Syntax of Subjunctive Clauses and *Do*-Support: A Preliminary Investigation

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1. Introduction

This paper, an excerpt from the draft of a larger work in progress (Inui, in prep), deals with the syntactic structure of subjunctive clauses in English, specifically with respect to the absence of *do*-support. Since it is widely accepted that *do* is inserted in the sentence to support Tense affix/feature (cf. Chomsky 1957, 1989 amongst others), the fact that subjunctive clauses do not allow expletive raises questions about their structure, specifically about the presence of the TP node. In spite of this lack of inflection, I propose in this excerpt that subjunctive clauses do have TP, just like indicative clauses, albeit with a null T head.

Before starting this paper, it is useful to set out the difference between tense and mood in English (cf. Curme 1931, Huddleston and Pullum 2002). Tense indicates the time of occurrence of the event/action; it may be expressed as an inflectional affix on the verb such as *-s* (present; e. g. *he GOES to school*) or *-ed* (past; e. g. *he WENT to school*) or as an auxiliary, as in the case of the present perfect (*he has gone there several times*). In contrast, mood is a purely *syntactic* property (in Present-Day English): this property has no associated inflectional forms. Mood features determine the *realis* nature of the clause: whether a clause is an indicative (e. g. *he GOES to school*), a subjunctive (e. g. *it is important that he GO to school*), or an imperative (e. g. *GO!*). Note here that a subjunctive is not necessarily related to tense at all. Since the verb is uninflected in the subjunctive complement, it might be supposed that subjunctives behave like infinitivals (e. g. *he wants to GO to school*). However, it will be shown here that the two are totally different because the subjunctive is syntactically finite (*contra* Kanno and Nomura 2012 who claim the subjunctive to be non-finite) whereas infinitives are, by definition, non-

finite. More precisely, it will be argued that the subjunctive clause is finite but tenseless. Hence, finiteness is distinct from tense. This difference is crucial in analyzing the syntactic structure of subjunctive clauses—especially, the property of TP.

Now, let us see some relevant examples. As illustrated in the examples in (1), subjunctive mood is indicated by the form of the verbs in the subordinate clauses, in brackets.

(1) a.*It is essential that [he take great care]. (Hudleston and Pullum 2002: 51)

　b. The Selection Commitee may insist that [he resign by the end of ...]. (Hiroe 1999: 57)

　c.*I demand that [he goes there]. (Culicover 1971: 42)

　d.*It is imperative that [he finds the answer soon]. (*ibid.*)

Note that in subjunctive clauses verbs do not show inflection: morphologically, they are thus formally identical to bare infinitives. The above examples display present subjunctive clauses introduced by some particular lexical items such as *essential, insist, demand,* or *imperative.* Notice that differently from indicative clauses the verbs in subjunctive complements do not seem to be tensed at all. If they are inflected with tense as in (1c, d), then the sentences will be ungrammatical in some varieties.[1]

As is well known, there is no *do*-support in subjunctive clauses, including present (negative) contexts, with the negative constituent *not* before the verbs. Some examples are shown in (2).

(2) a. I insist that [John not come so often]. (Chiba 1987: 49)

　b.*Who suggested that [he do not/don't/doesn't act so silly]? (Potsdam 1997: 536)

c.*Jack asks that [we do not/don't cut down his bean stalk just yet]. (*ibid.*)

In (2a), the negative constituent *not* appears independently of *do,* preceding the verb. Interestingly enough, *do* is disallowed in subjunctive clauses as in (2b, c). The opposite pattern is observed in indicative clauses.

(3) a. I don't/do not know the answer.
   b.*I not know the answer.

One obvious difference, then, between indicative and subjunctive lies in whether *do* is present or absent. Auxiliary *do* is usually considered a 'dummy' or expletive element, which implies that it does not contain any semantic property. Since it is standardly assumed that *do* is inserted in the sentence to support a Tense element (*present or past*)―see Chomsky (1957, 1989), the absence of *do*-support in subjunctive clauses implies that there is no Tense element.

　Moreover, it is generally the case that no modal auxiliaries may appear in subjunctive contexts; this constraint is shown in (4).

(4) a.*He demanded that the successful candidate can speak German.
   b.*The police require that the speculators must stand behind.... (Potsdam 1997: 535)[2]

From these contrasts, it is fair to conclude that there is some difference in the syntactic features of declarative and subjunctive clauses. The paradigms above further suggest that "there is no room" for finite auxiliaries, including *do,* in subjunctive clauses. However, there are some cases where *do* seems to appear in what should be subjunctive contexts.

(5) a. It is imperative that you <u>do not</u> ignore this request, (*Google*)
   b. and so we advise that you <u>do not be</u> greedy and stick with the lower offer. (*Google*)[3]
   c. Jack demanded that the charge <u>should</u> go fifty-fifty. (Hiroe 1999: 59)

While one could regard these cases as exceptions to the claim that *do*-support is barred from subjunctive clauses, this would probably be incorrect. It is true that the adjective *imperative* and the verb *advise* are considered lexical elements that introduce subjunctive clauses (see Chiba 1987 for other elements) but it could also be that the clauses in (5a, b) are not subjunctive but indicative (see Quirk *et al.* 1985 for a further discussion). It is the example (5c) that is more problematic here. Despite the fact that modal auxiliaries do not usually appear in subjunctive contexts as we have seen in (4), the modal auxiliary *should* overtly appears in those contexts.

　In this excerpt, then, I examines the syntactic structure of subjunctive clauses, focusing on the crucial question―why is *do* not inserted in subjunctive clauses? This is the central question too in the larger work that I am working on (Inui in prep). Although I offer a conclusion in the final section, it is as yet a tentative one.

2. Theoretical Motivation for *Do*-support

This section introduces the theoretical motivation for *do*-support in English. In generative grammar, auxiliary *do* has been discussed ever since Chomsky (1957). It is usually accepted by generative linguists that *do* is a semantically empty item and just supports a tense affix in order not to be isolated. This is referred to as "*do*-support." Though being an auxiliary, it is different from the aspectual auxiliaries *be* and *have* in that it lacks nonfinite forms and never appears in affirmative declaratives (other than emphatic contrasts).

　To begin with, consider the distribution of auxiliary *do* in indicative clauses. Some examples are shown below.

(6) a. He *doesn't/does not* know the answer. (negation)
   b.*He *knows not/not knows* the answer.
(7) a. *Do* you eat natto? (question)
   b.*Eat* you natto?
(8) a. I *DID* go to school yesterday. (emphasis)
   b.*I *did* go to school yesterday. (no stress on *do*)

In English, *do* seems to occur obligatorily in interrogative, negative, and emphatic clausal contexts. In negative sentences like (6), *do* precedes the negative constituent *not* or attaches to the contracted negative form *n't* as in (6a).[4] As in (6b), *not* cannot appear before or after the

verb. In interrogatives as (7), *do* appears in the sentence-initial position, namely, the left side of the subject in (7a). As in (7b), the main verb cannot occupy that position. In emphatic clauses such as (8), *do* functions as an emphatic marker bearing strong prosodic stress, as in (8a). Without stress, the sentence is unacceptable in Present-Day English as in (8b).

Semantically, auxiliary *do* has been assumed to contain no particular meaning compared to other auxiliaries and modal ones (Chomsky 1957, 1989, 1995). Why does an element with no meaning appear in the above sentences obligatorily? Chomsky (1989) offers a well-accepted model for solving this question. Chomsky proposes that the auxiliary *do* is inserted in the sentence to support a Tense affix only when this is prevented from attaching —'lower'—onto the lexical verb. Let us analyze the example (6) with the following structure.

(9)
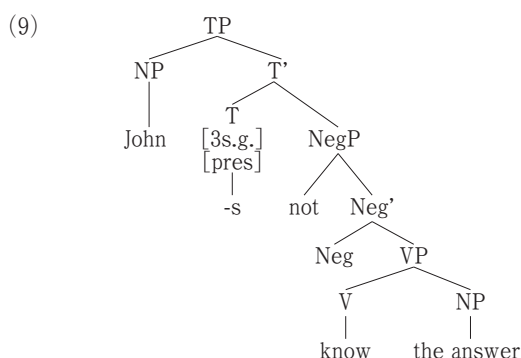
In this structure, the T head contains the third person singular [3s.g.] and present tense feature, which is realized as the affix -*s*. Since -*s* is a bound morpheme, it must attach to a particular element (in this case, the main lexical verb). Otherwise, the affix can not be phonetically realized (c.f. *Stranded Affix Filter*; Lasnik 1981). In fact, there are two approaches to realize it appropriately. One is to move V to T as *Head Movement*. This is what happens in the case of aspectual auxiliaries in English, and to finite verbs more generally, in other languages. The other option is to lower T to V as *Affix Hopping* (AH; c.f. Chomsky 1957). However, both approaches have the problem. First, it is known that in Present Day English main verbs cannot raise at all.[5] Then, the sentence *he knows not the answer* is incorrect. As for negation, Pollock (1989) assumes that NegP sits between TP and VP, whose head perhaps occupies its specifier position. If *not* takes [Spec, VP] as an adverb,

the affix -*s* should attach to the verb; and thus, the sentence will be like (6b), *he not knows the answer*. However, this sentence is unacceptable. To explain this unacceptability, we must assume that NegP blocks lowering of T to V. Due to this property, the tense affix in T cannot lower to the main verbs. Consequently, this affix will be isolated, triggering a violation of the *Stranded Affix Filter*. To avoid this violation, the auxiliary *do* is inserted in T to host the tense affix.

Now, turn to the case of the auxiliary *be* as follows.

(10) a. John is always honest.

b. John is not honest.

Differently from the case of main verbs, *be* seems to take the T position, phonetically realized as *is*. Then, how does *be* come to take that position? Let us assume that *be* originally occupies V. In order to appear in T, it should move from (Aspectual) V to T. At this time, it cannot move to T in one step (c.f. *Head Movement Constraint* (HMC)); instead, it raises successive-cyclically. In this case, NegP—more precisely, *not*—does not block this movement. Such an analysis is true of the cases of aspectual *be* and *have* (e.g., *John is always signing or Mary has often sung a song*), which are not discussed here. Consequently, the sentences where auxiliaries appear do not host *do* at all.
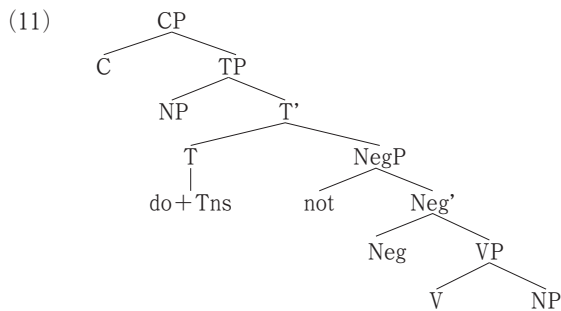
In fact, there are two important theoretical notions to consider the generation of *do*: ECONOMY and LAST RESORT PRINCIPLE. According to Chomsky, the notion of economy can explained in terms of *least effort*, stipulated as follows:

"the 'least effort' condition must be interpreted so that UG principles are applied wherever possible, with language-particular rules used only to 'save' a D-ructure yielding no output: .... UG principles are thus 'less costly' than language-specific principles. We may think of them, intuitively, as 'wired-in' and distinguished from the acquired elements of language, which bear a greater cost." (*ibid.*: 118)

According to this principle, rules concerned with the linguistic operation such as movement must be least when applied. In this sense, the insertion of *do* suits best to

this condition. Chomsky assumes that the insertion of *do* should be the most economical operation along with his notion. To support this assumption, Chomsky claims the Last Resort Principle (hereafter LRP), as explained as follows: "*do*-insertion, in particular, functions only as a 'last resort', to 'save' a valid D-structure that otherwise underlies no legitimate derivation" (*ibid.*: 124). More precisely, *do* is generated or inserted in the sentence 'at the right time at the right place.'[6]

The property of *do* can be summarized as follows. Auxiliary *do* is a dummy element as inserted in the sentence only when the affix is stranded in T, which is driven by LRP. The inserted *do* is inflected by the value for tense (present or past) and some feature (3s.g.), phonetically realized as *does* or *did*. In this paper, I adopt this property and mechanism as illustrated in the following syntactic structure.

(11)

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              CP
           /      \
          C        TP
                 /    \
               NP      T'
              /  \    /   \
             T        NegP
             |       /    \
          do＋Tns  not    Neg'
                        /    \
                      Neg     VP
                             /  \
                            V    NP
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3. The Syntactic Issues of Subjunctive Clauses: The Property of TP

Having set out a theoretical analysis of *do*-support in this section, we will discuss the syntactic issues of subjunctive clauses in English. Here, we will examine the property of TP which holds the Tense feature to attract auxiliaries on the one hand, and to base-generate modal auxiliaries or *do* on the other.

3.1 Analyzing the Data

First, let us consider the examples illustrated in (1)− (5) from a morphosyntactic perspective. The examples in (12), cited again from (1), show no person agreement on the verbs in the subjunctive contexts.

(12) a. It is essential that he take great care. (=1a)

　　b. The Selection Committee may insist that he

resign by the end of .... (=1b)

c.*I demand that he goes there. (=1c)

d.*It is imperative that he finds the answer soon. (=1d)

Note that verbs in subjunctive clauses do not show inflection: morphologically, they are identical to bare infinitives (*to take, to resign*). In indicative clauses, verbs should be inflected with *-s*, third-person present tense, such as *takes* or *resigns*. Thus, the examples in (12c, d) will be acceptable if embedded clauses were indicative. At the same time, they indicate that they are not subjunctive; it follows that the subjunctive T does not contain any feature at all.

Next, let us consider the position of the negative element *not* in subjunctives. As seen in (2), there is no *do*-support in negative subjunctive clauses with *not* before the verbs. This is illustrated in the following examples:

(13) a. I insist that John not come so often. (=2a)

　　b. Who suggested that he not act so silly? (Postdam 1997: 536)

　　c. It is vital that he not delay. (Roberts 1985: 41)

From these examples, we can find these sentences not indicative but subjunctive because of the sequence of *not* and the verb; structurally, *not* precedes the verb without *do*. Following the structure provided by Pollock (1989) and Chomsky (1989) roughly as (11), it appears that there is no lexical element in T, given that *not* is contained within NegP that lies between T and VP in English (and that lexical verbs in the Present-Day English cannot move from V to T).[7] This fact suggests that T does not contain the features that require raising or lowering in indicative clauses.

Additionally, this gives us a further important implication to auxiliaries. In subjunctive clauses, (aspectual) auxiliaries should remain in V. This is instantiated from the following examples:

(14) a. I urge that Tom *be not/not be promoted because of his attitude. (Postdam 1997: 537)

　　b. The association urges that he *be not/not be examined by that quack. (*ibid.*)

　　c. It is imperative that the contestant ?have not/

not have seen the answers.... (*ibid.*)

Recall here that auxiliaries, *be* and *have,* can move to the T position in contrast with main verbs. However, it is obvious from the acceptable patterns (*not be* or *not have*) that they do not move from V to T in subjunctives.[8)] If the sentences are indicative, they do move there in order to receive the affix such as *Tom is not promoted, he is not examined,* and *the contestant has not seen.* From this fact, we can say that there is no Tense affix, which hosts the raised auxiliaries, in the subjunctive T. In this respect, it is convincing to assume that modal auxiliaries do not appear in the subjunctive clauses as follows:

(15) a.*He demanded that the successful candidate can speak German. (=4a)

b.*The police require that the speculators must stand behind the barricade. (=4b)

According to standard assumptions, modal auxiliaries are base-generated in T (Chomsky 1989). From the observation that no modal appears in the T position as in (15), it is natural to exclude the possibility for them to be generated there because they have no reason to appear there. Thus, there is no feature in the subjunctive T.

Finally, observe the distribution of *do* in subjunctive clauses. In subjunctives, *do*-support is not applied at all as follows:

(16) a.*Who suggested that he do not/don't/doesn't act so silly? (=2b)

b.*Jack asks that we do not/don't cut down his beanstalk just yet. (=2c)[9)]

As seen in the previous section, *do* is inserted to support the Tense feature isolated in T under LRP as a dummy element. However, the subjunctive clauses do not favor *do*-support as (16) show. Hence, it seems that there is no Tense feature to be supported by *do* in subjunctive clauses. This is a significant difference between indicative and subjunctive with respect to T. A question, then, arises as to the theoretical account for the presence of empty T in subjunctive.

What we obviously obtained from a series of the observations above is, first, the verb form is bare and, second,

not precedes the verbs. How do we theoretically relate these phenomena to the impossibility that neither aspectual nor modal auxiliaries appear in the subjunctive T? Here, we will explore two previous analyses. First, Culicover (1971: 42) assumes in the transformational analysis that the auxiliary *will* exists in the Deep Structure (DS) and is deleted in the Surface Structure (SS) *via* a Deletion Rule.

(17) *It is important that you [*will*] ... leave on time.

This assumption can explain why other auxiliaries and the finite form of the verb never occur in the subjunctive contexts because *will,* indicated in a bracket, already exists in the DS and because the INFL head will be occupied by it. Consequently, *do* never occurs there. In Culicover's analysis, the reason that the subjunctive verbs are bare-form and auxiliaries including modals do not occur can be explained independently from whether the subjunctive clause has tense or not.

Second, Roberts (1985: 40-41, note 12) considers from the (18) that this form is mostly seen in American English (AE) and proposes that the complement contains an empty modal (what he calls "null modal"), occupying INFL.

(18) a. I require that he be there at 8.

b. I require that he [MODAL] be there at 8.

It is true that if the subjunctive complement already has an empty modal other modal auxiliaries are naturally excluded. Furthermore, this fact can be true of explaining the phenomenon that the subjunctive verb appears with its bare form simply because modals take a bare-from verb as its complement.

These two analyses seem to explain the reason why no inflection is expressed on verbs or *be* (and *have* too) and no modal occur in subjunctive clauses. That is because some element has already existed in INFL, or T. In the former analysis, there is a deletion whereas in the latter, there is no deletion at all. However, these essentially make no difference. Rather, these have empirical similarity in presupposing that modal auxiliaries never co-occur in the (present) subjunctive contexts. Since the deleted *will* or null modal is originally a finite auxiliary,

the subjunctive clause which contains either of them will be a finite clause. However, one problem still remains here: the case of *should.*

Both Culicover and Roberts' analysis explain the complementarity of null modal or overt modal by standard assumptions about complementary distribution. Assuming that the covert elements are present in T or no Tense feature is there cannot account for the presence of *should,* which is a finite and modal auxiliary, in the subjunctive contexts as illustrated in (19). This is also relevant to the explanation for (5), repeated here for convenience.

(19) a. They demand that the park should remain open. (Huddleston and Pullum 2002: 995)

　　 b. I insisted that he should take the document with him. (Yamaoka 2014: 117 Note 20)

(20) a. It is imperative that you do not ignore this request, ... (=5a)

　　 b. and so we advise that you do not be greedy and stick with the lower offer. (=5b)

Recall that modal auxiliaries that can occur in subjunctives are restricted to *should* as observed in (4) or (15).[10] In (19), *should* occurs in the embedded complement of the verbs *demand* and *insist.* As some scholars admit, the subjunctive *should* is often found in British English (BrE). Then, how do we explain the examples of (20)? In (20), *do* obviously appears in the complement of the adjective and verb *imperative* and *advise.* These examples may object the idea that subjunctive clauses do not contain any modal auxiliaries as mentioned before. Nevertheless, I claim that these examples are not subjunctive but purely indicative (except for BrE). Put it another way, the clauses with *should* and *do,* which seem to be subjunctive, are not subjunctive but indicative.

3.2 Assuming Mood Phrase (ModP)

In the previous section, we have seen that the subjunctive T is different from indicative one with respect to its property—namely, T is phonetically null. The question now is how we distinguish tense and mood syntactically, which is related to the distinction between tense and finiteness.

Regarding the question of whether subjunctive clauses are finite or non-finite, it is useful to examine the arguments of Kanno and Nomura (2012, hereafter K & N). K & N claim, with respect to the following example that subjunctive clauses are syntactically non-finite even though 'the verb is inflected for mood'.

(21) I demand that he leave at once. (Kanno and Nomura 2012: 68)

However, their claim here is not correct because the verb leave is *not* inflected at all. Although they define a finite clause as the verb being inflected for tense, person, and mood, this definition (at least in English) is also ambiguous, because finite verbs often show no overt inflection (e.g. third person plural present come). This study furthermore makes a syntactic distinction between subjunctive and infinitives, both of which are morphologically identical.

(22) a. I want him to leave.

　　 b. I believe him to have left. (*ibid.*: 67)

For K & N, the question is, if the subjunctive is nonfinite, how the difference between subjunctives and indicatives with respect to Case assignment explained? (subjunctive clauses have nominative subjects, infinitval clauses do not). For K & N, this contrast is accounted for by the property of agreement system. An example is here:

(23) John says that she was/is/will be in his room. (*ibid.*: 76)

In their analysis, agreement is operated in the C position which contains Tense, [Tns] and Agr, [Ag] features. This [Ag] feature plays a role in making the agreement between the subject and T. As a result, the verb inflects for third person singular (*is*) and the subject obtains Nominative case from the T head. This analysis may also be related to the question of the relationship between C and T in terms of Tense and Agreement, a question discussed by Beukema and Coopmans (1989).

Beukema and Coopmans (1989: 425-428, hereafter B & C) suggest that finite and infinitival clauses take the [＋Tense; ＋AGR] and [－Tense. －AGR] parameter

setting, respectively. In this line, subjunctive clauses will be classified as neither of them because there is no tense inflection. Note that B & C posit that Agreement is done in C not in AgrP (cf. Pollock 1989, Chomsky 1989), which is similar to the analysis of K & N (2012), and that there is an INFL not a T. The argument may be relevant to whether the subjunctive INFL contains Tense or not (see Culicover 1971, Chomsky 1981, Roberts 1985, Chiba 1987 amongst others for discussion). Here, the clause without Tense is indeed not related to mood, which goes against K & N's argument. Thus, tense and mood should be separated. This is reinforced by the following examples:

(24) a. I *said* that Mary *could* go out.

  b. I *might* come to the party *tomorrow*.

In (24a), the modal auxiliary *could* appears to be 'shifted' because it shows so-called "sequence of tense" with *said* between the matrix and subordinate clause; *could* does not express tense (or time). Also in (24b), the modal auxiliary *might* does not express time; more precisely, it is not inflected for tense. (See Portner 2003 for further discussion of the semantics of mood).

So far, we have understood mood as featurally separated from tense in some respects. But does this featural difference have structural consequences? Is there a distinct mood projection? Some scholars (notably, Schütze 2004, Inui 2005, to name a few) postulate the autonomous functional category Mood Phrase, ModP (sometimes MP or MoodP). At first, let us examine Schütze (2004).

Schütze (2004: 507) makes a distinction between tense and mood, positing a functional category, MP, represented as in (25).

(25) [CP [MP [TP [ΣP [VP

In this schema, M (Mood) is the place for modals and the head hosting *do* in *do*-support. This head covers the values of mood such as Indicative, Subjunctive, and Modal (necessity, obligation, possibility, or ability). In English, the indicative accommodates allomorphs Φindic and *do* whereas the subjunctive is licensed as Φsubjunc. Note that in this analysis T contains only tense affix

(Present or Past), taking the position below MP (in this case the clausal subject occupies [Spec, MP] at SpellOut (surface structure)). Moreover, it is interesting to note that auxiliary *do* is inserted under M, not T as commonly assumed (Chomsky 1989). To explain this, Schütze (2004: 508–509) proposes that *do* is a kind of mood having the same category as the modals., This explains why why *do* and other modals never appear in subjunctive clauses. Some relevant examples are given here:

(26) a. It is crucial that Mary be doing her homework by 8 pm. (progressive *be*)

  b. It is critical that Mary have finished her homework .... (perfective *have*)

  c. ?It is crucial that Mary can get here by 9 am. (mandative subjunctive with modals)

  d. *It is crucial that Mary do not be late for rehearsal. (mandative subjunctive with *do*)

In (26a, b), *be* and *have* do not raise to T nor M but remain inside VP because they are verbs not (aspectual) auxiliaries. That is why they do not move at all like lexical verbs in English. In (26c), although Schütze himself is surprised by the acceptability of this example it can be fine if it is indicative (see also (4) or (15)). In his analysis, *can* is base-generated in M not T (T just contains Present). Then, (26d) is excluded because in this case M contains Φsubjunc which does not select *do* as Φindic does. Since *do* behaves as a modal auxiliary in his idea, there happens a mismatch between Φsubjunc and Modal in M.

Schütze (2004) seems to succeed in distinguishing mood from tense by assuming both MP and TP. However, his analysis does not explain the distinction between tense and finiteness. The crucial issue here is that he assumes three moods—indicative, subjunctive, modal—as one property in M. In his idea, it is impossible to explain the case of *should*, which involves subjunctive and modal simultaneously. Remember the analyses of Culicover (1971) and Roberts (1985). Taken together, they assume that the overt or covert modal takes the position of T. What is more interesting is that even if there is some element in T it is not phonetically realized at all. As mentioned before, no modal appears and realizes itself phonetically in AE as compared it does in BrE

(especially *should*). The issue here is what content of T in subjunctive clauses is.

Inui (2005) suggests that ModP (MP in Schütze (2004)) is projected between TP and VP (or NegP), which contains either a phi feature or *should*. Note that Inui (2015: 100) posits ModP below, not above, TP. The representation is as follows:

(27) [CP [C *that* [TP NP [T Tense [ModP [Mod *Φ*/ *should* ([NegP [Neg]) [VP V...]]]]]]]]

In this structure, it is proposed that a null subjunctive modal, which represents unrealized, hypothetical, and or irrealis, can occur in mandative present subjunctives, and that such modal and should are both base-generated in the head of ModP. It is more notable that Inui claims that T bears a Tense feature (＋Tense) even in subjunctive clauses. As long as having the Tense feature, the subjunctive clause should be finite because the presence of it is the necessary condition for finiteness. From the discussion here, it is safe to argue that Inui (2005) is incorrect in postulating the Tense feature in T because if T accommodates ＋T the example (24b) is not explained. Again, *might* is not related to tense in this case, and thus this case seems not to contain ＋T in T. What can be pointed out in Schütze (2004) and Inui (2005) is that both propose the additional category, MP or ModP, distinct from TP. However, the presence of Mood Phrase runs the risk of forming new categories for purely theoretical reasons. Then, I, in this paper, do not postulate such phrase.

4. Concluding Remarks and Future Directions

In this excerpt from my larger work, I have considered that subjunctive T is essentially different from indicative one. From the subjunctive examples where verbs are not inflected for tense, auxiliaries (*have* and *be*) do not move to T, modals do not appear, and most importantly *do* never occurs, I hypothetically propose that even if T is without inflectional features, TP is still projected. This can be summarized as follows:

I. The term subjunctive indicates a syntactically finite clause with no inflection on the verb, which

contains a phonetically null modal auxiliary.

II. The clauses where modal auxiliaries, including *do*, appear are not a subjunctive but an indicative clause.

III. The subjunctive clause contains TP whose head is empty; there is no Tense feature.

Primarily, subjunctive clauses are syntactically finite as well as indicative clauses. However, the former does not contain inflection for tense, modals, and *do*-support whereas the latter does. Notice that indicatives can be divided into finite (declaratives) and non-finite (infinitivals). In declaratives, the T head having Tense feature is occupied by auxiliaries including modals or *do* (emphatic for affirmative contexts and negation for negative contexts). In infinitivals, the T head is filled with *to*, the non-finite marker. Finally, I illustrate the syntactic structures of finite indicatives, subjunctives, and non-finite indicatives (infinitivals).

(28) a. Indicative (Finite)　　　b. Subjunctive (Finite)
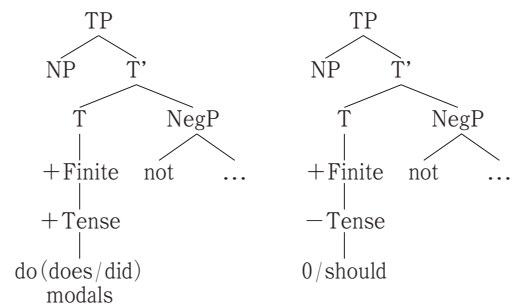
c. Indicative (Non-Finite: Infinitival)
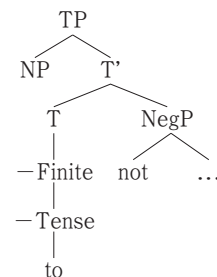
The diagram (28a) indicates the structure of finite indicatives. In finite indicatives, there are ＋Finite feature and ＋Tense affix in T to undergo *do*-support (including -*s* or -*ed*) or modals. The tree (28b) illustrates that of subjunctive clauses. The crucial difference between finite indicatives and subjunctives is the presence of a

＋Tense affix－namely, only ＋Tense features are associated with inflectional morphology (in regular context). Note that even if the sentence has ＋Finite it does not always mean that it has ＋Tense. It is not important whether the clause contains ＋Tense or －Tense to distinguish an indicative from a subjunctive clause because infinitives are also indicative despite the fact that they are non-finite. The structure (28c) shows the structure of infinitive clauses, which are non-finite. Compared to subjunctives, infinitives contain -Finite even if the clause is tenseless. In other words, －Tense does not mean －Finite; thus, it is claimed that finite and tense are distinct. In infinitive clauses, *to* occupies T canonically. Consequently, I claim that the T head contains binary values for the feature (±Finite) and affix (±Tense) as follows:

(29) a. ＋Finite／＋Tense → aspectual auxiliaries, and
      do-support

   b. ＋Finite／－Tense → 0／*should* and other modals

   c. －Finite／－Tense → *to*

In (29a), ＋Finite feature and ＋Tense affix will be satisfied with auxiliaries, and *do*. In (29b), ＋Finite feature and －Tense affix are required by the phonetically null item (0) or *should*. In (29c), the T head with －Finite feature and －Tense affix will be occupied by the infinitival marker *to*.

Finally, what I must consider for future in the following study can be summarized as follows:

(i) How do we more distinguish between tenseness and finiteness, on the one hand, and between tense and mood, on the other hand, in a more principled way?

(ii) How similar and different are subjunctive clauses between English and other languages (mainly Romance and Germanic) which have overt mood inflections on verbs?

(iii) How do we analyze other cases to which the T head is related such as *to*-infinitives, small clauses (perception or causation clauses), and imperatives?

Notes

1) In these cases, the mark * indicates that the corresponding sentence is ungrammatical or unacceptable judged by the pure *intuition* of the native speakers of English. Note that, however, (1c, d) both can be grammatical in British English, or non-subjunctive contexts (indicative). In restricted registers of US or UK, English subjunctive forms are productive; elsewhere, they are not. In addition, it is important to point out that the absence of inflection is not a necessary property; in many languages, subjunctive forms do show (finite) inflections. This is not discussed in this paper. I would like to thank my reviewer for pointing these.

2) Although Potsdam adds stars to these examples, these judgments should be careful. An unanimous reviewer judges these－especially (4b)－'fine.'

3) Sources: (5a) http://www.bradenton.com/2015/09/22/6003909/darrell-turner-of-turner-tree.html. (Accessed9/25/2015), (5b) http://www.product-reviews.net/2014/08/20/iphone-6-upgrade-gazelle-vs-ebay-for-5s-trade-in/. (Accessed 9/25/2015)

4) In fact, the discussion of whether *n't* (c.f. plural and possessive *'s*) is an affix or a clitic varies among researchers. It is often claimed that *n't* is a clitic base-generated as a negative adverb in VP before cliticizing to certain elements－e.g. auxiliaries (see Quirk *et al.* 1985: Pollock 1989). However, Zwicky and Pullum (1983) take issue with this claim, considering it an affix. For the details, see this study and references therein.

5) A reviewer mentions that after all, French, German, and Japanese verbs do raise across negation. It is more important in English that the negative adverb *never* does not block lowering (e.g. *John never eats natto*). In addition, verbs raise to C in imperatives (cf. Duffield 2013) and lexical *have* and *be* also raise in British English (e.g. *Be you a student?* or *Have you a bike?*).

6) It is not obvious that *do*-support is driven *only* by LRP in English because French does not have *do*-support (cf. Pollock 1989): LRP is not specifically about *do*-support. In fact, a least effect explains why raising is preferable to lowering－not why *do* is inserted in the sentence. After all, it is a more general constraint in the theory.

7) Although Pollock (1989) does not mention the succinct position of *not* in NegP, it perhaps takes its specifier position, [Spec, NegP] because its head position is used for successive-cyclic movement of auxiliaries (V→Neg→T (→C)).

8) Significantly, *be* and *have* are passive or aspectual auxiliaries not just a verb in VP. they can form VoiceP or

AspP above the VP as follows:
(i) passive: [$_{VoiceP}$ [$_{voice}$ *be*] [$_{VP}$ V …]]
(ii) aspectual: [$_{AspP}$ [$_{Asp}$ *be/have*] [$_{VP}$ V …]]

9) These examples are clearly unacceptable, but imperatives with *do*-support are allowed, even though there is no Tense feature. Thus, *do*-support is not incompatible with non-indicative or untensed sentences (infinitives). Furthermore, emphatic *do* is excluded from subjunctives. this should also be discussed. I would like to thank my reviewer for bringing up this issue.

10) However, if (4) and (15) are acceptable for the some speakers who accept *should* in subjunctives, some modals and auxiliaries will be excludedon semantic or pragmatic grounds.

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