objections *notwithstanding*], they pressed ahead with their proposal.

Let us first ask whether postposition-like *notwithstanding* is an intensive or not. If the following expression is acceptable, it should be identified with an intensive for an adversative P.

(33) [PP [P Despite] these problems *notwithstanding*], they didn't give up.

The grammaticality judgment, however, is not stable. Out of seven native English speakers I consulted with, one judged the sentence acceptable, two questionable, and four highly questionable or unacceptable.

For those who accept (33), *notwithstanding* is given the same account as in section 3.2. Namely, postposition-like *notwithstanding* is an intensive for the adversative P. The adversative P may be overt (*despite*) or null. The P is subject to the Intensity Constraint. Hence (34b) below is excluded: the null P needs to be licensed by its designated intensive *notwithstanding*, as in (34d).

- (34) a. [PP] [P despite] these problems]
 - b. $*[_{PP}[_{P}\emptyset]]$ these problems]

 - d. $[PP][P\emptyset]$ these problems *notwithstanding*]

Those who do not accept (34c) might have an additional constraint on the adversative P: the overt P cannot be intensified. It may not be surprising, considering the fact that most Ps do not have intensives.

In conclusion, the behavior of *notwithstanding* is expected from the combination of (i) the availability of a null P and (ii) the relevance to the Intensity Constraint. The adversative P (i) takes a null form optionally, and (ii) is subject to the Intensity Constraint. When the P is null, therefore, its designated intensive *notwithstanding* looks like a postposition of the preceding DP. The combination is exactly the same as the spatial P as seen in section 3.2. But in this case a majority of people have an additional constraint on the

overt P: The overt P cannot take the intensive.

3.4 Side-setting intensives

Finally, it remains to consider *apart* and *aside*, which both H&P and Aarts (2011) identify as postpositions. The relevant examples (2a, b) are repeated here as (35a, b).

(35) a. [Apart/aside from this], he performed very creditably.

b. [This apart/aside], he performed very creditably.

The structure of an adjunct phrase involving *apart/aside* is harder to investigate since it cannot have an overt P, unlike *through/round* and *over/round*.

(36) *[Except this apart/aside], he performed very creditably.

The absence of an overt P might make an intensive analysis look unlikely. For the moment, then, I examine two alternative analyses suggested in the literature: an absolute analysis and a movement analysis. In the following, however, it is shown that neither analysis is tenable. After demonstrating problems with the two analyses, I come back to the intensive analysis again, showing how it accounts for the relevant data.

Let us first examine the absolute analysis. H&P point out that adjunct phrases involving *apart/aside* (and *notwithstanding*) "bear some resemblance to an absolute construction" (p. 631). Compare (35a, b) with (37a, b).

(37) a. No one-[including missionaries]-had any right to intrude on their territory.

b. No one–[missionaries *included*]–had any right to intrude on their territory. (H&P, p. 631)

(37a) involves a participle clause in which *missionaries* follows the participle. When the participle is passivized, as in (37b), *missionaries* appears on the left of the participle. The complement DP can thus either follow or precede the head. This is exactly what we observe in the adjunct clauses in (35a, b). H&P do not adopt the absolute analysis, however, since *apart* and *aside* are obviously not predicative. But the lack of predicativeness should not be a problem: there are absolute constructions involving no verbal predicates, as

exemplified below:

(38) a. She said her prayers, her heart *full of love and tenderness*. (Yasui (1997: 527))

b. The ceremony *over*, the crowd dispersed. (Egawa (1991: 347))

c. Christmas then *only days away*, the family was pent up with excitement. (H&P, p. 1120)

The absolute analysis should not be dismissed for the lack of predicativeness. However, it should be dismissed for other problems. The first problem concerns Case of the "subject" DP. According to several grammar books, the subject of an absolute construction should be nominative (cf. Declerck 1991, Watanuki and Petersen 2006, H&P). An accusative subject is not allowed (cf. Declerck (1991: 641)) or "markedly informal and somewhat unlikely" (H&P, p.210).⁵ The following example is taken from H&P (p.210), with the question mark added by the author based on H&P's description.

(39) She sought advice from Ed, he/??him being the most experienced of her colleagues.

Compare this with the example involving a pronominal DP followed by *apart/aside*. As shown in (40), the pronominal DP must be accusative: a nominative DP is totally excluded.

(40) A: Whitney suffered from her husband's violence.

B: *Him/*He* aside, she had drug problems, too.

If [DP aside] constituted an absolute construction, the DP could be marked with nominative. The deviance of the nominative DP makes the absolute analysis unlikely.

The second problem concerns possible interpretations of adjunct phrases involving *apart/aside*. To understand what the problem is, we first need to understand possible interpretations of participle and absolute clauses.

According to Stump (1985), participle/absolute clauses are divided into *weak* and *strong* adjuncts. As for participle clauses, weak adjuncts are those involving stage-level predicates, as in (41a), while strong adjuncts are those involving individual-level predicates, as in (41b).

- (41) a. wearing that new outfit/standing on a chair/in first gear
 - b. being a master of disguise/having unusually long arms/ weighing only a few tons

(Stump (1985: 41-42))

In a modal sentence, the weak adjunct is most likely to have a conditional reading, as in (42a).⁶ On the other hand, the strong adjunct cannot have that reading. Instead, the participle clause in (42b) is most likely to denote a cause or reason.

- (42) a. Standing on a chair, John can touch the ceiling. (=If he stands on a chair, ...)
 - b. Having unusually long arms, John can touch the ceiling. (\neq If he has unusually long arms, ...)

(Ibid.)

In contrast, absolute clauses (unless augmented by *with*) are all strong adjuncts, regardless of whether their predicates are stage-level or individual-level. Consider the following examples.

- (43) a. His mother being a doctor, John would know the way to the Med Center.
 - b. His arm being in a cast, Bill might not be asked to participate.
- (44) a. The truck in first gear, we would coast gently downhill.
 - b. Her hair braided, Jane must resemble Mary.⁷

(Ibid., pp. 272-273)

The absolute clauses involving an individual-level predicate in (43a, b) lack a conditional reading, like the participle clause in (42b). Interestingly, the absolute clauses in (44a, b), though involving a stage-level predicate, also lack a conditional reading. They are most likely to have a cause or reason reading. I refer the reader to Stump (1985) for a detailed discussion of how this is so. What concerns us here is the fact that absolutes can never have a conditional reading.

With this in mind, let us consider the following sentence and its possible interpretations:

- (45) This apart/aside, John would get a high score.
 - a. If they put this aside, John would get a high score.
 - b. John would get a high score, even if they did not put this aside.

In the (a)-reading, *this apart/aside* is a condition for John's getting a high score. In the (b)-reading, on the other hand, John's getting a high score is likely, regardless of whether *this* is counted in or not. According to my informants, both readings are acceptable. Since absolutes do not have a conditional reading, *this apart/aside* cannot be regarded as one.

In conclusion, the phrase involving postposition-like *apart/aside* cannot be analyzed as an absolute clause. The case form of its "subject" DP and its possible interpretations are different from what we observe with absolute clauses.

Let us now examine the second possible analysis: a movement analysis. Matsubara (2012) suggests that the complement of a postposition-like item undergo movement to a higher position. *This apart/aside* will therefore be given the following structure:

(46) $[_{FP} [this]_i F [_{PP} apart/aside t_i]]$

The complement of *apart/aside* moves obligatorily since otherwise the correct order would not be derived. (The trigger of movement is not identified in Matsubara.) If this is on the right track, they can be said to be genuine postpositions. The OP order is derived from movement of complements (cf. Kayne 1994).

The movement analysis, however, encounters a technical problem. To understand the problem, several facts need to be understood. First, *apart/aside* cannot take a DP complement as shown below:

(47) *apart/aside this

I call a position that can be occupied by a DP a [+D] position, and a position that cannot be occupied by a DP a [-D] position. The example (47) demonstrates that the complement of *apart/aside* is a [-D] position.

Second, *apart/aside* can take a *that-*clause. The P can precede or follow the *that-*clause, as demonstrated below. Notice that the *that-*clause in (48a) occupies a [-D] position.

(48) a. Aside/Apart that the price is a bit expensive, the car is excellent.

b. That the price is a bit expensive aside/?apart, the car is excellent.⁸

Third, *that*-clauses in a [-D] position cannot undergo A- or A'-movement, as observed by Alrenga (2005) and Takahashi (2010). Consider the following examples:

- (49) a. Most baseball fans {hoped/felt/wished/insisted/reasoned} that the Giants would win the World Series.
 - b. *Most baseball fans {hoped/felt/wished/insisted/reasoned} that. (Alrenga (2005: 183))
- (50) a. *That the Giants would win the World Series was {hoped/felt/wished/insisted/reasoned} (by most baseball fans).
 - b. *That the Giants would probably win the World Series, (I think that) most baseball fans reasoned.

 (Ibid., p. 183, p. 192)

Example (49b) indicates that *reason*-type verbs cannot take a DP complement. Hence the *that*-clause in (49a) should be in a [-D] position. The deviance of (50a, b) indicates that *that*-clauses in a [-D] position cannot be passivized or topicalized. Let us compare this with *that*-clauses in a [+D] position.

- (51) a. Most baseball fans {believed/expected/predicted/recognized} that.
 - b. Most baseball fans {believed/expected/predicted/recognized} that the Giants would lose.

(Ibid., p. 186)

- (52) a. That the Giants would lose was {believed/expected/predicted/recognized} by most baseball fans.
 - b. That the moon is made of cheese, I've come to believe. (Ibid., p. 186, p. 192)

Believe-type verbs can take either DP or CP as their object ((51a, b)). The *that*-clause in (51b) should thus be in a [+D] position. The grammatical (52a, b) indicate that *that*-clauses in a [+D] position can be passivized or topicalized.

With these three facts in mind, let us consider the structure of the adjunct in (48b). Given that apart/aside cannot take a DP complement ((47)), the that-clause in (48a) should be in a [-D] position. It is expected, then, that the that-clause cannot undergo movement of any type. Accordingly, the word order as observed in (48b) cannot be derived by movement of the that-clause. The that-clause should be base-generated in some position preceding apart/aside. It is concluded, then, that the movement analysis is untenable.

Thus the absolute analysis and the movement analysis have both failed. What's left for us now? One option is to give up the claim that English is a strict head-initial language and assume that *apart/aside* takes its complement on its left, which obviously is an unwelcome result.

Another option is to go back to the intensive analysis once again. Recall that the problem with the intensive analysis is that the adjunct phrase involving *apart/aside* cannot have an overt P. Let us suppose that this is not a problem: a null P denoting setting something aside (side-setting P henceforth) simply has no overt counterpart. Hence (53b, c) are excluded. If the side-setting PP involves a null P, we need to consider whether the null P needs licensing or not. The deviant (53d) indicates that it is subject to the Intensity Constraint: the null P must be associated with its designated intensive, i.e. *apart* or *aside*, as in (53a).

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(53) a. [PP [P \emptyset] this apart/aside]
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- b. *[PP [Pexcept]] this apart/aside] (=(36))
- d. *[PP[PØ] this]

Apart and aside are thus analyzed as intensives for side-setting P. The side-setting P is unique in that it has no overt P counterpart.

I must admit that the intensive analysis for *apart/aside* is not well motivated: we have it because it is left by the process of elimination. For the moment I have not come up with any prediction to be tested against the proposed analysis. At least, however, it is theoretically preferable, since the presence of intensives of this type is expected from the combination of (i) the availability of a null P and (ii) the relevance of the Intensity Constraint. The side-setting P (i) takes a null form obligatorily, and (ii) is subject to the Intensity Constraint.

3.5 A variety of null Ps and intensives

In section 3 we have dealt with postposition-like items which seem to take their complement DP either

on their right or left. It is concluded that the DP is not a complement of a postposition, but of a null P. The postposition-like items are actually intensives for the null preposition. These PPs vary as to (i) the availability of a null P and (ii) whether a null P (if present) needs to be licensed by its designated intensive. The variety is summed up in the table below:

(54)

		(I) Availability of a null P		
		(a) Not allowed	(b) Possible	(c) Obligatory
(II) Relevance of the Intensity Constraint (designated intensive)	(a) Not relevant	other Ps	temporal durative P (through, round)	proximal temporal P?
	(b) Relevant		spatial range P (over, round), adversative P (notwithstanding)	side-setting P (apart, aside)

In section 3.1 I considered PPs denoting temporal duration. Such PPs can be headed by *for*, as in *(for)* a while or *(for)* the whole year. With or without *for*, these PPs can contain intensive through or round, as in *(for)* the whole year round/through. Since the null P is not subject to the Intensity Constraint, [null P + temporal DP] can appear without an intensive, i.e. as a bare NP adverbial.

In sections 3.2 and 3.3 PPs denoting spatial range and adverseness were discussed. They can host a null P, but the null P must be licensed by its designated intensive *over/round* (for spatial range) or *notwithstanding* (for adverseness). Hence with the null P its DP complement is obligatorily followed by its designated intensive, which makes the intensive word look like a postposition. In case of adversative PPs, a majority of people seem to have an additional constraint on the overt P: An intensive cannot occur with the overt version of P.

In this way, properties of these postposition-like items are derived by the combination of the two

conditions, i.e. (i) the availability of a null P and (ii) the relevance of the Intensity Constraint.

Before closing the section, I briefly touch upon what Ps in the other cells are like. First, if a null P is not available, the PP must be headed by an overt P, which is exactly what we usually call PP. Ps in this category are not subject to the Intensity Constraint since it is a condition on null Ps. Second, what if a null P is obligatory but need not be licensed? In such a case, bare NP adverbials without an overt P or intensives will be observed. I suspect that *today* or *tomorrow* might fit here. Namely, this cell might be filled in with Ps denoting a proximate temporal location.

4. Conclusion

If we understand "postposition" as a head that has its complement on its left (either by base-generation or movement of the complement), this paper concludes that there are no postpositions in English. The postposition-like items should be either intransitive Ps that takes a null complement as in (55a-c), or intensives for a null P as in (56a-c).

- (55) a. [$_{PP}$ two years [$_{P}$, before [e]]]
 - b. [PP] one inch [PP] off [e]
 - c. [PP two years [P' ago [e]]]
- (56) a. $[PP [P \emptyset]]$ the whole year *through*]
 - b. $[PP [P \emptyset]]$ the world *over*
 - c. $[PP [P \emptyset]$ this apart]

These PPs are different with respect to (i) the availability of a null element and (ii) whether the null element needs licensing or not. The PPs as shown in (55a) and (56a) can optionally take a null element which does not need licensing. The PPs in (55b) and (56b) can also take a null element optionally, but it needs licensing. The PPs in (55c) and (56c) obligatorily take a null element which needs licensing. We can thus account for properties of various postposition-like items as ones derived from the combination of (i) and (ii).

Admittedly, it remains a mystery why some Ps are subject to (i)/(ii) and others are not. Both (i) and (ii) are generalization obtained by observing the data like (55a, b) and (56a, b). What I have shown in this paper is that apparently exceptional behavior of Ps in (55c) and (56c) can be dealt with by the combination of (i) and (ii). How to account for (i) and (ii) themselves is left for future research.

Notes

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- 1. *Through* in this case denotes temporal duration like *all year through*. Aarts (2011: 79) claims that *through* in this sense has only a postpositional usage since *through all year* is not legitimate. However, prepositional temporal *through* is observed as in *through the year* and *all through the year*. The deviance of *through all year* should be attributed to the absence of an article. *All year through* is allowed without an article for its idiomatic status (as in *pipe in mouth*). Thus *through* can be either prepositional or postpositional.
- 2. Off/down can appear alone as a verbal particle denoting a path of movement, as in *The boat drifted* off/down (Svenonius (2010: 152)) or when it denotes some metaphorical meaning, as in *She's* off (i.e. away from work) or *He's down* (i.e. depressed) (Ibid.).
- 3. An anonymous reviewer has raised the possibility of an alternative analysis. *Ago* can be followed by *from now*, as in *She died ten years ago [from now]*. It might then be that *ago* takes a *PP*-complement optionally, and the PP complement, if null, must be licensed by a degree DP. If this is the case, *ago* (and possibly *on* as well) falls into the same category as *off* and *down* in the table (12).
- 4. Postposition-like use of these Ps is highly restricted. For one thing, as has been pointed out by Konishi (1955: 80-81), these Ps almost always appear with *all* or *whole*. For another, postposition-like use of *round* is virtually restricted to the two expressions in (17b): for example, we cannot say **all the month round* or **the whole month round* (Quirk et al. (1985: 452)).
- 5. According to H&P, the deviance is semantic. While absolute clauses are formal in style, an accusative subject is markedly informal (cf. accusative subjects in genitive constructions). Hence the occurrence of an accusative subject in an absolute clause causes stylistic inconsistency.
- 6. Other readings are also possible, if a clue is given in the context.
- 7. Stump (1985: 273) notes that (44a, b) are "of marginal acceptability." What concerns us here is what reading the absolute clauses can have if they are acceptable at all.
- 8. *Aside* seems to be preferred to *apart* when the P follows *that*-clauses. At present I have no idea what makes the difference.

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 $RHD^2 = The Random House Dictionary of the English Language (2nd ed.), 1987.$

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