Finding Something to Lean On*

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Certain heads are standardly described as requiring specifiers. The EPP guarantees that English T, for example, must have a specifier, as in (1), and the English interrogative C in (2) requires a wh-phrase to move into its specifier:

(1) [The cookies in this box] have all been eaten __.

(2) [How many of the cookies] have you eaten __ ?

There are other kinds of heads, however, that seem to have a stricter requirement; the phrase preceding them must end in its head. A famous case of this was observed by Williams (1982):

(3) a. a very proud (*of her daughter) woman

b. a somewhat dissatisfied (*with the service) customer

c. a quite tough (*to solve completely) problem

Williams' Head-Final Filter requires an AP which modifies an N (in English, and in many other languages) to end with A. This is not a general property of English A:

(4) a. She is [very proud of her daughter]

b. The problem is [quite tough to solve completely]

Nor, as the examples in (3) show, is AP required to consist entirely of A; A may have modifiers like *very*, *somewhat*, and *quite*, showing that it may be phrasal. It simply cannot have a complement, if it is to modify a noun[1].

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[1] All of these examples involve adjectival modifiers, but Haider (2000, 2004) discusses parallel examples with adverbials (Haider 2004, 782):

A similar phenomenon, also involving adjectival modification, is discussed by Giurgea (2009), Adger (2012), and Belk and Neeleman (2017). They note that in languages in which nominal complements and adjectives are both postnominal, the adjective must intervene between the noun and its complement, a generalization which Belk and Neeleman (2017) refer to as "AP-Adjacency":

(5) a. ke ki'i **mui** [o ke kumulā'au]. [*Hawaiian*]
the picture big of the tree
'the big picture of the tree'

b. * ke ki'i [o ke kumulā'au] **mui**.

(6) a. ha-tmuna **ha-gdola** [shel ha-etz] [*Hebrew*]
the-picture the-big of the-tree
'the big picture of the tree'

b. * ha-tmuna [shel ha-etz] **ha-gdola**

(7) a. an dealbh **mòr brèagha** [de Mhàiri] [*Scottish Gaelic*]
the picture big beautiful of Màiri
'the big beautiful picture of Màiri'

b. * an dealbh [de Mhàiri] **mòr brèagha**

Combining AP-Adjacency with Williams' Head-Final filter, we arrive at a conclusion, which seems to hold at least for many languages: when an adjective modifies a noun, whichever XP is first must end in its head. The Head-Final filter requires prenominal AP to end in its head; the facts in (5-7) seem to indicate that when AP is postnominal, the nominal projection preceding it must end in its head as well.

(i). He has [(*much*) more carefully (**than anyone else*)] analyzed it.

As noted by Sheehan et al (2017), the data in (3-7) are quite reminiscent of the FOFC (Biberauer et al 2014, Holmberg 2000, and much other work), which requires head-final projections to take only head-final projections as their complements:

(8) a. Milloin Jussi olisi kirjoittanut romaanin? [*Finnish*]
when Jussi would.have written INDEF.novel
'When would Jussi have written a novel?' [Aux V O]

b. Milloin Jussi olisi romaanin kirjoittanut?
when Jussi would.have INDEF.novel written [Aux O V]

c. Milloin Jussi romaanin kirjoittanut olisi?
when Jussi INDEF.novel written would.have [O V Aux]

d.* Milloin Jussi kirjoittanut romaanin olisi?
when Jussi written INDEF.novel would.have [*V O Aux]

As the data in (8) show, just when a Finnish auxiliary is to be preceded by its VP complement, the VP complement cannot be head-initial. Finnish VP can in principle be head-initial, as in (8a), and the VP can precede the auxiliary, as in (8c), but if the VP does precede the auxiliary, it cannot be head-initial, as we see in (8d). The Finnish VP in (8d), then, is like the English AP in the Head-Final Filter case, or like the material preceding the AP in the AP-Adjacency case; it must end in its head, apparently just when it precedes another head of a certain kind.

One question we can ask, then, is what distinguishes heads like English T and English interrogative C, which can be preceded by phrases which do not end in their heads (as in the examples in (1-2)) from heads like English N in (3), Hawaiian A in (5), and the Finnish auxiliary in (8), all of which require the phrases preceding them to end in their heads? Or to put the same question a different way: what is the difference between the specifiers of TP and CP in English,

which do not have to end with their heads, and phrases like English AP, Hawaiian NP, and Finnish VP, which do have to end with their heads, just when they precede certain kinds of heads?

Another question to ask is why the generalizations reported above, although they are quite widespread, are not universal. There are, for example, languages that are reported to allow violations of the Head-Final Filter:

(9) a. i [perifani ja to jo tis] mitera [*Greek*: Androutsopoulou 1995]
the proud of the son her mother
'the mother [proud of her son]'

b. [mnogo gordiy-at săs svoe-to dete] bašta [*Bulgarian*:
very proud-the with self-the child father Tasseva-Kurktchieva
'the father [very proud of his child]' 2005]

Similarly, although the effects of the FOFC are quite widespread, there are a number of reported counterexamples, involving languages in which various heads in the clausal spine seem to be able to be final despite having head-initial complements:

(10) a. Kɔ̀kú [wà àzɔ̌ ɔ́] **fó** [*Fongbe*, Aboh 2020, 284]
Koku do work DET finish
'Koku finished doing the work'

b. Nǐ [gāngcái shuō shénme] **láizhe**? [*Mandarin*, Paul 2014]
you just say what RECENT.PAST
'What did you just say?'

c. [Zhāng-sān cháng kàn diànyǐng] **ma**? [*Mandarin*, Li and Thompson
Zhangsan often see movie Q 1984, 54]
'Does Zhangsan often see movies?'

d. deb-ge [tol kobio] **li**. [*Bagirmi*, Dryer 2009, 317]
person-PL kill lion NEG
'The people didn't kill the lion'

In this paper I will attempt to answer the questions above. The account will be set in the framework of Contiguity Theory (Richards 2010, 2016), and section 1 will be a review of the important properties of that theory. In section 2, I will explain why certain kinds of phrases are never required to end with their heads. In section 3, we will turn to the cases discussed above, in which phrases are required to end with their heads. In section 4, I will attempt to explain the exceptions in (9-10). Section 5 will consider some additional problematic cases, section 6 will offer some possible extensions of the theory to other phenomena, and section 7 will conclude.

1. Contiguity Theory

Contiguity Theory is an attempt to develop a predictive theory of the forces which drive syntactic movement. Central to the theory is the idea that syntax is more sensitive to phonology than generally believed; in particular, the creation of phonological representations begins during the 'narrow syntax', and syntactic operations can be driven by phonological considerations.

Contiguity Theory posits two forces driving movement that will be relevant for us, along with a condition on how these two forces may interact. The two forces in question are called Affix Support and Contiguity, and the condition on their interaction is referred to as Multitasking.

1.1 Affix Support

Affix Support is a condition which can be related to existing proposals about the behavior of clitics (Selkirk 1995, Werle 2009). This work proposes that the special behavior of (at least certain kinds of) clitics is connected to the fact that they are prosodically defective; because they lack the ability to project a stress beat of their own, they must be attached to some element that does project stress, for reasons having to do with how the prosodic structure of the sentence must be constructed.

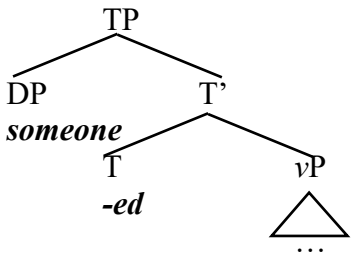
Affix Support generalizes this idea to any head which does not project a stress beat of its own, including affixes:

(11) **Affix Support**

A head which does not introduce a stress must have a potential 'host' that does introduce a stress (in the direction of affixation, for affixes)

English T, for example, must have a specifier in this account because it is a head without a stress beat of its own; its Agree relation with the subject triggers movement of the subject to a position preceding T, where it may serve as a potential host:

(12)



Richards (2016) argues that this generalization captures the distribution of the classic EPP effect. French, for example, is unlike languages like Spanish and Italian in requiring the specifier of TP to be filled; this is related, in Contiguity Theory, to the fact that French stress is word-final (or possibly phrase-final), while in Spanish and Italian, T projects a stress of its own, which is

realized on the syllable before the T morpheme (Oltra-Massuet and Arregi, 2005). Languages which do not have T suffixes at all--languages like Tagalog, Irish, and Greek--also lack a requirement that the specifier of TP be filled; they may have EPP effects in other positions in the tree, but since T is not a suffix, it does not need a host to its left, according to the condition in (11).

(13) a. chant-ass-iez [*French*: stress final in word, or possibly in phrase]
sing-IMPSUBJ-2PL → EPP

b. canta-ra-is [*Spanish*: stress before T morpheme (Oltra-Massuet and
sing-IMPSUBJ-2PL Arregi, 2005)] → no EPP

c. k-um-anta [*Tagalog*: T morpheme is an infix] → no EPP
<NOM.PERF>-sing

Among the various heads which do not introduce stresses of their own, in (13a-c), are the verb stems themselves; French *chant-* 'sing' does not introduce a stress, any more than the suffixes *-ass* or *-iez* do. Since the verb stems are not affixes, the direction in which they need Support cannot be determined by direction of affixation, but it will be important in what follows that heads of these kind are indeed among the ones which require Affix Support.

1.2 Contiguity

A second force that can drive syntactic operations in Contiguity Theory is called Contiguity, and can be described as follows:

(14) **Contiguity**

If X Selects or Agrees with Y, there must be nothing between X and Y which is more prosodically prominent than Y.

The determination of prosodic prominence involves at least the following considerations:

(15) a. Phrases are more prosodically prominent than heads.

b. In a string with multiple phrases, or multiple heads, there are parameters conditioning the position of prominence: a given language may specify whether it is the rightmost or the leftmost phrase/head in a string which receives prominence.

The value of the parameter in (15b), at least for phrases, can be determined by investigation of the prosody of the language in question; interested readers can turn to Richards (2019) for more discussion of this issue. English, for example, can be shown to be a language in which prominence appears on the leftmost phrase in a sequence of phrases.

We can illustrate some of the effects of Contiguity by considering English examples like (16):

(16) Mary has solved the problem.

I make the standard assumption that T in (16) Agrees with *Mary*, and that *v* Agrees with *the problem*. One consequence of this is that adverbs can intervene between the subject and T, but not between the verb and the object:

(17) a. Mary **probably** has solved the problem.

b. * Mary has solved **quickly** the problem.

In (17a), Contiguity must hold between T and the subject—that is, there must be nothing intervening between T and the subject which is more prosodically prominent than the subject. Since English is a language in which main prosodic prominence is realized on the leftmost of a series of phrases (and again, see Richards 2019 for arguments for this), the requirement of Contiguity is satisfied: *Mary* is to the left of the adverb *probably*, and is therefore more prominent than the adverb. In (17b), on the other hand, the English rules for realization of

prominence will make *quickly* more prominent than the object, since the adverb is the leftmost phrase in a series of phrases, and Contiguity between *v* and the object will therefore fail.

On this account of the facts in (17), objects are unlike subjects in needing to be adjacent to their Agreeing probes, not because of a special condition on objects, or a distinction between Nominative and Accusative case, but because *v* precedes the object, while T follows the subject. If we arrange for T to precede the subject—for example, by moving T to C, in the formation of a question--we expect an adjacency requirement to appear in this case as well. And this is what we find:

(18) a. Probably Mary has found out the answer.

b. * Has **probably** Mary found out the answer?

The adverb *probably* can precede the subject, as (18a) shows, but in (18b), we can see that when T has moved past both the adverb and the subject, the result is ill-formed. On the account given here, (18b) is ruled out by the same condition that rules out (17b): English Probes cannot be separated by phrases from Goals which linearly follow them, for reasons of Contiguity.

The preceding examples illustrate the effects of the parameter governing the distribution of prosodic prominence that was given in (15b) above: a language may realize prosodic prominence on either the leftmost or the rightmost of a series of phrases (and in English, it is the leftmost phrase which receives prominence). The other condition on prosodic prominence given above was (15a), which says that phrases are more prosodically prominent than heads. We can see the effects of this generalization in (19):

(19) a. *She has found **quickly** the answer.

b. She has found **out** the answer.

c. *She has found **right out** the answer.

(19a) is ill-formed for reasons we have reviewed; no phrase can intervene between *v* and the object in English, because English realizes prominence on the leftmost of a series of phrases, and Contiguity therefore does not hold in (19a) between *v* and the object. In (19b), the element intervening between *v* and the object is a head. Since heads are less prominent than phrases, there is nothing intervening between *v* and the object which is more prominent than the object, and Contiguity between *v* and the object holds. In (19c), the particle *out* has been modified by an adverb, and now there is again a phrase intervening between *v* and the object, yielding ungrammaticality, just as in (19a).

The relation between the verb and the object in English is a good example of the kind of "adjacency requirement" imposed by Contiguity. As we've just reminded ourselves, the verb and the object do not in fact have to be strictly adjacent, for reasons and in ways that Contiguity Theory is intended to explain. Because the actual condition on the relation between the verb and the object is a prosodic one, sufficiently prosodically light material can intervene between them without causing ill-formedness. We will see more examples of this kind later. In fact, it will turn out to be important that the grammar does not compute 'adjacency', per se, at the stage of the derivation with which we are concerned: it only computes Contiguity relations, some of which require something resembling adjacency.

A variety of other facts can be made to follow from Contiguity, and I will have to direct interested reader to the relevant literature for more discussion. Let us now turn to an interaction between Contiguity and Affix Support.

1.3 Multitasking

Pesetsky and Torrego (2001) propose a condition on how the derivation is to behave at points in the derivation at which multiple operations are in principle available; a version of their condition appears in Kotek (2014), van Urk and Richards (2015), and Richards (2016):

(20) **Multitasking**

At every step in a derivation, if two operations A and B are possible, and the conditions satisfied by A are a superset of those satisfied by B, the grammar prefers A.

Consider, for example, a point in the derivation in which both the Affix Support and the Contiguity conditions need to be satisfied; perhaps when a head has been Merged which needs Affix Support, and which bears a Probe that triggers the Contiguity requirement. Multitasking requires the derivation to prefer an operation which satisfies both Affix Support and Contiguity over one which satisfies only one of these conditions. In other words, the grammar should prefer Affix Support to come from some element which is in a relation of selection or Agree—and thus, of Contiguity—with a probe on the head receiving Support.

One example of this effect comes from the behavior of the EPP in a language like English. English T requires a specifier, because of Affix Support; in other words, it requires a specifier for reasons ultimately having to do with the morphology and phonology of the English verb. But the fact that this specifier is typically the subject is traceable, in this account, to the effects of Multitasking: the preferred source of Support for T is the DP with which T is in an Agree relation.

2. Why do some phrases not need to end with their heads?

In section 1.1, I suggested that the condition of Affix Support might ultimately be related to existing proposals about the behavior of clitics (Selkirk 1995, Werle 2009). In this literature,

clitics are taken to have special behavior just because they are not well-formed prosodic words. Because the prosodic structure of the sentence is built up of prosodic words, a clitic must attach to a prosodic word in order to become part of the larger prosodic structure. The literature discusses a number of ways that different kinds of clitics can do this; they can, for example, actually become part of a prosodic word, or they can pair up with a prosodic word to create a prosodic phrase.

The literature on clitics assumes, along with most of the linguistic literature more generally, that the prosodic properties of elements like clitics are not introduced until after the syntactic derivation is complete. What I suggested in Richards (2016) was that if we give up this assumption—if we allow the 'narrow syntax' to be responsible for the building of at least some prosodic structure—then the condition of Affix Support, and the resulting account of the distribution of EPP effects, will follow from the theoretical apparatus which is already in place to account for the behavior of clitics. Syntactic heads which do not introduce stress beats of their own--for example, all the heads in the clausal spine of English—will have the 'clitic' property of needing to associate with full prosodic words. I suggested above that the English EPP is the way that this need is satisfied for T; because T is a suffix, it needs a full prosodic word to its left, and moving the subject to the specifier of TP gives T what it needs.

In section 1.3, I reviewed the condition of Multitasking, which has the effect that when English T seeks Support, it should seek it from something that a probe on T is in an Agree relation with. This idea leaves us with a puzzle, however, when we combine it with the ideas about clitics just reviewed. Clitics must attach to *prosodic words*; their special status as clitics comes from the fact that they are not well-formed prosodic words, and must attach to prosodic words to become part of the larger structure of the sentence. But it is clear that English T has no

requirement to be next to any particular prosodic word, much less to one that it is in an Agree or selection relation with (as Multitasking would require):

(21) a. [The woman] has solved the problem.

b. [The woman who left yesterday] has solved the problem.

c. [The woman who is speaking] has solved the problem.

The ϕ-probe on T is in an Agree relation with DP, but it clearly does not need to take D as its host, or any other particular part of the DP projection, as the variety of examples in (21) illustrates.

I propose that we solve this problem by positing that DP is a spellout domain; consequently, at the point in the derivation at which T Agrees with DP, the DP itself is accessible to the computation, but the interior of DP is not. As a result, Affix Support for T can be satisfied by DP, without regard for DP's interior. We might summarize this idea as follows:

(22) If X seeks Affix Support from Y, it must get Affix Support from the smallest projection of Y which is still part of the workspace.

The idea of (22) is that heads seeking Support do indeed 'prefer' to get Support from heads—but when Spellout has made the interior of an XP inaccessible to the computation, Support can come from an entire XP. On this account, DP can provide T with Support, because DP is a Spellout domain. If DP were not a Spellout domain, then T would need to get Support, not just from DP, but from D—that is, from a head with which T is in an Agree relation with (and which is itself a prosodic word).

Just to prepare ourselves for the coming discussion, we should consider what it means for X to 'get' Affix Support from Y. Multitasking will require Affix Support for X to be provided, if possible, by a Y with which X is in a Contiguity relation. And we have already seen that

Contiguity relations can sometimes require something like adjacency—though, as we have also seen, the relevant kind of adjacency allows for certain kinds of exceptions, involving interveners which are sufficiently prosodically light that they do not interrupt a Contiguity relation across them. It will be important in what follows that adjacency, per se, is not required, even for Affix Support; all that is required is Contiguity (which sometimes imposes a requirement resembling adjacency).

3. Why do some phrases need to end with their heads?

Now we are in a position to account for the puzzles with which the paper began. The phrases that must end with their heads, in this approach, will be phrases that are not spellout boundaries, and which are providing Affix Support for other heads.

Consider, for example, the cases involving APs modifying nominals. I will assume that adjectival modification universally involves morphemes of the kind seen in Tagalog, and in many Indo-Iranian languages, intervening between the adjective and the noun. In the literature on Tagalog these morphemes are called 'linkers', so I will call them that here:

(23) a. malaki-ng kambing
big-LI goat

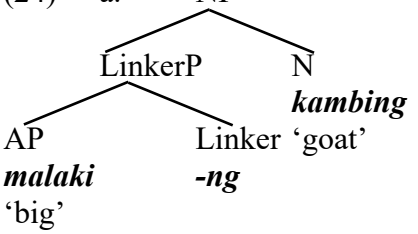
b. kambing na malaki
goat LI big
'a big goat'

In Tagalog, adjectives may either precede or follow nouns, and the linker (glossed LI above) must intervene between them. The Tagalog linker can be used in a number of syntactic contexts, but in this one, the choice between its allomorphs is determined by the phonology of the preceding word; if it is phonotactically possible, the linker is a velar nasal attached to the

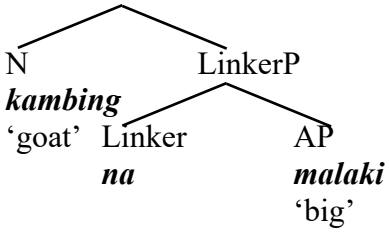
preceding word (as in 23a), and if phonotactic considerations prevent this, the linker appears as the syllable *na*.

I will assume the following syntactic structures for the examples in (23):

(24) a.



b.



The structures in (24) resemble fairly conventional ones, in which the AP would be adjoined to a projection of NP—with the difference that the AP is actually immediately dominated by a LinkerP, headed by the linker, which is the actual NP adjunct. A number of other imaginable structures would be compatible with the facts under discussion here, but I will use these, just in the interests of concreteness.

In these structures, the Linker selects the AP. The Linker also Agrees with the nominal, as we can see overtly in some of the Kurdish languages:

(25) ju bız-**a** gırs-e [*Zazaki*, Toosarvandani and van Urk 2014]
a goat-**LI.FEM.SG** big-FEM.SG
'a big goat'

In the Zazaki example in (25), the linker intervening between the adjective and the noun indicates that the noun is feminine and singular (and the adjective then has its own concord suffix, indicating the same thing).

I will assume that all of the properties of linkers just illustrated are universal: they appear between adjectives and nouns, are in a selection relation with AP and an Agree relation with NP, and are prosodically weak, 'leaning' on a host to their left. In many languages, of course, the

linkers are phonologically null (in other words, they are arguably the limiting case of "prosodically weak"), but I will assume that they are universally syntactically present.

3.1 Head-Final Filter

Consider first the case of a language like English, in which AP precedes the noun. The (null) linker between the AP and the N will lean leftward on the AP, seeking Affix Support from a constituent with which it is in a selection relation, as Multitasking requires.

Moreover, since AP is not a spellout domain, the linker will actually have to be able to get Support from the head A of AP, as proposed in section 2 above. This yields the results of the Head-Final Filter:

(26) a. a [(very) dissatisfied]-Ø customer

b. * a [(very) dissatisfied with the service]-Ø customer

In (26a), the null linker needs to be Contiguous with, and get Support from, the AP *very dissatisfied*, which it selects. Contiguity and Affix Support both succeed, since the linker can attach to the head A of the AP in question. In (26b), on the other hand, the linker is close enough to AP to create Contiguity with it, but cannot attach to A; the complement of A is in the way.

3.2 AP-Adjacency

Now we can turn to the behavior of languages in which AP follows the noun:

(27) ke ki'i [-Ø **mui**] [*Hawaiian*]

the picture LI big

'the big picture'

I assume that the Hawaiian null linker, like the English null linker (and the Tagalog and Zazaki overt linkers) is prosodically deficient, seeking Support from material to its left. Since the Linker agrees with the nominal (as the Zazaki linker morphology shows), and since the LinkerP

containing the adjective is adjoined somewhere inside DP, the Linker is required to seek Support, not just from NP, but from N. The AP must therefore be adjacent to N:

(28) a. * ke ki'i [o ke kumulā'au] [-Ø **mui**] [*Hawaiian*]
the picture of the tree LI big
'the big picture of the tree'

b. ke ki'i [-Ø **mui**] [o ke kumulā'au]
the picture LI big of the tree
'the big picture of the tree'

In (28a), the noun's complement intervenes between the noun and the Linker, preventing the Linker from attaching to an appropriate host. In (28b), the problem is solved by extraposition of the noun's complement.

3.3 FOFC

Now we can return to the effects of the FOFC, illustrated again with the conditions on word order in Finnish wh-questions:

(29) a. Milloin Jussi olisi kirjoittanut romaanin? [*Finnish*]
when Jussi would.have written INDEF.novel
'When would Jussi have written a novel?' [Aux V O]

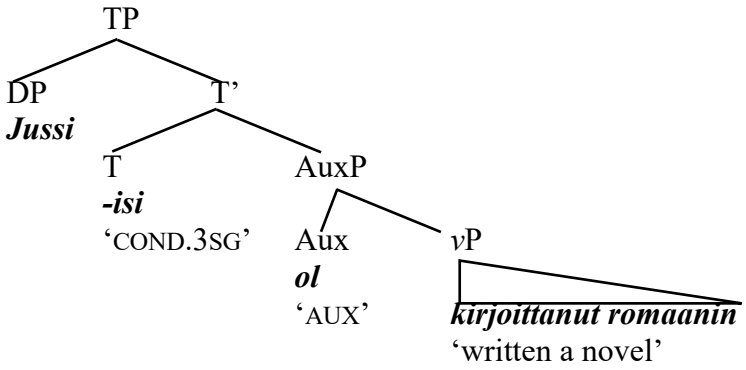
b. Milloin Jussi olisi romaanin kirjoittanut?
when Jussi would.have INDEF.novel written [Aux O V]

c. Milloin Jussi romaanin kirjoittanut olisi?
when Jussi INDEF.novel written would.have [O V Aux]

d.* Milloin Jussi kirjoittanut romaanin olisi?
when Jussi written INDEF.novel would.have [*V O Aux]

We are now in a position to account for these data, assuming a simplified partial tree for the head-initial word order in (29a) like the one in (30):

(30)



Finnish stress is generally word-initial (Suomi and Ylitalo 2004); that is, it is assigned to complete words, not to any particular morphemes. The head *ol* 'AUX' in (30) is not a complete word; it will be put together with the suffix *-isi* in T to form the auxiliary *olisi* 'would have (3sg)'. Since *ol* is not a complete word, it does not have a stress beat of its own. Consequently, we should expect the Aux node to require Affix Support.

In trees like (30), this Support can come from the subject *Jussi*. But in word orders in which *v*P precedes the auxiliary, the auxiliary will need to get Support from the interior of *v*P[2]. In (29c), in which the verb is final in *v*P, Affix Support succeeds: the auxiliary gets its Support from a projection that it selects, and specifically from the head of this projection. But in (29d), a phrase intervenes between the auxiliary and the head of *v*P, and the result is ill-formed, for reasons that we now understand.

[2] In section 2 above, I proposed that DP in English is a Spellout domain, and that Spellout domains are immune to the reasoning that triggers the effects under discussion here; because Spellout has labeled DP opaque, the reasoning went, a head requiring Support from DP has no particular need to be adjacent to D. We might now worry about whether the same reasoning ought to apply to *v*P in this example: why can the auxiliary not simply get Support from an opaque *v*P, without needing to be adjacent to any particular head? I think an answer to this question might come from Chomsky's (2001) version of the Phase Impenetrability Condition, in which Spellout of a phase takes place when the next higher phase head is Merged. DP should therefore undergo Spellout when *v* is Merged, since DP is generally dominated by *v*P, and a DP will therefore be opaque by the time it can move to the specifier of TP. The *v*P in (30), by contrast, has not yet had enough time to become opaque.

Holmberg (2000) and Sheehan et al (2017) note that FOFC violations can sometimes be tolerated if the offending phrase is prosodically 'light':

(31) Kyllä minä [lukenut sen] olen [*Finnish*]
indeed I read it AUX.1sg
'I have indeed read it'

Just as in the ill-formed (29d), in (31) the phrase preceding the auxiliary is not head-final. Crucially, however, the material intervening between the auxiliary and the verb is just a pronoun, and apparently this makes the example well-formed. We can relate this effect to the contrast in (32), already discussed above:

(32) a. * She learned **immediately** the answer
b. She found **out** the answer

In (32a), the verb and the object are separated by a phrase, and because English realizes main prominence on the leftmost of a string of phrases, the result is ill-formed. In (32b), by contrast, the element intervening between the verb and the object is merely a head, and since phrases are invariably more prominent than heads, Contiguity is respected; there is nothing between the verb and the object which is more prominent than the object.

Similarly, in the Finnish example in (31), the auxiliary is still Contiguous with (and hence, can be Supported by) the verb, despite the pronoun intervening between them. Importantly, the pronoun in (31) is prosodically light; as long as the relevant parameter in Finnish allows main prominence to be realized on the leftmost item in a string of non-phrases, the result will be that main prominence will appear on the verb, and Contiguity between the auxiliary and the verb can still hold. No such reasoning can save the FOFC violation in (29d)

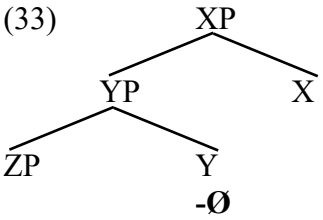
above; here the element intervening between the auxiliary and the verb is a phrase, and phrases are always more prominent than heads.

The original statement of the FOFC contains an asymmetry: head-final projections may not have head-initial complements, but head-initial projections may have head-final complements. In the account of the FOFC just given, this asymmetry is connected to the fact that Finnish heads require Support from their left; a Finnish head may require a phrase to its left to end in its head, but it will never impose any requirement on a phrase to its right. Finnish inflectional morphology is generally suffixing (and indeed, cross-linguistically, inflectional suffixes are more common than prefixes). In the particular case of affixes in a language like Finnish, the requirement that Support come from the left can be connected to the fact that the affixes are suffixes. If we are right to connect the FOFC to a need for Support for the auxiliary stem, then this general property of Finnish morphemes must be taken to hold, not only of its affixes, but of its verb and auxiliary stems as well. If this is the right line of reasoning to pursue, then it leads us to predictions about languages which are generally prefixing in their morphology; we should hope not to find the effects of the traditional FOFC in such languages, and in fact we might hope to find the effects of the mirror image of the traditional FOFC, with initial heads being banned from taking head-final complements.

4. Why are there exceptions?

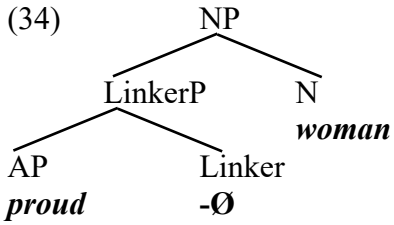
The discussion thus far has focused on structures like the one in (33):

(33)



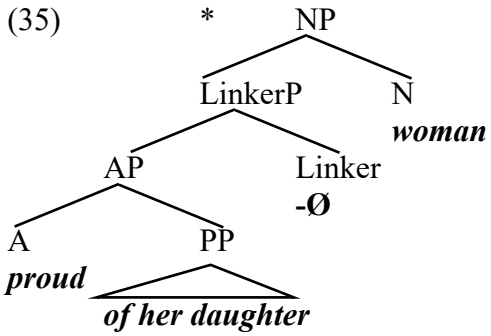
In the particular case of the Head-Final Filter, for example, XP is an NP, YP is a LinkerP, and ZP is an AP:

(34)



The linker in (34), we have said, must have a host to its left, and this host must be A, thanks to the combined effects of Contiguity, Affix Support, and Multitasking. If a phrase intervenes between A and the Linker, the result is ill-formed:

(35)

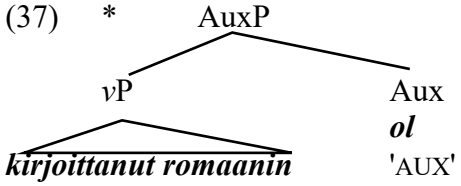


The account of the FOFC violation in (36) had a similar character:

(36) * Milloin Jussi kirjoittanut romaanin olisi?

when Jussi written INDEF.novel would.have [*V O Aux]

(37)



'written a novel'

The head Aux in (37), like the Linker in (35), is not a complete word (it will only become a complete word by combining with higher functional material to become *ol-isi* 'would have'), and

therefore needs Support, to its left, from the verb. Since the complement of V intervenes between the verb and Aux, (37) is ill-formed.

Both of these accounts start with the assumption that Linker in (33) and Aux in (35), are alike, both in not being complete prosodic words (and therefore needing Support), and in not being able to get Support in any way other than by 'leaning' to the left. But suppose there were heads of this kind for which these assumptions were not true?

4.1. Exceptions to the FOFC

As mentioned above, the literature on the FOFC has unearthed a number of apparent exceptions:

(38) a. Kɔ̀kú [wà àzɔ̌ ɔ́] **fó** [*Fongbe*, Aboh 2020, 284]
Koku do work DET finish
'Koku finished doing the work'

b. Nǐ [gāngcái shuō shénme] **láizhe**? [*Mandarin*, Paul 2014]
you just say what RECENT.PAST
'What did you just say?'

c. [Zhāng-sān cháng kàn diànyǐng] **ma**? [*Mandarin*, Li and Thompson
Zhangsan often see movie Q 1984, 54]
'Does Zhangsan often see movies?'

d. deb-ge [tol kobio] **li**. [*Bagirmi*, Dryer 2009, 317]
person-PL kill lion NEG
'The people didn't kill the lion'

A property which these exceptions typically have, which is often commented on (Bailey 2013, Sheehan et al 2017, and much other work) is that they involve heads which are not polymorphemic (to use the term this literature often uses, they are 'particles'). Consequently,

each of these heads is, at least potentially, a complete word on its own, and thus in principle capable of undergoing any stress-assignment rules which assign stress to words[3]. These heads should therefore not need Support, and the exceptions in (38) are thereby accounted for.

4.2. Exceptions to the Head-Final Filter

As was also mentioned above, there are languages that are reported to allow violations of the Head-Final Filter:

(39) a. [mnogo gordiy-at săs svoe-to dete] bašta [*Bulgarian*:
very proud-the with self-the child father Tasseva-Kurktchieva
'the father [very proud of his child]' 2005]

b. i [perifani ja to jo tis] mitera [*Greek*: Androutsopoulou 1995]
the proud of the son her mother
'the mother [proud of her son]'

c. [bogaty w doświadczenia] człowiek [*Polish*: Siewierska and Uhlířová
rich in experience man 1997]
'a human being [rich in experience]'

What distinguishes these languages from the languages in which the Head-Final Filter is active?

Here is a descriptive generalization which appears to hold of languages with pronominal clitics. The generalization makes use of the phrase 'cliticization target', the meaning of which will become clearer once I illustrate the effects of the generalization:

[3] The actual realization of stress, of course, might involve many complicating factors, some of them possibly postsyntactic; it might turn out, for example, that these 'particles' go through an early derivational stage in which every complete word receives its own stress, possibly followed by later stages in which certain kinds of heads (such as functional heads) are deprived of prosodic prominence in the course of constructing larger prosodic units.

(40) a. If a language has pronominal clitics that can take NP-internal material as a cliticization target, then the language lacks the effects of the head-final filter (*Bulgarian, Macedonian, Polish, Greek*…)

b. If a language has pronominal clitics that *cannot* take NP-internal material as a cliticization target, then the language must *obey* the head-final filter (*Czech, Slovak, Serbian, Croatian, Slovenian, Italian, Spanish*…)

Pronominal clitics in Bulgarian, Greek, and Polish, for example, can find their hosts inside NP:

(41) a. kniga-ta ***vi***
book-the you.DAT
'your book'

b. mnogo-to ***ti*** novi knigi
many-the you.DAT new books
'your many new books' [*Bulgarian*: Franks and King 2000, 56]

(42) a. to kenurjo podilato ***tu***
the new bike his
'his new bike'

b. to kenurjo ***tu*** podilato
the new his bike [*Greek*: Anagnostopoulou 2012, 5]

(43) moje (***mu***) pomoganie (***mu***) we wtorki (****mu***)
my him.DAT helping him.DAT on Tuesdays him.DAT
'my helping him on Tuesdays' [*Polish*: Franks and King 2000, 131]

The pronominal possessors in (41) and (42), and the pronominal object of the nominalized verb in (43), may all cliticize to material inside NP. And, as the generalization in (40) leads us to expect, these are all languages in which the Head-Final Filter may be freely violated:

(44) a. [mnogo gordiy-at săs svoe-to dete] bašta [*Bulgarian*:
very proud-the with self-the child father Tasseva-Kurktchieva
'the father [very proud of his child]' 2005]

b. i [perifani ja to jo tis] mitera [*Greek*: Androutsopoulou 1995]
the proud of the son her mother
'the mother [proud of her son]'

c. [bogaty w doświadczenia] człowiek [*Polish*: Siewierska and Uhlířová
rich in experience man 1997]
'a human being [rich in experience]'

By contrast, languages like Serbian and Italian cannot have clitics within NP; not only do they not have clitic versions of their pronominal possessors, but objects of nominalized verbs cannot be clitics taking anything NP-internal as their hosts:

(45) a. predstavljanje njega Mariji
introduction him.GEN Maria.DAT
'the introduction of him to Maria'

b. * predstavljanje ***ga*** Mariji
introduction him.GEN Maria.DAT [*Serbian*: Franks and King 2000, 273]

(46) a. il suo aiuto a me
the his help to me
'his help to me'

b. * il suo aiuto-***mi***

the his help-me.DAT [*Italian*: Stanislao Zompì, p.c.]

And languages like Serbian and Italian are among the languages in which the effects of the Head-Final Filter are seen:

(47) a. *[karakteristična za našu zemlju] kretanja

characteristic of our country trends

'trends characteristic of our country' [*Serbian/Croatian*: Siewierska and Uhlířová 1997, 137]

b. * il [simile ad un vocabolario] libro di Gianni

the similar to a dictionary book of Gianni

'Gianni's book similar to a dictionary' [*Italian*: Cinque 2010, 45]

Now that we have seen some examples of the generalization in (40) at work, I should explain what is meant in that generalization by the 'cliticization target'. Clitics in Serbian, Bosnian, and Croatian, for example, appear in "second position" in the clause:

(48) Komšije *su nam ga* vratile, hvala Bogu.

neighbors AUX us.DAT him.ACC returned thanks God

'The neighbors returned him to us, thank God'. [Wehrle 2009, 276]

The italicized clitics in (48) are attaching to the first phrase (and also the first word) of the clause. As it happens, their host is a noun. But their *cliticization target* is not specifically a noun; they would cliticize to anything in this position of the clause. By contrast, consider the Bulgarian clitics in (49):

(49) a. kniga-ta *vi*

book-the you.DAT

'your book'

b. mnogo-to *ti* novi knigi

many-the you.DAT new books

'your many new books' [*Bulgarian*: Franks and King 2000, 56]

The italicized possessive prefixes in (49) are attaching to the first element in the noun phrase. In other words, they have a *cliticization target* which is defined in terms of the constituents of the noun phrase; the noun phrase is the domain within which they cliticize.

Now, why does the generalization in (40) hold? That is, why can languages in which pronominal clitics may find cliticization targets within the NP freely violate the Head-Final Filter, while languages in which pronominal clitics cannot have cliticization targets within NP must obey it?

It seems to me that we can understand this generalization as telling us that the null linker, in all of these languages, has the option of behaving like a pronominal clitic. Bulgarian, for example, is a language in which pronominal clitics may attach to NP-internal material, as we have seen. And by hypothesis, an NP like the one in (50) contains a null Linker, which follows AP and must attach to A:

(50) [mnogo gordiy-at săs svoe-to dete]-Ø bašta [*Bulgarian*:

very proud-the with self-the child father Tasseva-Kurktchieva

'the father [very proud of his child]' 2005]

What distinguishes languages like Bulgarian, then, would just be the fact that the movement arrow in (50) represents a legitimate move for this language; the null Linker is actually able to

reach its adjective host, by moving within NP just like a Bulgarian pronominal clitic. In a language in which pronominal clitics cannot undergo movements like the one in (50), the Linker must find a host adjacent to it, and the effects of the Head-Final Filter therefore emerge. In other words, there is no variation between languages with respect to the conditions on where the Linker must attach; the variation has to do with the kinds of movement the Linker may undergo.

This approach raises an important question: what determines the placement of pronominal clitics? The question is particularly important, in the theory under discussion here, because languages which lack pronominal clitics are not uniform with respect to the Head-Final Filter: English and Russian, for example, both lack pronominal clitics, but English obeys the Head-Final Filter, while Russian does not:

(51) a. [dependent (*on the export of oil and gas)] countries

b. [zavisimyje ot eksporta nefti i gaza] strany
dependent from export.GEN oil.GEN and gas.GEN countries
'countries [dependent on the export of oil and gas]'

[*Russian*: Alexeyenko and Zeijlstra 2021, 51]

In languages that have pronominal clitics, then, we can use the behavior of pronominal clitics as a way to predict the behavior of the Linker; but what we also need is a way of determining the behavior of the Linker in languages in which there are no pronominal clitics to observe. What this theory leads us to seek, in other words, is a particular approach to the placement of clitics which at least partly derives their possible landing sites, not from idiosyncratic lexical properties of the clitics themselves, but from something independently observable about the language in which the clitics are found. In other words, we want a theory of the behavior of clitics which predicts that if English *did* have pronominal clitics, they would pattern with those of Italian and

Serbian, and that Russian pronominal clitics, if they existed, would behave like the pronominal clitics of Bulgarian or Polish. Unfortunately, I have no such theory of pronominal clitics to offer, and must leave this problem to future work.

5. Is this a good enough theory?

The theory in this paper has been meant to handle, among other things, the fact that phrases cannot intervene between English adjectives and nouns:

(52) a. a proud (*of her daughter) woman

b. a taller (*than me) student

There are, however, some apparent exceptions[4]:

(53) a. my first (ever) bicycle

b. a tall (enough) student (for the basketball team)

Why can expressions like *ever* and *enough* intervene between the adjective and the noun?

Here I will draw heavily from van Riemsdijk's (1998) proposals about a similar puzzle in Dutch. The resulting picture will also depend on certain assumptions about how Contiguity Theory fits in the grammar; namely, the idea that Contiguity Theory handles a set of conditions that hold during the 'narrow syntax', representing the attempts of the syntactic computation to create objects which will be acceptable to the PF interface. An important idea, already present in previous work, is that the representations constructed by Contiguity Theory will not necessarily survive the PF derivation; there may be other conditions imposed by the PF interface itself to which the narrow syntax is blind, and which are imposed after the syntactic derivation is finished.

[4] Many thanks to Manfred Sailer for pointing out these cases.

Dutch prenominal adjectives, van Riemsdijk (1998) tells us, generally end in a morpheme *-e*, except when the modified noun is neuter and indefinite:

(54) a. een rond-**e** bal (non-neuter, indefinite)
a round-**e** ball

b. het rond-**e** bord (neuter, definite)
the round-**e** plate

c. een rond bord (neuter, indefinite)
a round plate [*Dutch*: van Riemsdijk 1998, 672]

An expression like *snel genoeg* 'fast enough' may be prenominal, just if there is no *-e* (that is, just when the noun is neuter and indefinite):

(55) a. een snel genoeg vliegtuig (neuter)
a fast enough plane

b. * een snel genoeg-**e** auto (non-neuter)
a fast enough-**e** car

c. *een snell-**e** genoeg auto

d. * een snel genoeg auto [*Dutch*: van Riemsdijk 1998, 673]

Van Riemsdijk notes a different pattern for *zo snel mogelijk* 'as fast as possible', which may combine with *-e*:

(56) a. een zo snel mogelijk vliegtuig (neuter)
a as fast (as) possible airplane
b. een zo snel mogelijk-**e** auto (non-neuter)
a as fast (as) possible-**e** car
c. *een zo snell-**e** mogelijk auto
d. * een zo snel mogelijk auto [*Dutch*: van Riemsdijk 1998, 673]

Van Riemsdijk's (1998) observation is that *-e* must appear at the end of AP, and must attach to an adjective (and words like *snel* 'fast' and *mogelijk* 'possible' are adjectives, while *genoeg* 'enough' is not).

He also notes that the presence or absence of *-e* is not relevant for Head-Final Filter violations, which are invariably bad in Dutch:

(57) a. *de trots-**e** op zijn zoon vader (non-neuter)
the proud-**e** of his son father
b. * een trots op zijn vader kind (neuter)
a proud of his father child [*Dutch*: van Riemsdijk 1998, 672]

It seems to me that the English and Dutch facts might be captured by an account which makes use of one of the central ideas of Contiguity Theory, namely that the syntactic movements and filters which the theory posits represent attempts to create representations which will be well-formed at the PF interface, during the narrow syntax—that is, at a point in the derivation at which much of the information which will be present at PF has not yet been introduced into the representation. Let us begin by noting that the modifiers under discussion here (e.g., *ever*, *enough*) have the somewhat unusual property of obligatorily following the adjectives that they modify:

(58) a. She is (*very/quite/extremely/sufficiently*) tall (**very/quite/extremely/sufficiently*).

b. She is (**enough*) tall (*enough*).

Suppose we hypothesize that this ordering is induced postsyntactically, once the lexically idiosyncratic properties of modifiers like *enough* and *ever* have been introduced via late insertion.

In both Dutch and English, then, modifiers would be followed by a linker, which would seek Support from its left in the way we have discussed, and modifiers would uniformly precede adjectives in the narrow syntax:

(59) a. a [proud of his father]-LINKER child

b. een [trots op zijn vader]-LINKER kind

a proud of his father child

c. a [enough fast]-LINKER plane

d. een [genoeg snel]-LINKER vliegtuig

a enough fast plane

e. een [genoeg snel]-LINKER auto

a enough fast car

During the narrow syntax, examples like (59a-b) will be ruled out; the linker will seek Support from the adjective to its left, and the complement of the adjective will intervene. In (59c-e), Support will be successfully created; at this point, the linker is adjacent to the adjective preceding it, as required.

Postsyntactically, two relevant things will happen in (59c-e). The modifiers *enough* and *genoeg* will be shifted to positions after the adjective, and the linkers (along with the rest of the

lexical items) will become more fully phonologically specified, via insertion of (among other things) the segments to be pronounced under each node.

(60) a. a [fast enough]-Ø plane

b. een [snel genoeg]-Ø vliegtuig
a fast enough-LINKER plane

c. *een [snel genoeg]-*e* auto
a fast enough-LINKER car

In all of the examples in (60), the postposing of the modifiers *enough* and *genoeg* breaks the Contiguity relation which held between the adjective and the linker, thereby eliminating the linker's Support. In (60a-b), the linker's loss of Support is not problematic, because the linker is, in the end, not pronounced at all, and therefore no longer subject to any conditions imposed by PF. In (60c), on the other hand, the linker is to be pronounced as *-e*, and the loss of Support is therefore fatal.

In (59a-b), the two cases of violations of the Head-Final Filter, the linker is also null, and in the end, will not need Support. The facts in (59), on this account, are fairly typical of the somewhat dysfunctional relationship which Contiguity Theory posits between the narrow syntax and PF. The syntactic derivation attempts to create representations acceptable to PF, but is working with only a partial representation of phonological information. In this particular case, the syntax is aware that linkers are prosodically dependent and ought to require Support, and therefore rejects structures in which Support is unavailable; but because segmental information has not yet been introduced, the syntactic derivation operates in ignorance of which morphemes will in fact be phonologically null and therefore eventually free of the need for Support.

6. Some possible extensions

In these sections I will sketch some possible further applications of the approach developed here.

6.1 DP and adjacency

In section 2 above, I proposed that DP is, in general, immune to the considerations that give rise to the phenomena discussed in this paper, because it is a Spellout domain. Because Spellout has rendered the internal structure of the DP opaque, the idea went, any heads seeking Support from DP will always be satisfied with the entire DP, without imposing any restrictions on the placement of the heads making up the DP. The behavior of the DP, on this account, is linked to the fact that DP (unlike, for example, AP) contains a phase head which renders its inner workings unavailable to the computation.

The literature contains several examples of languages in which certain DPs behave very much like the projections this paper has been discussing, in that they must have certain heads in positions adjacent to their licensers. Levin (2015), for example, discusses the case of Balinese postverbal subjects, which must have the head noun adjacent to the preceding verb:

(61) Nyoman gugut [(* **liu**) cicing (**liu**)]

Nyoman OV.bite many dog many

'Many dogs bit Nyoman' [*Balinese*: Levin 2015, 76]

The ban on having *liu* 'many' to the left of *cicing* 'dog' in (61) is not a general fact about this modifier in Balinese, which may generally either precede or follow the noun:

(62) [(**Liu**) cicing (**liu**)] ngugut Nyoman

many dog many SV.bite Nyoman

'Many dogs bit Nyoman' [*Balinese*: Levin 2015, 76]

In general, *liu* 'many' can either precede or follow the noun; in (61), however, *cicing* 'dog' must be kept adjacent to the verb.

Branan (2022) discusses similar facts from Kikuyu. Kikuyu demonstratives may generally either precede or follow the noun:

(63) [(**Ũyũ**) mũndũ (**ũyũ**)] nĩ-a-rũg-ire

1.DEM 1.man 1.DEM FOC-1S-jump-ASP

'This man jumped' [*Kikuyu*: Branan 2022, 2]

Certain kinds of postverbal arguments, however, are more restricted; the demonstrative cannot intervene between the verb and the noun:

(64) Mwangi nĩ-a-on-ire [(***ũyũ**) mũndũ (**ũyũ**)]

Mwangi FOC-1S-see-ASP 1.DEM man 1.DEM

'Mwangi saw this man' [*Kikuyu*: Branan 2022, 2]

The Kikuyu and Balinese nominals described above are behaving in a way that this theory leads us to expect, if they are (exceptionally) not Spellout domains, and are being licensed by a head which makes up part of the verb that is seeking Support to its right. If we thought, for example, that the Kikuyu and Balinese postverbal DPs in question are all being Agreed with by *v*, and that *v* is a prefix in these languages (and note that both of these languages do make use of prefixing in their verbal morphology), then we expect *v* to seek Support, not only from the entire DP phrase, but from the particular nominal head bearing the features that *v* is Probing for:

(65) *v*- … [$_{DP}$ X]

If we think that *v* bears a phi-probe, and that the Goal of this probe is a set of phi-features realized in one or more positions in the functional spine of the nominal, and if these particular DPs are not Spellout domains, then this theory predicts that *v* and X—that is, *v* and the noun

itself, of which X is presumably a part—must be linearly adjacent (more specifically, that they cannot be linearly separated by anything more prosodically prominent than X). The Balinese and Kikuyu contrasts in (61-64) would then follow.

Balinese and Kikuyu are certainly not the only languages in which certain nominals are required to be adjacent to the verb; see also van Urk (2020) on Fijian, Enç (1991) on Turkish, Baker and Vinokurova (2010) on Sakha, and much other work. One type of proposal which is sometimes made about these kinds of languages (for example, by Levin 2015, van Urk 2020, and Branan 2022) is that they exhibit multiple ways for nominals to interact with Case licensing: nominals may either be Case licensed in the familiar way, or they may undergo a different licensing process which requires them to be adjacent to the verb. The proposal made here can be thought of as a particular kind of implementation of that idea. A DP may either contain the functional structure necessary to make it a Spellout domain, or it may not. If DP is a Spellout domain, then any head Agreeing with it will need to create a Contiguity relation with it, which may or may not impose a requirement of adjacency. If DP is not a Spellout domain, however, and if the head Agreeing with it requires Affix Support, then an adjacency relation of a particular kind will be forced, one in which the nominal head itself is string-adjacent to a licenser. The adjacency requirement in question is accounted for via mechanisms that are also useful in other domains, as I have tried to show in this paper.

How can we determine independently whether a given DP is or is not a Spellout domain? This seems like a very important question for the future development of the idea of this section, and at this point I unfortunately have no answers to suggest. I will therefore end the section here, leaving this question for future work.

6.2 Selectional Contiguity

In Richards (2016) I posit a general condition of Contiguity, reviewed in section 1.2 above. I also claimed there that there is a more strict requirement of Contiguity which holds specifically for heads in a selection relation; such heads are required to be string-adjacent.

Selectional Contiguity was meant to account, for example, for conditions on extraposition in German discussed by Haider (2000, 2004). German allows extraposition of VP-internal material to a position following the verb, in examples like the ones in (66), in which the VP has itself been fronted:

(66) a. [__ Gerechnet **damit**] hat sie nicht mehr.
reckoned with.it has she not any.more
'She has not reckoned with it any more'

b. [__ Gesagt [**wie es funktioniert**]] hat er dem Kollegen leider nicht.
said how it works has he the colleague unfortunately not
'He has unfortunately not told his colleague how it works'

In (66), the boldfaced phrases have been extraposed to the right edge of the fronted VP. Such extraposition becomes impossible, however, if the VP is not fronted:

(67) a. *…dass sie nicht mehr [__ gerechnet **damit**] hat.

that she not any.more reckoned with.it has

'…that she has not reckoned with it any more'

b. *… dass er dem Kollegen leider nicht

that he the colleague unfortunately not

[__ gesagt [**wie es funktioniert**]] hat.

said how it works has

'…that he unfortunately has not told his colleague how it works'

The idea in Richards (2016) was that the facts in (67) represent the effects of Selectional Contiguity; the auxiliary *hat* 'has' is in a relation of Selectional Contiguity with some head contained in the main verb, and these heads therefore cannot be broken up by extraposition. In (66), the idea went, the VP has been fronted for reasons having to do with the requirements of a completely different head, which can apparently override Selectional Contiguity.

The approach developed in this paper makes it possible for us to account for facts like those in (67) in a different way, without positing a special status for Contiguity relations triggered by selection. The auxiliary, or some head which makes up part of the auxiliary, does indeed select a head which is contained in the main verb, and this selection relation triggers a Contiguity requirement—but because the auxiliary stem is not a complete word, it also requires Affix Support, and the same considerations which have driven all the other explanations in this paper then require adjacency between the auxiliary and the main verb.

Some of the other phenomena which Selectional Contiguity was invented to explain have also received a different explanation in this paper (Selectional Contiguity was an important part of my account of the FOFC, for example). Whether all of the facts that Selectional Contiguity

was meant to handle can now be dealt with via the approach outlined here is a question I will leave for future work.

7. Conclusion

The core proposal of this paper has been a refinement of the Contiguity-theoretic idea of Affix Support, repeated here:

(68) If X seeks Affix Support from Y, it must get Affix Support from the smallest projection of Y which is still part of the workspace.

I have argued that (68) can be useful in accounting for the FOFC and for the Head-Final Filter (along with some of their known exceptions), as well as the requirement of AP-adjacency.

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