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NegP and Subjunctive Complements in English

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It is currently widely believed that the markers of sentential negation are functional heads, Neg^0, which project in the ordinary way, to NegP (Pollock 1989, Laka 1990, Zanuttini 1991). The principal motivation for this view within English has been the ungrammaticality of (1a–b). They are accounted for if *not* is the head of NegP, which intervenes between the inflectional head and the main verb and if the Head Movement Constraint (Travis 1984) blocks raising or lowering across the head Neg^0.

(1) a. *Kim not likes eggs.
b. *Kim likes not eggs.

This line of analysis, however, has been called into serious question in much recent work (Ernst 1992, Chomsky 1995, Lasnik 1995). Furthermore, there are successful alternative analyses that do not posit NegP (Baker 1991, Ernst 1992, Kim and Sag 1995). My aim here is

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to present a novel argument for the existence of a *not*-headed NegP in English based on the licensing of VP-ellipsis in subjunctive clauses.

1 VP-Ellipsis

VP-ellipsis (VPE), illustrated in (2), is a well-known phenomenon in which a VP may be missing under "identity" with a like constituent elsewhere in the discourse.

(2) a. Joe will taste the food if Mikey does Ø.
b. Matt might be moving to Finland and Sophie might Ø too.

Bresnan (1976) first noted a constraint on VPE that an empty VP must be introduced by an element from a particular lexical class. Of central concern here is the core of Bresnan's observation that an elided VP is permitted as a consequence of being immediately to the right of some head. I formulate this as a local licensing condition, in (3), which states that a null VP requires syntactic selection by an overt head.

(3) *VP-Ellipsis Licensing Condition*
An elided VP must be the complement of a morphologically realized head.

Such a condition is assumed at least implicitly in most works that consider the syntactic requirements on elided VPs (e.g., Sag 1980, Gazdar, Pullum, and Sag 1982, Lobeck 1987, 1995, Chao 1988, Zagona 1988, López 1994). I take it to be relatively uncontroversial. Licensers in finite clauses include the italicized heads in (4): a modal in (4a), periphrastic *do* in (4b), and the auxiliaries *have* and *be* in (4c–d). (5) is correctly excluded because there is no overt licensing head.

(4) a. I'll try the guacamole ice cream if I *must* Ø.
b. Boxer auditioned for the choir and his roommate *did* Ø too.
c. A baby llama will go anywhere its mother *has* Ø.
d. No one else will support the candidate despite the fact that the mayor *is* Ø.

(5) *John didn't leave but Mary Ø.

Sentential *not* also seems to license an ellipsis site.

(6) a. Mary wants to go to the fashion show but her husband might *not* Ø.
b. Some of the guests tried the appetizers but most did *not* Ø.

If *not* is the licensing element in such examples, we would have evidence that *not* is indeed a head, since that is what the VPE Licensing Condition requires. Under this interpretation, the elided VP is the complement of, and is licensed by, Neg^0. It is not straightforward to deduce from these examples, however, that the element responsible for licensing the elided VP is *not*. A modal, auxiliary, or *do* is obligatorily also

present in negated finite clauses, and the VPE Licensing Condition could be reformulated so as to allow nonlocal licensing by these elements. To determine whether negation alone is able to license a null VP, we require clauses in which *not* appears in the absence of these alternative potential licensers. Subjunctive complements provide the crucial context.

2 Ellipsis in Subjunctive Clauses

Subjunctive clauses are found as complement to a restricted set of English predicates such as *insist, suggest,* and *be necessary*, and they are characterized, at least in the present tense, by a VP headed by a verb in its bare form. Zanuttini (1991) argues that this lack of overt verbal morphology and other behaviors follow if subjunctive clauses lack an I projection. Roberts (1985), Baltin (1993), Lasnik (1995), and Potsdam (1996) less radically conclude that subjunctive clauses have an IP whose head is a morphologically independent zero modal. If either hypothesis is correct, the VPE Licensing Condition predicts that ellipsis should be unavailable in subjunctive complements. I demonstrate below that the assumption regarding subjunctive I is warranted and that the prediction regarding VPE is generally correct.

If I^0 is occupied by a null element or not present at all in subjunctive clauses, then elements that typically occupy this position—modals, periphrastic *do*, and raised auxiliaries—should be excluded. Modals and support *do* are commonly taken to be base-generated in I^0 (Emonds 1976, Chomsky 1991), and neither is available. For modals, in (7), this fact seems purely syntactic since the examples have acceptable paraphrases without modals, in (8). (9) illustrates the impossibility of *do* with emphatic affirmation, (9a–b), or negation, (9c–d). Negation in subjunctives is expressed with *not* alone, (10).[1]

(7) a. *He demanded that the successful candidate can speak German.
b. *The police require that the spectators must stand behind the barricade.

(8) a. He demanded that the successful candidate be able to speak German.
b. The police require that the spectators stand behind the barricade.

[1] An anonymous reviewer points out that (7b) with the modal *should* and (9b) are grammatical in some dialects. For such speakers, the hypothesis that subjunctive I is completely absent cannot be entirely correct. The argument being developed, however, does not depend upon exactly which hypothesis might be appropriate for any given speaker, only that one or the other is. For speakers who agree with the above judgments, the complete absence of subjunctive I is still tenable.

(9) a. *Her boss requested that she *do* be more assertive as she is quite competent.
b. *I insist that you *do* be careful.
c. *Who suggested that he {*do not* / *don't* / *doesn't*} act so silly?
d. *Jack asks that we {*do not* / *don't*} cut down his beanstalk just yet.

(10) a. Who suggested that he *not* act so silly?
b. Jack asks that we *not* cut down his beanstalk just yet.

In finite clauses the I^0 position may also be occupied by one of the aspectual auxiliaries, often analyzed as verbs that raise into I^0 (Jackendoff 1972, Emonds 1978, Pollock 1989). *Be* and perfective *have* are found in subjunctive clauses; however, it can be shown that in this circumstance they resist raising to I^0 and remain in VP (Lasnik 1995, Potsdam 1996). This is seen by their positioning with respect to sentential negation and sentential adverbs. Auxiliaries that have undergone verb movement can precede these elements, whereas auxiliaries that remain in VP must follow them. *Have* and *be* in subjunctive complements may not appear to the left of sentential *not*, (11),[2] or sentential adverbs, (12).[3] Similar finite clauses, in which the auxiliaries do raise, are given for comparison and are fully grammatical. In each example the sequence auxiliary + *not*/adverb is italicized.

[2] It is necessary to differentiate sentential negation from constituent negation. The latter, which may also be expressed with *not*, typically serves to contrast a constituent with some alternative and bears contrastive stress. The examples in (11) may be grammatical with constituent negation but are not grammatical as instances of sentential negation. This can be seen by applying Iatridou's (1990) *because*-adjunct diagnostic. (i) with sentential negation is ambiguous, having the readings in (iia–b). (iii) with constituent negation has only the reading in (iia), in which just the verb phrase is within the scope of negation. Crucially, (11a), if it is grammatical, patterns with the constituent negation example and has only the first reading. This indicates that the examples are ungrammatical with sentential negation, as claimed.

(i) Tom was not promoted because of his attitude.

(ii) a. Tom was not promoted and the reason is because of his attitude.
b. Tom was promoted but not because of his attitude.

(iii) Tom will be not promoted because of his attitude.

[3] Jackendoff (1972) recognizes a class of S(ential)-adverbs that are propositional modifiers, in contrast to VP-adverbs, which function as modifiers of predicates. Examples include what are traditionally categorized as epistemic, agent-oriented, or evaluative adverbs. They can be identified by their ability to appear between the subject and a modal in finite clauses, in (i). VP-adverbs, in (ii), may not appear in this position.

(i) Hulk Hogan *definitely/normally/certainly* could lift that by himself.

(ii) *Hulk Hogan *quickly/effortlessly* could lift that by himself.

(11) a. *I urge that Tom *be not* promoted because of his attitude.
(cf. Tom *was not* promoted because of his attitude.)
b. *The association urges that he *be not* examined by that quack.
(cf. He *was not* examined by that quack.)
c. ?It is imperative that the contestant *have not* seen the answers ahead of time.[4]
(cf. He *has not* seen the answers.)

(12) a. *It is recommended that you *be normally* approved by the committee first.
(cf. Participants *are normally* approved by the committee first.)
b. *It is crucial that we *be absolutely* paying attention to his every word.
(cf. We *were absolutely* paying attention to his every word.)
c. ?It is mandatory that everybody *have certainly* read at least the introduction.
(cf. Everybody *had certainly* read at least the introduction.)

These observations jointly suggest that I is either absent altogether in subjunctive clauses or else filled with a null element. Given the VPE Licensing Condition in (3), VPE should consequently be impossible. This is borne out.[5]

[4] Johnson (1988) demonstrates that the behavior of negation with respect to perfective *have* in subjunctives is exceptional and that examples like (11c) with sentential *not* following *have* are sometimes acceptable. One interpretation of the data is that *have* is higher in the structure than *be* in comparable examples. The sentential adverb example in (12c) supports the same conclusion. For some speakers, it is not completely ungrammatical either. The subjunctive data are part of a larger body of facts, discussed in Lobeck 1987 and Johnson 1988, pointing to the inadequacy of treating perfective *have* structurally the same as auxiliary *be*. The status of (11c) and (12c) is an interesting complication but it is tangential to the main claim of the squib since the crucial ellipsis data do not involve *have*.

[5] Even when auxiliaries are stranded, the examples are ungrammatical.

(i) a. *We can't count on Josh to be waiting for us at the airport so we request that you be Ø instead.
b. *The bridges were repaired before the engineers could even insist that the supporting structure be Ø first.
c. *When the laborers have reached a decision, it is important that the leader have Ø as well.

The data in (i) indicate that the VPE Licensing Condition is a necessary but not sufficient condition on ellipsis. In each case, the null VP is the complement to a morphologically realized head but the result is ungrammatical. There are additional restrictions on the identity of the licensing element.

(13) a. *Kim needn't be there but it is imperative that the other organizers Ø.
b. *Ted didn't want to vacation in Hawaii but his agent suggested that he Ø.
c. *We think that Mary should present her case to the committee and we ask that Bill Ø too.

It is surprising then that ellipsis *is* grammatical in subjunctive complements when sentential negation is present, (14). This observation was to my knowledge first made in Baltin 1993; its significance for the claim that *not* is a head is discussed there and in Lobeck 1995:189.

(14) a. A: Should we wake Dad?
B: No! It's absolutely imperative that you not Ø.
b. Kim needs to be there but it is better that the other organizers not Ø.
c. Ted hoped to vacation in Liberia but his agent recommended that he not Ø.
d. We think that Mary should present her case but we will ask that Bill not Ø.
e. A: Should I attend the meetings?
B: I suggest that you not Ø.

The examples in (14) belong to a somewhat formal register, but the contrast with (13) is clear and must be accounted for. If VPE is licensed in the general case by an overt head, then *not* must be such a head.[6]

3 Adjunct *Not*

An alternative account of the above contrast is that *not* is the licensing element but it is nevertheless not the head of NegP. We can give substance to this idea by hypothesizing that negation, at least in subjunctive clauses, is structurally realized as an adjunct. As such, it is syntactically parallel to constituent negation or VP-level adverbs, which adjoin to the modified constituent.

A relevant and decisive observation against such an account is that neither constituent negation nor left-adjoined adverbs may immediately precede an ellipsis site (Baker 1971, Sag 1978, Johnson 1988, Ernst 1992, Kim and Sag 1995). (15) demonstrates the ungrammaticality of constituent negation before a null VP. (16) illustrates the illicit stranding of adverbs of the class exemplified by *merely, simply,* and *just*, which must be left-peripheral in VP (Jackendoff 1972).

[6] Williams (1994) uses the contrast in (i) to argue a similar point.

(i) a. *I consider Bill intelligent and I consider Sally Ø too.
b. I consider Bill intelligent and I consider Sally not Ø.

If (ib) is grammatical, the line of reasoning in the text supports the contention that small clauses contain an inflectional layer above the lexical projection.

(15). a. *Some of the students have been studying but some have been not Ø.
b. *Jo said they could have heard the news but Lee said they could have not Ø.

(16) a. *Kit didn't buy milk so I will simply Ø on my way home.
b. *The maid was sweeping the dust under the rug and I was just Ø too.
c. *The kids haven't eaten any broccoli because they saw that their father has hardly Ø either.

The ungrammatical constituent negation cases contrast with the grammatical examples with sentential negation in (17), and also (6).

(17) a. Some of the students have been studying but some have not Ø.
b. Sara said she could hear the announcement but Lee said that he could not Ø.

Under an adjunct analysis of *not*, the grammaticality of the subjunctive ellipsis examples in (14) is completely mysterious. The data should pattern not with (17), as is the case, but with (15) and (16), which are impossible even in the most formal registers. If subjunctive negation is an adverb, the contrast between (14) and (15)/(16) is obscure. If *not* is a head, the contrast is immediately understandable: the grammatical examples of ellipsis with sentential negation are licensed by the overt head in accordance with (3).

In summary, the only likely licenser for a null VP in negated subjunctive clauses is *not*. Given that it cannot be an adverb and that a null VP is required to be the complement of an overtly realized head, we are led to the conclusion that *not* is this head, projecting to NegP.

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JAPANESE NC CLUSTERS AND THE REDUNDANCY OF POSTNASAL VOICING

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Although phonologists have claimed that redundant features do not play a role in the phonology (e.g., Kiparsky 1985, Steriade 1987; see Steriade 1995 for a review), this assumption has been challenged in recent work by Archangeli and Pulleyblank (1994), Itô, Mester, and Padgett (1995), Steriade (1995), and others. In this squib I examine two cases that Itô, Mester, and Padgett address—Japanese and Turkish—suggesting that, at the least, the assumptions that underlie the claim that redundant features can be phonologically active must be reconsidered.

The squib focuses chiefly on Japanese Rendaku and its interaction with postnasal obstruent voicing. Itô, Mester, and Padgett (1995) argue that postnasal obstruent voicing in Japanese is redundant, but that the phonological process of Rendaku is sensitive to the voicing of postnasal obstruents. Thus, voicing, although redundant, functions in the phonology. Others have questioned the details of Itô, Mester, and Padgett's analysis (see, e.g., Hayashi and Iverson 1996, Kawasaki 1996, Pater 1995). I would like to take a different tack here, questioning instead a basic assumption of their claim. Underlying the claim that postnasal obstruent voicing in Japanese is redundant is an important assumption: this redundancy is computed over only a portion of the lexicon, the native, or Yamato, vocabulary of the language. In fact, both voiced and voiceless obstruents appear in the postnasal environment in Japanese when the full range of Yamato vocabulary, Sino-Japanese vocabulary, and other loan vocabulary is taken into consideration. In this squib I raise the issue of whether the type of lexical stratification proposed by Itô, Mester, and Padgett is reasonable or whether postnasal voicing in Japanese must be discounted as redundant because voicing is in fact not redundant in this position. The second case, labial attraction in Turkish, is directly parallel. A process called labial attraction has been identified in Turkish by which, in some vocabulary, an unexpected vowel [u] is found following a labial consonant. Itô, Mester, and Padgett attribute the rounding of the vowel to the presence of redundant rounding on the labial consonant; however,

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