Remarks on Head Movement in English and French

Explorations in Generative Grammar

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Hee-Don Ahn

(Seoul National University)
position to A'-head position.

Short head movements include the verb movements proposed by Emonds (1978) and Pollock (1989) with respect to relative ordering between verbs and other elements such as adverbs, negation, and floating quantifiers. Parallel to NP-movements such as passive and raising, I will follow the claim that short head movement is an instance of A-movement; that is, movement from A-head position to A-head position (cf. Li (1990), Roberts (1991), Han (1993)).

This paper will deal mainly with the nature of short head movement, although a brief discussion on long head movement will also be given.

1.2. Direct or Indirect

The computational operations governing syntactic word-formation can be either “direct” (through incorporation à la Baker (1988)) or “indirect” (through checking à la Chomsky (1993)). Take the past tense form walked for instance. The combining processes of the stem WALK and the inflectional morpheme PAST (-ed) can be interpreted at least in two ways.

Under the direct approach advocated in Pollock (1989) and Chomsky (1991), the stem WALK is drawn from the lexicon as such, then head-combining operations such as head-movement incorporate it with the morpheme piece -ed or PAST in the syntax.

Under the indirect approach advanced in Chomsky (1993/1994), on the other hand, the inflected word walked is directly drawn from the lexicon with its intrinsic features already assigned, and the head-movement combines the amalgam walked with the inflectional node, where the relevant features are checked and licensed.

This paper argues for the direct (incorporation) approach where the syntactic rule associates verb stems with their inflectional morphemes through word-formation by adjunction (i.e. by head-movement).

1.3. Raising or Lowering

This paper further claims that there be two types of head-movement: head “raising” and head “lowering,” which each have their own distinct properties.

By head raising, verb stems V may raise to inflectional nodes/morphemes I, a typical instance of movement that should observe general constraints on movement such as relativized minimalism.

In notable contrast with head raising, head lowering, which we mean INFL literally moves down to V, is subject to totally independent modules and principles of grammar such as “adjacency.”

I will further claim that those two kinds of head-movement (raising vs lowering) are governed by two independent principles of grammar; one is the Principle of Greed put forward in Chomsky (1993/1994), the other is the Principle of Haste (Pollock (1994)) or the Earliness Principle (Pesetsky (1989)) as opposed to the Procrastinate Principle of Chomsky (1993/1994).

I will essentially show that the different scope of verb movement in English and French can be captured by the fact that verb stems in English are “free” morphemes while those in French are “bound.” Specifically, with the proper formulation of “Greed,” main verb stems in English are not allowed to move since they are full standing words, and they must remain in situ (inside VP) unlike main verb stems in French, which can move since morphologically bound forms cannot stand alone in the syntax (cf. Lasnik (1981)).

I will further propose that (overt) head raising can take place only prior to LF (covert movement aside), whereas head lowering can occur only after LF; to be more precise, between LF and PF--the level that I dub “Morphosyntactic” component (roughly akin to the “Morphology” component in Chomsky (1994)). Then, with a certain properly formulated
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Hee-Don Ahn
(Kon-Kuk University)

1. Preliminaries

It is widely held that there is a reasonable distinction between inflectional
and derivational process of morphology; the former word-formation in-
volving syntactic operations, while the latter internal to the lexicon (see
Anderson (1992) for some discussion).

This paper explores the issues concerning the role of head-movement in
the morphology and syntax of verb inflection. Among various head com-
bining operations, this paper restricts its attention to those cases where a
verb and inflectional morpheme are affected.

1.1. Long or Short

The head movements discussed in the literature can be divided into two
types: "long" and "short." Long movement relates X to Y beyond IP
(say, I-to-C or C-to-I movement), and short movement relates X to Y
within IP (say, V-to-I or I-to-V movement).

Well-known instances of long head movements are the so-called Subject-
Aux inversion in English and Verb Second in Germanic languages. Like
wh-movements and topicalization, I will adopt the view that long head
movement is an A'-movement; that is, movement from A- or A'-head
version of "Haste/Earliness," (main) verb stems that are bound forms in French not only "can" but "must" raise to inflectional nodes (that are also bound morphemes in French and many other languages) instead of lowering of I to V that is essentially barred by Haste/Earliness.

2. Facts

Concerning word order variation in many languages, one of the important factors is based on the correlation that holds between a verb's syntactic position and its morphological marking. Call this "correlation argument."

Finite verbs bearing some sorts of (rich) inflectional endings tend to occupy different syntactic positions from non-finite verbs which involve bare (or impoverished) inflectional ending. To formulate a correlation argument in a strong form, let us ignore "rich/poor" distinction of morphological marking temporarily, and assume "finite/nonfinite" (or "inflectedness") distinction as its core for the moment.

2.1. Verb Action in French

In French, a finite verb precedes the negative marker pas, while the reverse order is usual with infinitivals. Here are some examples from Roberts (1994, 151-2).

(1) a. Jean n'aime pas Marie.
   J. neg loves not M.
   "John doesn't love Mary."
   b. *Jean ne pas aime Marie.

(2) a. Ne pas aimer ses parents est une mauvaise chose.
   neg not to-love one's parents is a bad thing
   b. *N'aimer pas ses parents est une mauvaise chose.

Given the reasonable assumption that the position of pas (presumably the head or specifier of NegP) remains constant, finiteness seems to determine the position of the verb in French.

Note also that similar paradigms are obtained with the interaction between a verb's finiteness and adverbials in French. Examples are also taken from Roberts (1994, 151-2).

(3) a. Jean comprend à peine l'italien.
   J. understands hardly Italian
   "John hardly understands Italian."
   b. *Jean à peine comprend l'italien.

(4) a. A peine comprendre L'italien, ce n'est pas un crime.
   Hardly to-understand Italian, it neg is not a crime.
   "To hardly understand Italian is not a crime."
   b. Comprendre à peine L'italien, ce n'est pas un crime.

Putting aside the grammatical "adverb-verb" order in (4b) for the moment, (3)/(4) appear to pattern with (1)/(2) the way in which finiteness can determine verb placement: finite verbs precede pas and adverbs, and infinitives follow these elements.

Verb action in French, in fact, seems to be a bit more complex when we consider the behavior of auxiliary verbs such as avoir, être and modal-like verbs such as vouloir, devoir, pouvoir, and falloir.

Finite auxiliaries (and modals) pattern exactly with main verbs, hence, they can be dealt with in a uniform fashion (Pollock (1994, 89-90)).

(5) a. Jean n'a pas disparu.
   "John has not disappeared."
b. *Jean ne pas a disparu.
c. Jean n’est pas heureux.
   “John is not happy.”
d. *Jean ne pas est heureux.

As seen in (5), finite auxiliaries cannot follow pas but must precede it on
a par with finite main verbs in French.

Unlike main verbs in infinitives as shown in (2), however, nonfinite
auxiliaries in French can either precede or follow the negative element
pas, as shown in the following (Pollock (1994, 91)).

(6) a. Ne pas être/avoir compris …
   “Not to be/have understood …”
b. N’être/avoir pas compris …

2.2. Auxiliaries in English

Paradigms in English verb action display semi-parallel aspects compared
with French. In English an auxiliary verb cannot follow the negative
marker not if it is “inflected” with the tense/agreement morpheme.

(7) a. John has not left.
   b. *John not has left.
   c. John is not happy.
   d. *John not is happy.

In this respect, auxiliaries in English behave on a par with main verbs in
French.

Note, however, that “uninflected” auxiliary verbs in English subjunctive
clauses may not precede the negator not. Observe the examples below
taken from Johnson (1994, 2).2

(8) a. I request that Gary not be eating when we arrive.
   b. I demand that Gary not have left by the time it starts.
   c. *I request that Gary be not eating when we arrive.
   d. *I demand that Gary have not left by the time it starts.

(8c–d), where bare auxiliaries precede not, are not completely deviant for
some speakers, nonetheless, they are much worse than (8a–b). A similar
observation is made in Roberts (1991) concerning the English subjunctive.3
Pollock (1989, 376), however, claims that the following sentences in-
volving infinitives are marginally acceptable for many speakers.

(9) a. ??To be not happy is a prerequisite for writing novels.
   b. ??To be not arrested under such circumstances is a miracle.
   c. ??To have not had a happy childhood is a prerequisite for this.

But the facts on acceptability judgments are murky, as Pollock himself
concedes. In Lasnik (1992, 403), it is observed that the following
infinitivals in (10) pattern with imperatives in (11) in disallowing verb
raising.

(10) a. *I believe there to be not a solution.
   b. *I believe John to be not here.
   c. *I believe John to be not singing.

(11) a. *Be not noisy.
   b. Do not be noisy.

Aside from variation in grammatical judgment among speakers, I speculate
that the marginal acceptability may correlate to the emphatic use of not as
“constituent negation” in the sense of Klima (1964). If, for some semantic
reason, an emphatic use of not is not possible in Lasnik’s sentences as opposed
to Pollock’s ones where constituent negation is possible, Pollock’s sentences
may not give rise to a genuine piece of evidence for be raising in infinitives. See Ahn (1994) for some discussion on two types of not in English.

2.3. Main Verbs in English

So far we have observed the correlation that holds between verb placement and the presence or absence, i.e. finiteness, of inflectional markings. English main verbs, however, seem to exhibit exceptional paradigms regarding the "correlation" scheme.

Somewhat parallel to main verbs in French, uninflected main verbs in English follow the negation not.

(12) a. I require that John not leave.
    b. *I require that John leave not.
    c. I believe John to not leave.
    d. *I believe John to leave not.
    e. I made John not work.
    f. *I made John work not.

Note that in these examples I intend to preclude the option of the interpretation involving "constituent negation." Thus, the contrasts here are clear-cut, compared with (9) above.

Inflected main verbs in English, however, sharply contrast with ones in French in that they cannot precede not.!

(13) a. *John laughs not.
    b. *He got not arrested.
    c. *John left not early.

Inflected (main) verbs cannot follow the negative element not, either.

(14) a. *John not laughs.
    b. *He not got arrested.
    c. *John not left early.

Recall that uninflected verbs follow not in English, as we have seen in (12). Thus, the ill-formedness in (13) along with (14) is another peculiar property found in English that calls for an explanation.

Inflected main verbs in English may not precede a certain class of adverbs, either.


As noted in Pollock (1994, 108), a careful choice of adverbs is important. Consider the following examples that apparently display main verb raising. (cf. Pesetsky (1989), Johnson (1991))

(16) a. Bill knocked recently on it.
    b. Sue looked carefully at him.
    c. Harry relies frequently on it.

These sentences, however, may involve PP extrapolation to the right of VP "final" adverbs since the following sentences are also acceptable.

(17) a. Bill knocked on it recently.
    b. Sue looked at him carefully.
    c. Harry relies on it frequently.

If a choice is made with adverbs that do not occur VP final, the sentences become considerably worse than (16).

(18) a. *Bill knocked hardly on it.
    b. *Sue looked barely at him.
    c. *Harry relies sure on it.
Witness that as observed in Pollock (1994), the class of adverbs employed in (18) cannot occupy a VP final position in contrast with (17).

(19) a. *Bill knocked on it hardly.
    b. *Sue looked at him barely.
    c. *Harry relies on it sure.

24. On Case Adjacency

In contrast to V-Adv-PP order in the previous subsection, notice that whether adverbs can be VP final or not, “main verb+adverb” orders are uniformly blocked, as shown in the following examples where a verb takes an NP complement.

(20) a. *John sees recently Mary.
    b. *John reads carefully the letter.
    c. *John visited frequently her house.

(21) a. *John sees hardly Mary.
    b. *John reads barely the letter.
    c. *John visited sure her house.

The ungrammaticality in (21) can be accounted for on a par with (18). The deviance in (20), however, begs a deeper explanation. Unlike (21), V-Adv order in (20) seems to be able to be obtained from the following (well-formed) initial structures through Extraposition of NP complements to the right of VP final adverbs.

(22) a. John sees Mary recently.
    b. John reads the letter carefully.
    c. John visited her house frequently.

Then, the question arises why NP-Extraposition but not PP-Extraposition is ruled out in English (see some discussion in Pollock (1989, 381 fn.17)). I suggest that the answer not be directly connected to the constraint on Extraposition per se, but lie in the role of Case theory.

The traditional account of impossible V-Adv-NP order in English is that there is an adjacency requirement on structural Case assignment (cf. Stowell (1981) and Chomsky (1981)). But this account suffers from accommodating French data. Recall that V-Adv-NP order is not only possible with infinitives (see (4)), but is also forced in finite clauses (see (3)). Furthermore, even in English, Case adjacency condition does not hold in its strict form. Consider the following contrasts noted in Lasnik (1992, 386-8).

(23) a. ?There usually arrives a bus (at this time).
    b. *There arrives usually a bus (at this time).

(24) a. There is usually a man here.
    b. ?*There will be usually a man here.

The contrast between (23a) and (23b) can be handled by Case adjacency if an unaccusative arrive, involved in there-construction, is indeed a (structural) Case assigner (cf. Belletti (1988)). However, the standard Case adjacency may not naturally account for the contrast in (24). Case adjacency wrongly rules out both sentences in (24). Under our “correlation argument,” be, a (structural) Case assigner, can not raise in (24b), hence, this (illicit) word order can only be obtained by NP-Extraposition that is impossible in English. The (licit) word order in (24a), on the other hand, can be achieved by be-raising. (Note that be is inflected in this case, so be-raising is expected due to correlation argument.)

In sum, Case adjacency is not only “conceptually” weak (since it is a language-particular condition), but also “empirically” misleading (since it incorrectly predicts (24a) ungrammatical). Note further that in the spirit
of the minimalist approach, Case adjacency gains no independent status since all (structural) Cases are licensed through SPEC-head relation. Specifically, accusative Cases including exceptional Case are licensed in the SPEC of AGRO. Nevertheless, I would like to propose that Case adjacency effects can be subsumed under the Case theory, and the illegitimate V-Adv-NP order in English results from the conspiracy of Case checking mechanism and other independent modules of grammar.

Consider (20), repeated only (20a) here for expository purposes.

(20) *John sees recently Mary.

Since main verb raising is blocked in English, this word order can only be accomplished by Extraposition of Mary to the right of VP final adverb recently. Now if accusative Case in English is checked out at LF in the SPEC-head configuration along the lines in Chomsky (1993), the object Mary ultimately raises to the SPEC of AGRO for Case checking. Further, note that VP adjoined site is an A'-position, while [SPEC, AGRO] is an A-position, not an unreasonable assumption. Then, the raising of Mary to [SPEC, AGRO] results in an improper chain, an insightful suggestion made by Howard Lasnik (by personal communication), since it is generally held that movement from A'-position to A-position should turn out to be illicit (presumably due to Principle C violation).

Concerning French side, NP-Extraposition can (and presumably "must") be dispensed with to get V-Adv-NP order, since "short verb movement" in the sense of Pollock (1989) may (and sometimes "should") always take place. Thus, the situation of improper movement for Case checking (at LF) never happens in French. Consequently, French displays no Case adjacency effects, a desirable by-product.

In sum, we are led to draw the following two conclusions for English main verbs. First, Main verbs in English do not move. Second, Case adjacency is far from a true condition on Case assignment, and is not even descriptively adequate for English. It fits a welcome result to derive the genuine effects of Case adjacency requirement from general principles of grammar, because language particular conditions should entirely be eliminated from our (core) grammar if possible.

2.5. A Note on Inversion in English and French

Up to now, we have discussed some preliminary facts concerning some principled variation of short movement, i.e. the connection between V and INFL, in English and French. In what follows, let us briefly consider some characteristic properties of long movement, i.e. the connection between V+I and COMP, in English and French.

Like short movement, long movement in French patterns differently from English. Compare the following minimal pairs between two languages.

(25) a. Aime-t-il Marie?
   b. *Likes he Mary?

(26) a. A-t-il compris?
   b. Has he understood?
   c. Sont-ils satisfaits?
   d. Are they satisfied?

The hypothesis that the so-called Subject-Aux inversion in root interro-
gatives be analyzed as INFL-to-COMP movement provides an explanation of the fact that inversion is restricted to auxiliaries in English. In other words, since V-to-I movement does not apply to main verbs in English, this operation mechanically fails to feed I-to-C movement for English main verbs. That is, in order for a verb to occupy C, it would first have
to move to 1. Therefore, the ill-formedness of an example like (25b) results from restrictions on main verb raising to INFL in English. In contrast, English auxiliaries and all French verbs seem to have potential to raise to C, since they all raise to 1 in finite clauses.

There remains a nontrivial question: What makes 1-to-C movement obligatory in root interrogatives? That is, it is not clear what triggers 1-to-C movement. One may speculate, as Chomsky (1991) does, that C bears a Q-affix to be supported in root interrogatives. An alternative view is given in Grimshaw (1993). The precise formulation of the nature of 1-to-C movement is beyond the scope of this paper. I would rather save up this matter for a future topic.

3. Toward an Explanation

The facts of verb action that call for an explanation in English and French can be summarized as follows.

Fact #1. Finite verbs in French raise farther than infinitivals so that only finite verbs raise over negation pas, although a slight adjustment is necessary for auxiliaries and modals. Further, compulsory raising over adverbs is imposed only on finite verbs in French.

Fact #2. Main verbs in English contrast with those in French in that English non-auxiliaries never move, whether they are inflected or not.

Fact #3. Inflected auxiliaries in English pattern similarly to finite verbs in French in that they precede negation not (and trivially adverbs).

3.1. Fact #1 vs Fact #2

Pollock (1989) has suggested that the scope of verb movement is restricted by the richness of inflection, particularly AGR. He argues that “opaque” AGR does not permit transmission of the verb’s 0-role, while “transparent” AGR does this job. He further claims that English AGR is opaque and French AGR is transparent so that 0-assigning lexical verbs in English cannot raise onto AGR in English—maybe a mere restatement of the fact in some novel but more complicated way, as Pollock (1994, 111) himself has acknowledged in his following paragraph:

All Pollock (1989) did concerning this unpleasant state of affairs was to give a list of [-opaque] vs [+opaque] functional positions, clearly unsatisfactory result since it merely restates the facts instead of explaining them. (Emphasis is mine.)

As Lasnik (1992, 402) and Pollock (1994, 111) himself have pointed out, it is totally unclear why richness should correlate directly, rather than inversely, with transparency.

Compared with Pollock (1989), Chomsky (1993) puts forward a slight different line of argument concerning transparent/weak asymmetry (his strong/weak features of INFL). However, since the underlying core spirit has a lot in common, Chomsky’s proposal is weakened on the similar basis. Chomsky suggests that a verb is inserted into structure fully inflected. Instead of picking up morphological pieces/features in the course of derivation, verbal features already specified in the inflected verb form are matched with those of functional categories and checked off. Under this proposal, overt verb raising is forced by Greed if the correspondent functional categories bear “strong” V-features to check, otherwise overt raising is delayed until LF by Procrastinate. The relevant portions of these two principles are as follows.

(27) The Principle of Greed (Chomsky 1994, 14)

Move raises a to a position β only if morphological properties of a itself would not otherwise be satisfied in the derivation.
The Principle of Procrastinate

Apply the syntactic operations as late as possible.

In English, since INFL bears “weak” V-features, overt (lexical) verb raising is blocked due to Procrastinate. In French, in contrast, overt verb raising is forced to check off INFL’s strong V-features. As far as I can see, Chomsky’s proposal seems to be another instance of genius reformulation of Pollock-type restatement of the same facts.

Under our proposal, the undesirable diacritic features like [±opaque] and [±strong] are completely unnecessary. Instead, I suggest that “morphologically real” features such as [±bound] are responsible for the different scope of verb movement detected in English and French.

Note that verb stems in English are “free” morphemes while those in French are “bound.” Then, by Greed as formulated in (27), a main verb stem in English is not allowed to move and must remain inside VP, since it is a full standing word, and it meets all its morphological properties in situ. Inflection in English, however, is a bound morpheme, hence moves to be supported by a verb (as a kind of “last resort”). The situation of INFL movement has to involve a lowering operation that is not allowed in Logico-syntact where Move leaves a trace (see note 1). Assume, however, that unlike Logico-syntact, the operation Move in Morphi-syntact does not leave a trace, then I-to-V lowering can take place after Logico-syntact where only (V-to-I) raising operation is permitted.

Main verb stems in French, in contrast, must be supported, since they are morphologically bound forms, hence cannot stand alone in the syntax (cf. Lasnik (1981)). There are two possible cases for accomplishing this goal: V-to-I raising or I-to-V lowering. Our organization of grammar depicted in note 1, however, forces V-to-I raising instead of I-to-V lowering once we assume the following natural principle.

The Principle of Haste

Apply the syntactic operations as early as possible.

If V-to-I raising should take place prior to I-to-V lowering due to our organization of grammar, finite verbs but not inflections in French are indeed forced to move due to Haste.

A note on the important difference between V-to-I raising and I-to-V lowering is in order. Recall that V-to-I raising over negation is possible with French finite verbs (and English finite auxiliaries). How can this movement circumvent relativized minimality violation? Assume that the heads of lexical projections including verbs and inflections such as Tense and AGR are in an A’-position, whereas the head of NegP (not, pas) is in an A’-position. Then Move from V to I is an instance of A’-movement which crosses A’-head Neg. Hence V-to-I raising is immune to relativized minimality.

I-to-V lowering as Morphi-syntactic process, however, is subject to independent principles in Morphi-syntactic module in contrast to (V-to-I) raising which belongs to different module, Logico-syntact. Following Halle and Marantz (1993) and Bobaljik (1993), I suggest that a proper formulation of “Adjacency” is at work for constraining I-to-V lowering in Morphi-syntact. Recall the ill-formed sentences in (14), repeated here.

(14) a. *John not laughs.
    b. *He not got arrested.
    c. *John not left early.

These sentences are all deviant due to the violation of Adjacency, since INFL and the verbs are separated by not, the head of NegP, prior to Lowering of I to V.
32. Fact #3

As we have observed in section 2.2, we are led to conclude that finite auxiliaries move unlike main verbs in English. Pollock (1989) treats the distinction between auxiliaries and main verbs in terms of θ-theory, claiming that auxiliaries lacking capacity of θ-role assignment can move onto opaque AGR in English. Along the similar vein, Chomsky (1993) argues that since an auxiliary, being a thematically “light” verb, is not visible at LF, it must move onto INFL to check off prior to Spell-Out.

Note, however, that the verb be in English used as a “main” verb patterns exactly with its auxiliary use.

(30) a. He is usually in Seoul during summer vacation.
    b. He is not in Seoul during summer vacation.

The verb have, in contrast, has peculiar properties, in that only British lexical have behaves like auxiliaries.

(31) a. He has seldom enough money. [*in American English]
    b. He has not/hasn’t enough money. [*in American English]

It is hardly convincing to claim that main verbs lack θ-assigning capacity, furthermore, it is unnatural to attribute to a thematic difference the low-level variation between American and British English have.

Further, consider the following ill-formed sentences indicated in Pollock (1994, 134 fn. 37).

(32) a. *Be not afraid
    b. *I suggest that he be not disturbed

Note that such sentences with bare be were acceptable until ENE period (see note 3).

Under Pollock’s (1989) approach, (32a,b) are wrongly predicted to be grammatical in Modern English (NE). Under Chomsky’s (1993) approach, on the other hand, both sentences are likely to be predicted ungrammatical since be, as its bare form indicates, bears no (morphological) features to be checked off.

However, note that do-insertion is possible only in (33a).

(33) a. Do not be afraid.
    b. *I suggest that he do not be disturbed.

Note also that (33b) was acceptable in early English period, as is observed in Roberts (1991, 441).

(34) except it do contayne in it degrees
    [1531: Eliot, Governor: Barber (cp cit: 247)]

The contrast in (33) shows that a phonetically null functional category (say, Imp) is present in imperative mood, while the corresponding functional category for subjective mood is absent in NE. In other words, imperatives involve a morphologically impoverished affix, whereas subjunctives involve no affix at all in NE.

Then there arises a question. Why is be-raising blocked in (32a)? Another related question is: How do-insertion was possible in ENE (34). If we assume that a null Imp “affix” is present in NE imperatives, it must be supported. However, be, as a “free” form in NE, cannot raise to Imp due to Greed. Imp can neither move down to be due to Adjacency since not intervenes. Thus as a last resort, an expletive do is inserted to adjoin affixal Imp in NE. Note that in (33b) do-insertion is not triggered since there is no subjunctive affix to support in NE. In contrast, Subjunctive ENE seems to contain a null affix Sub. Hence in (34), do is inserted to support it. These interesting paradigms can hardly be explained by Pollock (1989) and Chomsky (1993).

Returning to the moving capacity of finite auxiliaries in English, I
would like to suggest that auxiliaries HAVE and BE in English in fact be bound morphemes. My claim is indirectly supported by the fact that these two verbs have a suppletive paradigm in 3sg present; *has, not *have, and is, not *be, and the like.

Interestingly, some verbs like do and say also display irregular morphophonology in 3sg present form; the stem vowel change as [dəs] not [dəs], and [seiz] not [səyz].

But notice that neither verbs exhibit the behaviors parallel to auxiliaries.

(35) a. *He does not this job.
   b. *He says not this word.

Roberts (1991, 456 fn. 5) notes that have, say and do are exactly the verbs that retained 3sg present -th long after -s had taken over everywhere else. Thus, it seems that morphophonemic defective paradigms found in 3sg present do not directly dictate the “bound” status of HAVE and BE. However, if we assume that the stem of HAVE is ha, which manifests itself as a bound form, the irregular realizations of ha patterns can be understood as follows:

(36) Stem past 3sg pres [-3sg] present
    ha ha-d ha-s ha-ve

For the verb BE, it is hard to imagine a realistic base form before inflection. Note that be itself seems also to be derived from a common stem that is shared with other inflected forms such as am, is, are, was, and were. In any case, the irregular morphology leads to the conclusion that a stem of BE is a bound form. A similar observation is independently made in Watanabe (1993, 40-1).

In sum, it is not implausible to claim that auxiliaries HAVE and BE are indeed morphologically bound forms to be supported by some materials in the syntax. Thus, it is not surprising to find the verb action of auxiliaries in English which is parallel to French verb action.

A final note on French infinitival verb forms. Presumably it is tempting to suggest that French verbs involved in infinitives should raise to a certain functional projection, call Inf, to support -er, -ir, -oir suffixes. Thus, we may partially capture the semi-verb-raising effects in French infinitives (see (6b)) as opposed to English.

NOTES

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1. Note that our organization of grammatical levels/components radically departs from the standard conception recently advanced in Minimalist/Bare framework as depicted below.

(i) <OLD MODEL> Lexicon
    Overt syntax ← Spell-out
         Overt syntax ← / \ → Covert syntax
            Morphology LF
               Phonology ← PF
I would rather propose and assume the following revised model throughout this paper.

(ii) <NEW MODEL>

   |   |   |
---|---|---|
Lexicon | Logico-syntax |
LF      | Semantic interpretation |
Morphology | Morphological interpretation |
 PF     | Phonological interpretation |

I am not in a position to defend the relevant details of the new ambitious organization of grammar in this shallow paper. I hope to return to the comprehensive discussion of this new model with wider consequences in the near future. But see some preliminary conceptual motivation of this model in section 3.1.

2. In contrast to English, subjunctive verbs do raise over negator pas in French.

(i) a. Je suggère qu'il ne perde pas de temps.
   "I suggest that he not lose any time."

   b. *Je suggère qu'il ne pas perde de temps.

Unlike English, subjunctive verbs in French are "inflected" for tense/agreement. This lends a strong support to the correlation that holds between a verb's syntactic position and the morphological marking of a verb's inflection.

3. As diachronic development in English subjunctive mood is concerned, Roberts (1991, 440) notes that in Old English and Middle English, subjunctive (present) verbs took -e endings throughout the singular and -en endings in the plural. Consequently, subjunctive verb forms preceded not in ME (and OE) as shown in the following ME corpus cited in Roberts (1991, 441).

(i) And gif he be nought so, then ... 
And if he be not so, then ...

[1420s: James I, Kingis Quair, 62; Gray (1985:73)]

Subjunctive mood endings, however, began to erode during ME, and almost entirely disappeared in Early Modern English. Hence, a subjunctive form in ENE was marked by a bare verb. However, contrary to the correlation argument, we have also found "verb-not" order in ENE subjunctive corpus (cf. Roberts (1991, 441)).

(ii) Beware that thou bring not my son thither again.
   [1611: Bible, Gen 24, 6; Visser (1973, #686)]

Thus, the correlation argument seems to somehow be weakened. We will come back to this problem in connection with null morphemes in section 3.

4. The following sentences seem to be marginally acceptable for some speakers.

(i) a. ?John seems not friendly.

   b. ?I consider John not friendly.

   c. ?John arrived not sad.

These sentences, however, seem to involve constituent negation that demands separate account from ordinary sentence negation NegP, of which not is either a head or a specifier. In this connection, the grammatical judgment of the following example that is starred in Pollock (1989, 374) can hardly be standard since constituent negation seems possible in this context, too.

(ii) *John seems not happy.

REFERENCES


