MODAL PHRASE, MOVEMENT, AND TO-INFINITIVAL CLAUSES

FUMINORI MATSUBARA
Kochi University*


Keywords: ModalP, Case, not to V vs. to not V, ECM-raising, for-deletion

1. Introduction


There is no doubt that this book is a substantial contribution to the understanding of one of the most important syntactic issues, i.e. sentence structures. Although this issue has been extensively discussed in generative grammar since Chomsky (1957), the crucial analysis of the modal system has not yet been settled in minimalist terms. In this sense, the book is recommended to those who are interested in the syntax and semantics of modal auxiliaries, to-infinitivals, and the subjunctive present, among others. Nomura also engages in several interesting and challenging en-

* I would like to express my gratitude to two anonymous EL reviewers, Kunihiro Iwakura, Sadao Ando, Andrew Radford, Peter Skaer, Akiko Kobayashi, Toshitaka Kodoh, Shoji Sugiyama, Mitsunobu Yoshida, Kevin Gregg, and Darren Lingley, for their invaluable comments and suggestions. Special thanks go to Kotomi, Amane, and Riko Matsubara. Needless to say, the author alone is responsible for any remaining deficiencies.

© 2008 by the English Linguistic Society of Japan
deavors, which include attempts to reform Chomsky’s minimalist theory, to expound clearly much previous research, to criticize such studies with convincing evidence from a wide range of empirical data, and finally to advance his alternative analyses. He attempts to provide syntactic accounts as much as possible but also resorts to pragmatic or functional accounts, wherever necessary.

Specifically, Nomura proposes that a modal constitutes its own projection ModalP and that ModalP is headed by i) a modal auxiliary in finite clauses, ii) to in to-infinitival clauses, and iii) a covert (i.e. phonologically empty) modal auxiliary (Mp) in subjunctive present clauses. He also argues that NegP should be placed between IP and ModalP and that the negative not occupies Spec-NegP, not Head-NegP. His rigid clausal architecture is schematized as follows:

\[
(1) \quad \text{IP I \left[ \text{NegP not Neg ModalP must} \left[ \text{VP you go} \right] \right]} \]

It should be noted that a similar structure is suggested by Radford (2004: 166–170), who follows Roberts (1998).

Thus, examples (2a–c) containing the three kinds of modals heading ModalP are derived from structures like (3a–c):

\[
(2) \quad a. \text{You must not go. (p. 39)} \\
b. \text{Be careful [not to catch a cold]. (p. 65)} \\
c. \text{I insisted [that he not go there]. (p. 180)} \\
(3) \quad a. \text{IP I [NegP not Neg ModalP must [VP you go]]] (p. 39)} \\
b. \text{CP C [IP I [NegP not Neg ModalP to [VP PRO catch a cold]]]} \quad \text{(p. 66)} \\
c. \text{CP that [IP I [NegP not Neg ModalP Mp [VP he go there]]]} \quad \text{(p. 180)}
\]

The purpose of this article is to review Nomura’s work by critically examining his suggested analyses of the ModalP Hypothesis. It is not possible to discuss all of his proposals in the limited space of this review. In what follows, therefore, I would like to focus on his new theoretical framework (sections 2 and 3), his major arguments for structure (1) (sections 4 and 5), and his analysis of to-infinitival complements (sections 6 and 7). Importantly, if his new theory is not adequate, we are compelled to reject his resulting conclusions.

2. Nomura’s Theoretical Framework

Nomura presents relationships between formal features of the three modals ((3a–c)) and their movements, which can be summarized as follows:
(4) a. Modals have two uninterpretable features, Tense feature (i.e. [Pres(ent)] or [Past]) and ϕ-features, and they must raise to I to check them off as a last resort in narrow syntax. (pp. 7–9)

b. Unlike other modals, the infinitival marker to has no formal features and thus does not raise at all. (p. 63)

c. The subjunctive covert modal Mₚ has three uninterpretable features, [Subj(uctive)], Tense feature [Pres(ent)], and ϕ-features, and they must raise to I to check them off as a last resort in narrow syntax. (pp. 179–182)

Given (4a), must in (3a) undergoes raising to I to check off its [uPres] and [uϕ] (u = uninterpretable). Given (4b), to in (3b) does not undergo any movement. According to (4c), Mₚ in (3c) moves up to I to check off its [uSubj], [uPres], and [uϕ] in the same way as must in (3a). Notice that Nomura argues that head movement applies in narrow syntax for reasons of licensing the negative polarity item any (i.e. *Anyone didn’t come. vs. Didn’t anyone come?), contrary to Chomsky (2001, 2004) (pp. 4, 5).

Nomura believes that “NP-Movement in English is consistently motivated by Case and ... the EPP feature can be abolished under XP-Movement” (p. 7), although he does not justify the adequacy of Case-driven movement. He assumes that N(P) carries two interpretable features, an N-feature and ϕ-features, but not Case, and that Case is a reflex of ϕ-features of N(P) and a T-feature, V-feature, or P-ϕ-feature, respectively, as illustrated in (5a–d) (p. 8):

(5) a. Nominative Case is a reflex of [ϕ] and the finite T(ense) feature (i.e. [Pres] or [Past]).

b. Accusative Case is a reflex of [ϕ] and [V].

c. Oblique Case is a reflex of [ϕ] and [P].

d. Null Case is a reflex of [ϕ] and [Pₚ].

Nomura assumes that N(P) must get Case in order to be pronounced as a full form in PF, in line with Halle and Marantz (1993) (p. 8).

Under his analysis, (2a) builds structure (3a), represented here again as tree diagram (6) with relevant features, where I has [Pres] and not in Spec-NegP has [Neg], both of which are assumed to be interpretable (p. 39):
In (6) *you* raises to Spec-IP to receive Case and become a full form. Once *you* occupies Spec-IP, Nomura postulates that [Pres] in I is copied up to I’, IP, and down to Spec-IP (*you*), and simultaneously [*φ*] in *you* is copied up to IP and down to I’ and I. He calls this operation *Feature Dribbling*, defined as follows:

(7) Features are copied to the element within the maximal projection which is (i) dominating, or (ii) being dominated.  

This yields structure (8) from (6) (p. 9):
In (8) you is assigned nominative Case as a reflex of [∅] and [Pres] in accordance with (5a). The modal must raises to I to check off its [uPres] and [u∅] as a last resort. Before that, however, Nomura assumes that in negative sentences a modal has [uNeg], so that must in (8) raises to Neg to check off its [uNeg] under a Spec-head configuration in NegP (pp. 14, 39). Then it raises further to I to check off its [uPres] and [u∅] under a head-head relation (p. 9).

To sum up, Nomura’s theoretical framework differs from Chomsky’s, at least in the following respects (p. 20):

(9) a. The operation Agree is not assumed.
   b. No EPP-features are assumed and NP-movement is driven for Case (assignment).
   c. Head-movement applies in narrow syntax.
   d. Feature Dribbling and feature checking under a head-head relation and under a Spec-head relation are assumed.
   e. Move applies to both a probe and a goal, conforming to Lasnik’s (1999) Enlightened Self Interest.

3. Problems with Nomura’s Theoretical Framework

Nomura’s theory is based on the assumptions in (9). However, these assumptions contain some problems. First, throughout the book under review, he follows (9e) and attributes movement to the elimination of uninterpretable features (e.g. (4a–c)). The implementation of movement by uninterpretable features is consistent with Chomsky’s minimalist assumption: e.g. a strong D-feature (1995), an EPP-feature (2000, 2001, 2004), Agree-feature (2005, 2006), etc.¹ Along this line, Nomura claims that NP/DP-movement is triggered by Case (assignment) ((9b)).

However, a closer examination of movement of the subject DP to Spec-IP in (6) and (8) reveals that no uninterpretable features are involved in this movement. In (6) I bears [Pres] and the DP you bears [∅], both of which are interpretable. In spite of this, you raises to Spec-IP. This is because unlike Chomsky Nomura does not assume Case features themselves and regards Case as a reflex of two interpretable features, ∅-features and categorial features, as in (5). Notice that Chomsky assumes that Case features exist.

as unvalued. Therefore, under Nomura’s theory, we have to say that NP/DP-movement is driven in order to amalgamate \( \varphi \) and \( [T]/[V]/[P]/[P_\varphi] \): it is not driven by Case (assignment). If so, this forces us to abandon the widely accepted generalization that uninterpretable features implement NP/DP-movement. This also leads us to assume two kinds of movement, i.e. movement triggered by uninterpretable features and movement triggered by the amalgamation of \( \varphi \) and \( [T]/[V]/[P]/[P_\varphi] \). This raises a theoretical redundancy and makes functional differences between interpretable and uninterpretable features obscure.

A second problem concerns the status of Case. Nomura assumes that neither probes (T, V, P, P_\varphi) nor goals (Ns) have Case features. This means that Case itself is not present in derivation. In spite of this, he claims that NP/DP undergoes movement to receive Case. This is an obvious contradiction: how can NP/DP move to get Case, which is absent in derivation? Further, if Case is reinterpreted as a reflex of \( \varphi \)-features and categorial features in overt syntax, as assumed by Nomura, then we need an additional operation to convert a pair (\( \varphi \) and \( [T]/[V]/[P]/[P_\varphi] \)) to Case at some stage of derivation. This conversion yields a violation of the Non-Tampering Condition (NTC) (Chomsky (2005: 5)) or the Inclusiveness Condition (IC) (Chomsky (1995: 228, 2000: 113, 2001: 3, 2004: 107, 2005: 5)), both of which bar introduction of new elements (features) in the course of computation.

A third problem relates to oblique and null Case assignment on the basis of (9a, d). Nomura suggests that Mary in (10a) is assigned oblique Case by the prepositional complementizer for (see (5c)), whereas PRO in (10b) is assigned null Case by the null counterpart of for, \( \varphi \) (see (5d)):

\begin{align*}
(10) & \quad \text{a. John longed \([CP \text{ for Mary to come back}]\).} \quad (\text{p. 69}) \\
& \quad \text{b. John tried \([CP \varphi \text{ PRO to solve the problem}]\).} \quad (\text{p. 71})
\end{align*}

According to (9a, d), for Mary and PRO to receive Case, they are required to move to within CP to enter into a Spec-head relation or a head-head relation with for and \( \varphi \). He adopts the latter option and illustrates the following structures for (10a, b):

---

2 Chomsky (2001: 6) states that “Case itself is not matched, but deletes under matching of \( \varphi \)-features.”

3 Nomura also states explicitly in a personal communication (p.c.) that this reinterpretation takes place in narrow syntax.

4 If this conversion is assumed to take place in PF, the violation of NTC or IC is avoided, as pointed out by an anonymous EL reviewer and Akiko Kobayashi.
MODAL PHRASE, MOVEMENT, AND 70-INFINITIVAL CLAUSES

(11) a. John longed \([\text{CP} \ [c \text{ for Mary}] \ [\text{IP} \ t_i' \ [\text{ModalP} \ to \ [\text{vP} \ t_i \ \text{come back}]]]]\)

b. John tried \([\text{CP} \ [c \varphi \ \text{PRO}] \ [\text{IP} \ t_i' \ [\text{ModalP} \ to \ [\text{vP} \ t_i \ \text{solve the problem}]]]]\)

((a, b) pp. 70, 72)

In (11a, b) Mary and PRO undergo successive cyclic movements from Spec-vP to C in order to receive Case (see (9b)). Notice that throughout the book he does not assume feature movement operations (p. 91).

However, such an overt movement of DP/NP to head position obviously gives rise to a violation of the *Chain Uniformity Condition*, formulated by Chomsky (1995: 253) as follows:

(12) A chain is uniform with regard to phrase structure status.

(12) prohibits a maximal projection from occupying a head position. Furthermore, as pointed out above, movement of Mary and PRO to C in (11a, b) is not induced by any uninterpretable features: *for* and \(\varphi\) possess interpretable [P] and [P\(\varphi\)], respectively, and Mary and PRO possess interpretable [\(\varphi\)] and [N]. Therefore, here too, under Nomura’s theory, it is impossible to state that Case (assignment) motivates NP/DP-movement since it is assumed to be absent in derivation.

Fourth, in order to establish (9b), Nomura needs to account for *there*-constructions such as (13a–f). Indeed, there have been recent proposals that EPP-features should be eliminated (Boeckx (2000), Bošković (2002), Chomsky (2005, 2006), Epstein and Seely (2006), Epstein, Pires, and Seely (2005), Grohmann, Drury, and Castillo (2000), among others). However, this does not mean that Case can take the place of EPP-features. In Chomsky (1995, 2000, 2001, 2004), which Nomura depends on, the expletive *there* is assumed to have no Case. With this in mind, consider the following:

(13) a. There is a strange man in the garden.

b. There arrived a man. ((a, b) Chomsky (1995: 200, 343))

c. There are likely to be awarded several prizes.

d. We expect there to be awarded several prizes. ((c, d) Chomsky (2001: 7))

e. There was a proof discovered. (Chomsky (2000: 138))

f. There was discovered a proof. (Epstein and Seely (2006: 63))

---

5 Nomura assumes that in (11a, b) *Mary* and PRO land in the intermediate Spec-IP on the way to C in order to check a [person]-feature in I under a Spec-head configuration (pp. 69–72).
In spite of the fact that the associate of there in (13a–c, e, f) is assigned nominative Case by the matrix T, it does not raise overtly to the matrix Spec-TP in order to enter into a Spec-head relation with T. It is not clear how this can be accounted for under Nomura’s Case-driven movement analysis. The same holds for (13d): his theory needs to account for why the associate of there, which is assigned Case by the matrix verb, is stranded in its base position without creating a Spec-head relation with the verb. Similarly, if a proof in (13f) raises to a preverbal position in (13e), how does his theory deal with this movement, which is not Case-driven? Further, under his theory, it is also necessary to account for why there in (13c) raises from the infinitival Spec-TP to the matrix Spec-TP, although it does not bear Case. Consequently, we would like to know how these issues are resolved. If they are not settled, it is difficult to accept (9b) easily.

Fifth, we proceed to [uNeg] selected by modals in negative sentences. As observed in (8), the only role that [uNeg] plays is to make must in Modal land in Neg on its way to I. This is for capturing the nature of step-by-step movement in accordance with the Head Movement Constraint (HMC) or the Minimal Link Condition (MLC). However, if this is correct, the same reasoning should hold for long-distance NP/DP-movement like in (14):

(14) John appears to be likely to be kissed by the kitty.

In order to explain the successive cyclic movement of John in (14), it would be necessary for Nomura to motivate each link of the movement in some morphological way. As noted in fn. 5, if a [person]-feature in I serves as a trigger for these links, just as in (11a, b), he could no longer maintain that NP/DP-movement is driven by Case (assignment).

From the above arguments, we see that Nomura’s new theory has a number of problems that need to be reconciled. Incidentally, Nomura adopts Spec-head relations, which Chomsky dismisses. In this regard, I can provide evidence in support of Nomura. (15a–c) show that Spec-head relations are necessary in certain cases:

---

6 As pointed out by Epstein and Seely (2006: 63, 64), preference of Merge over Move prohibits a proof in (13f) from raising and instead requires there-merger. This incorrectly blocks the derivation of (13e). Notice that Chomsky (2005: 7) assumes that Move is as free as Merge.

By contrast, Chomsky (2001: 20, 21) claims that a proof in (13f) moves to the edge position in (13e) by virtue of a thematization/extraction rule Th/Ex in the phonological component.
(15) a. It surprised me that John left school last month.
b. It seems that Mary let the cat out of the bag.
c. It was believed (held, reasoned, ...) that the conclusion was false.


Under Chomsky's (2000, 2001, 2004) Agree-based theory, a goal must be in the c-command domain of a probe. However, this is not true for Agree between *it* and *T* in (15a-c), as pointed out by Iwakura (2002: 263, fn. 14) and Matsubara (2002b: 151, fn. 16): the probe *T* does not c-command the goal *it* that merges in Spec-TP. Given this, we can say that this Agree is carried out under the Spec-head relation between them.7

4. Nomura's Arguments for the ModalP Hypothesis

Nomura proposes that "ModalP is needed in English grammar as a minimum requirement" (p. 36) and that NegP is placed over ModalP. Compare the conventional structure (16a) with his proposed structure (1), repeated here as (16b):8

(16) a. [TP T [NegP Neg [VP V [VP V ]]]] (p. 38)
b. [Ip I [NegP Neg [ModalP Modal [VP V [VP V ]]]]]

It may safely be said that he adduces two main reasons for (16b): i) scope ambiguities of modals and the negative *not* and ii) ease of the derivation of the <not to V> word order in infinitival clauses.

4.1. Scope Ambiguities of Modals and Not

Let us first turn to the former reason for (16b), i.e. scope ambiguities of modals and the negative *not*. There are two scope relations between them. When modals have scope over *not* (Modal > not), sentences are interpreted as Propositional Negation (= Main Verb Negation), as shown in (17). On the other hand, when *not* has scope over modals (not > Modal), sentences are interpreted as Modal Negation (= Auxiliary Negation), as in (18).

(17) a. You must [n't go/not go]. (*must > not*)
   (= I oblige you [not to go].)

7 In (15a–c) if *C*, not *T*, is a real probe for *it*, as Chomsky (2005, 2006) assumes, then Spec-head relations are dispensable in these cases as well.

8 Nomura employs an I(P) category for a T(P) category.
b. You should [n’t go/not go]. \((\text{should} > \text{not})\)
c. You ought [n’t to go/not to go]. \((\text{ought} > \text{not})\)
   (= I advise you [not to go].)
d. You may [not go]. \((\text{may} > \text{not})\)
   (= I permit you [not to go].)
e. You can [not go]. \((\text{can} > \text{not})\)
   (= You are permitted [not to go].)

\[(a-e) \text{ p. 40}\]

(18) a. You [may not] go to the party. \((\text{not} > \text{may})\)
   (= I do [not permit] you to go.)
b. You [can’t/cannot] go. \((\text{not} > \text{can})\)
   (= You are [not permitted] to go.)
c. You [needn’t/need not] go. \((\text{not} > \text{need})\)
   (= You are [not obliged] to go.)

\[(a-c) \text{ p. 43}\]

It should be noted that for Modal > not in (17) the modal must c-command not, whereas for not > Modal in (18) not must c-command the modal. This is problematic for the generally assumed structure (16a) and any structure with ModalP over NegP, since such a structure allows a modal in T/Modal to c-command not in NegP but disallows the latter to c-command the former. Therefore, (16a) cannot generate the interpretation of Modal Negation in (18).

On the other hand, (16b) can yield two interpretations of Propositional Negation in (17) and Modal Negation in (18). Nomura suggests that the latter interpretation is obtained in “the Modal-underlying structure” (i.e., where a modal occupies Modal), while the former interpretation is obtained in “the Modal-derived structure” (i.e., where a modal occupies I as a result of raising from Modal) (p. 44). Given (16b), thus, the Modal-underlying structure enables not in Spec-NegP to c-command a modal in Modal and the Modal-derived structure makes their converse c-command relation possible.

4.2. Derivation of the \(<\text{Not To V}>\) Word Order

We now proceed to the second reason for the ModalP Hypothesis. This relates to how to derive the word order \(<\text{not to V}>\) in infinitival clauses. It is worth noticing that this word order cannot easily be derived from (16a) since to is merged in T and not is merged within NegP, yielding the word order \(<\text{to not V}>\). Hence, drawing on (16a), we incorrectly predict that examples like (19a–d) are grammatical, while examples like (20a–d) are deviant:

\[(19)\]
a. *Be careful to not catch a cold. \((\text{p. 97})\)
b. *Try to not be late. \((\text{Swan (1995: 276), in p. 97})\)
c. *The wisest policy would be to not do anything at all.
   (Declerck (1991: 467), in p. 97)

d. *Carol told Dan to leave, but Jim told him to not.
   (Ernst (1992: 128), in p. 103)

(20)  a. Be careful not to catch a cold.  (p. 97)
b. Try not to be late.  (Swan (1995: 276), in p. 97)
c. The wisest policy would be not to do anything at all.
   (Declerck (1991: 467), in p. 97)
d. Carol told Dan to leave, but Jim told him not to.
   (Ernst (1992: 128), in p. 103)

On the other hand, drawing on (16b), we can readily derive the <not to V> word order since to is merged and remains in Modal and not is merged in Spec-NegP. Recall that according to (4b) to does not raise from Modal to I. Therefore, (16b) succeeds in ruling out (19a–d) and ruling in (20a–d). This justifies the ModalP Hypothesis.

Pollock (1989: 375) suggests that the normal <not to V> order is derived from the <to not V> order. Thus, (21a, b) are derived from (22a, b):

(21)  a. John wants not to go.
b. Peter expects his friends not to object to his proposals.

(22)  a. John wants to not go.
b. Peter expects his friends to not object to his proposals.

((21), (22) Pollock (1989: 375), in p. 97)

Pollock claims that the to not vs. not to ordering depends on whether to in T undergoes Affix Movement (Chomsky’s (1981) “rule R”) according to which it adjoins to VP at S-structure.

As is well known, however, Pollock’s analysis is not unproblematic. Many linguists have pointed out problems with Pollock’s analysis and Nomura restates these problems (pp. 99, 100). First, affix lowering of to at S-structure causes an ECP violation within the GB framework. Second, downward movement itself should be abolished in the minimalist terms. Third, it is difficult to account for why the intervening head not does not block affix lowering of to, although it does block affix lowering of agreement/tense (e.g. *John not kisses Mary).9

Fourth, if to adjoins to VP, we predict that it can be deleted by VP-deletion. However, this is not the case, as shown by the contrast between (23) and (24) (Sawada (1995) and Matsubara (1997)):

9 Pollock (1989) assumes that the negative not is a head of NegP.
(23)  a. Ichiro must sign a contract with another team. It would be absurd not to.  
(b) She opened the door, though I told her not to.  

(24)  a. *Ichiro must sign a contract with another team. It would be absurd not. 
(b) *She opened the door, though I told her not.  

Fifth, Pollock's analysis cannot account for how to rule out examples like (19a–d) while ruling in examples like (22a, b), since both have the identical word order <to not V>.  

Sixth, Nomura adds that Affix Movement "should be applied only to affixes (i.e. bound morphemes), not words (i.e. free morphemes)" (p. 99). From this argument, Nomura's analysis is preferable to Pollock's analysis.

Let us now proceed to the following examples:

(25)  a. Not to have played football for many years is a disadvantage in a major game.  
(b) To not have played football for many years is a disadvantage in a major game.  
(c) To have not played football for many years is a disadvantage in a major game. 

To account for the italicized word order in (25a–c), Nomura assumes three positions for not: i) not in (25a) is a sentential negation not, which merges in Spec-NegP and negates the whole infinitival clause (see (26a)); ii) not in (25b) is a verb phrase negation not, which adjoins to PerfP (= a type of VP) and thus negates PerfP (see (26b)); and iii) not in (25c) is a main verb phrase negation not, which adjoins to VP and thus negates VP (see (26c)) (pp. 104–106):

(26)  a. [CP [IP PRO [NegP not [ModalP to [PerfP have [vp played ...]]]]]]  
(b) [CP [IP PRO [ModalP to [PerfP not [PerfP have [vp played ...]]]]]]  
(c) [CP [IP PRO [ModalP to [PerfP have [vp not [vp played ...]]]]]]

5. Problems with Nomura's ModalP Hypothesis

Here I would like to show that Nomura's ModalP analysis contains some
problems and discuss other possible alternative analyses.

5.1. Modals and Negation

To begin with, Nomura claims that the interpretation of Modal Negation (not > Modal) is captured in the Modal-underlying structure, while that of Propositional Negation (Modal > not) is captured in the Modal-derived structure. However, if this is correct, then we erroneously predict that all modals never fail to have two interpretations, since they originate in Modal c-commanded by not in Spec-NegP and raise to I c-commanding not in Spec-NegP. As is generally accepted, root modals that mean obligation such as must, should, and ought to and those that mean volition such as will and shall cannot have the interpretation of Modal Negation (Halliday (1970), Leech (1987), Palmer (1990), Ando (2005), etc.):\(^{11}\)

(27) a. You mustn't smoke in here. (must > not) 
   (= You are obliged [not to smoke in here].)

b. You should not/ought not to desert her. 
   (should/ought > not)
   (= You are advised [not to desert her].)

c. He won’t do what he’s told. (will > not) 
   (= He insists on [not doing what he’s told].)

d. You shall not/shan’t escape my revenge! (shall > not) 
   (= I will see [that you don’t escape my revenge].)

((a–d) Ando (2005: 336))

Further, it is also generally agreed that most epistemic modals cannot yield the interpretation of Modal Negation (Halliday (1970), Leech (1987), Palmer (1988), Sawada (1993), Huddleston and Pullum (2002), Yasui (2004),

\(^{11}\) As for must, Nomura points out that it can be negated as Modal Negation and cites the following example (p. 49):

(i) You must not go home now to look after the children, mustn’t you? 
   (Declerck (1991: 375), in p. 49)

Even if so, however, he has to account for why in many cases must cannot have the interpretation of Modal Negation (see (27a)). Further, he runs into the problem of why should, ought to, will, and shall in (27b–d) have only the interpretation of Propositional Negation.

Notice also that Radford (2004) shows that the root must does not generate the interpretation of Modal Negation, contrary to Nomura:

(ii) You must not do that. (must > not) 
   (= It is necessary [for you not to do that].) 
   (Radford (2004: 167))
Ando (2005), etc.):\(^{12, 13}\)

(28)  
\begin{enumerate}
  \item a. It may not be true. \((\text{may} \to \text{not})\)  
      (= It is possible [that it is not true].)
  
  \item b. It can’t be true. \((\text{can} \to \text{not})\)  
      (= It is certain/necessarily the case [that it is not true].)
  
  \item c. That shouldn’t be hard. \((\text{should} \to \text{not})\)  
      (= It is reasonable to conclude [that that is not hard].)
  
  \item d. He won’t have received my letter yet. \((\text{will} \to \text{not})\)  
      (= I predict [that he hasn’t received my letter yet].)
\end{enumerate}

\((a-d)\) Ando (2005: 336)

To settle this problem, Nomura advances the following hypothesis:

(29) All the modals can have both interpretations of Modal Negation and Propositional Negation in syntax, but accidental gaps exist, each of which is consistent with the harmonic system that English modals themselves exhibit. (p. 47)

According to (29), the accidental gaps of Modal Negation of the root must, should, and ought to are all substituted for by need not or (the quasi-modal) don’t have to (pp. 49, 50). The same remarks can apply to the epistemic must, should, and ought to (p. 50). In this respect, (29) depends on “the tendency where morphologically or syntactically expected forms do not exist because of the presence of other corresponding forms” (p. 62, fn. 26).

However, (29) is not so easy to accept. As shown above, there are many modals that cannot yield the interpretation of Modal Negation. Thus, it is not reasonable to assume that all the modals can be negated both as Modal


\(^{13}\) Nomura points out that some epistemic modals can generate the interpretation of Modal Negation and shows the following examples (p. 47):

\begin{enumerate}
  \item a. He [can’t/cannot] be at home now. \((\text{not} > \text{can})\)
      (= It is [not possible] that he is at home now.)
  
  \item b. He [needn’t/need not] be at home now. \((\text{not} > \text{need})\)
      (= It is [not necessary/necessarily the case] that he is at home now.)
  
  \item c. He [mustn’t/must not] be at home now. \((\text{not} > \text{must})\) (AmE)
      (= It is [not certain] that he is at home now.)
\end{enumerate}

Even if so, however, he has to account for why in most cases epistemic modals cannot be negated as Modal Negation. Further, he faces the problem of why should and will in (28c, d) yield only the interpretation of Propositional Negation.
Negation and as Propositional Negation. Second, if both interpretations arise in syntax, then it is not clear how and when one is allowed and the other is blocked. Further, suppose that the accidental gap of Modal Negation of must/should/ought to is filled by need not/don’t have to. Then it is not clear how and when the interpretation obtained from the derivation with must not/should not/ought not to is replaced by that obtained from the derivation with need not/don’t have to. How and when do the different derivations affect each other? In addition, given that the root will and shall in (27c, d) are negated only as Propositional Negation, what modals substitute for them to yield the interpretation of Modal Negation?

These problems do not arise in Radford’s (2004: 167, 168) analysis, which follows Roberts (1998). Under Nomura’s ModalP analysis, all modals merge in Modal and raise to I. This means that there is only one position for modals to (externally) merge in. By contrast, Radford (as well as Roberts) suggests that wide-scope modals like those in (17), (27), and (28) merge in T, whereas narrow-scope modals like those in (18) merge in some position below T, labeled AUX (= Modal in Nomura’s analysis), and raise to T. This means that there are two positions for modals to (externally) merge in, i.e. T and AUX. Given this, (30a) with wide-scope must and (30b) with narrow-scope need are assigned structures like (31a, b), respectively.14

(30) a. You must not do that.  (must > not)
   (= It is necessary [for you not to do that].)
b. You need not do that.  (not > need)
   (= It is not necessary [for you to do that].)

(31) a. \[\text{cp } [\text{TP you must } [\text{NegP not } [\text{vp do that}]]]]
b. \[\text{cp } [\text{TP you need } [\text{NegP not } [\text{AUXP ti } [\text{vp do that}]]]]

((30), (31) adapted from Radford (2004: 167))

In (31a) must in T c-commands not in Spec-NegP, thus yielding the interpretation of Propositional Negation. The same account holds for (17), (27), and (28). In (31b) not in Spec-NegP c-commands need in AUX, thus yielding the interpretation of Modal Negation. The same account applies to (18).

Radford’s analysis, which advances two different positions for modals, is based on the fact that Scottish English allows double modal constructions (Brown (1991)). (32a–c) are taken from Scottish English:

(32) a. He should can go tomorrow.

14 Radford (2004: 170–173) assumes that the negative not is placed in Spec-NegP.
(= He ought to be able to go tomorrow.)

b. He must no can do it. (no = not in Standard English (SE)) (= I conclude he is unable to do it.)

c. Will he can do it?

(Cf. *Will can he do it?) ((a–c) Brown (1991: 74, 97, 98))

It should be noted that in (32b) must has scope over/c-commands no and no has scope over/c-commands can. Under the analysis here, (32a–c) are derived from structures like (33a–c):

(33) a. \[\text{[cP TP he should [AUXP can [vP go tomorrow]]]}\]

b. \[\text{[cP TP he must [Negp no [AUXP can [vP do it]]]}\]

c. \[\text{[cP will; TP he; t; AUXP can [vP do it]]}\]

Importantly, Nomura’s analysis cannot secure two positions for two modals. However, Radford’s analysis raises several questions. First, it is not clear how and when modals are grouped into two types, i.e. wide-scope and narrow-scope modals, with respect to negation. This scope difference is syntactically determined in relation to not. Then is it possible for modals to be classified into two types (e.g. in the lexicon) before their external merger? If it is, how? Second, when a modal yields two interpretations of Propositional Negation and Modal Negation (e.g. may in (17d) and (18a), can in (17e) and (18b)), it is assumed that in the former case it merges in T and in the latter case it merges in AUX. Then we wonder how the identical modal can be sorted into two types, wide-scope and narrow-scope modals. Can this be achieved by assigning it certain distinct features? Or are these two types regarded as different lexical items with the same phonological form since they head/project different phrases, TP and AUXP?15

Third, it is necessary for Radford’s analysis to account for why double modal constructions like (32a–c) are disallowed in SE. In other words, how does SE block a wide-scope modal and a narrow-scope modal from cooccurring in T and AUX? Furthermore, Radford attributes two different positions for modals, T and AUX, to the fact of double modal constructions like (32a–c). On closer scrutiny, however, we can also find triple modal constructions in languages like Scottish English, Tyneside English, Texas English, etc. (Boertien (1979), Brown (1991), references therein). Observe examples in (34) from Scottish English:

(34) a. He’ll might could do it for you.

(= He might be able in the future to do it for you.)

---

15 I am grateful to an anonymous EL reviewer for pointing this out.
b. He'll should can come the morn.
   (= It is likely that he will be able to …)

According to Boertien (1979: 15), Texas English allows the occurrence of three modals such as might should oughta and might could oughta. Given these facts, Radford would have to propose three different positions for modals. Consequently, if Radford cannot resolve these questions, we cannot accept his analysis easily. This leads us to say that further research is needed to decide which analysis is better, Nomura’s or Radford’s.

5.2. <Not To V> vs. <To Not V>

Let us now turn to the word orders in negative infinitivals in section 4.2. Under Nomura’s analysis, as seen in (26a–c), the <not to V> order and the <to not V> order are distinct constructions: the former is the negation of the whole infinitival clause, while the latter is the negation of the verb phrase (p. 112). Recall that to merges in Modal but does not raise to I ((4b)). If so, however, his analysis encounters the same problem as in Pollock’s analysis: it cannot account for the contrast between examples like (19a–d) and examples like (22a, b). (19a, c) and (22a, b) are repeated here as (35a, b) and (36a, b):

(35) a. *Be careful to not catch a cold.
   b. *The wisest policy would be to not do anything at all.

(36) a. John wants to not go.
   b. Peter expects his friends to not object to his proposals.

His analysis mistakenly predicts that (35a, b) are as grammatical as (36a, b) since the <to not V> order in these examples falls under verb phrase negation and builds the identical structure, in which to merges in Modal and not adjoins to vP (see (26c)).

Nomura attributes the <not to V> vs. <to not V> ordering to two different positions of not. A similar approach is made by Bouchard (1995: 426) and Miller (2002: 229) as well. In contrast, Radford (2004: 169) attributes this ordering variation to two different positions of to, i.e. T and AUX (= I and Modal in Nomura’s analysis). Specifically, the wide-scope to (i.e., to has scope over not) (externally) merges in T, while the narrow-scope to (i.e., not has scope over to) merges and stays in AUX. Following Radford, thus, (37a, b) build structures like (38a, b):

(37) a. He decided [not to co-operate with the police].
   b. He decided [to not co-operate with the police].

((a, b) Radford (2004: 169))
(38) a. $[\text{CP } [\text{TP PRO } [\text{NegP not [AuxP to [vP co-operate with the police]]}]]$

b. $[\text{CP } [\text{TP PRO to [NegP not [vP co-operate with the police]]}]]$

((a, b) adapted from Radford (2004: 169))

It is notable that another possible account of the two orders is to suppose that $to$ in (38a, b) merges in AUX/Modal and optionally raises to T/I (see fn. 10). Henceforth, I call this account a $to$-raising analysis.

Then which approach of the above three is most plausible? First, there is corpus-based evidence in favor of Radford’s analysis and the $to$-raising analysis that we sometimes find two occurrences of $to$ in an infinitival clause, as suggested by Higashi (1999: 380). Consider the following:16

(39) a. ... I try $to$ $not$ to $take$ a lot of notice of it ...

b. Griffin, 27, was also ordered $to$ $not$ to contact Lynn and pay her up to £6,500 compensation ...

c. ... it was late enough for us $to$ $not$ to know if it was coming ...

d. ... it’s got to be done a certain way with a brush so $to$ $not$ to leave any marks. ((a)–(d) British National Corpus)

Radford’s analysis can derive double $to$ constructions in (39a–d) in the same way as double modal constructions in (32a–c) since it can secure two places for $to$ to (externally) merge in. Thus, the infinitivals in (39a, c) can be assigned structures like (40a, b):

(40) a. $[\text{CP } [\text{TP PRO to [NegP not [AuxP to [vP take a lot of notice of it]]}}]]$

b. $[\text{CP for [TP us to [NegP not [AuxP to [vP know if it was coming]]}}]]$

What is worth noting here is that his analysis can allow the generalization that not only modals but $to$ have two different positions to merge in (although I have illustrated the cases of triple modal constructions in the previous section). On the other hand, Nomura’s analysis cannot account for (39a–d) for the same reason that it cannot account for (32a–c), since it...

16 I thank Sadao Ando (p.c.) for showing Eric’s (a moderator in Lydbury Grammar Clinic (http://www.lydbury.co.uk/grammar/)) comment on the $<to$ $not$ $to>$ ordering. His comment is: “there may be plenty of examples from the past …, but the form $to$ $not$ to [verb] is now decidedly antiquated. These days, one of the forms $to$ not [verb] and not $to$ [verb] is invariably used instead, at least in AmE. When you hear it in spoken English these days it is usually done inadvertently, or because the person is stumbling over his words.”
assumes that to merges and remains in Modal.

The to-raising analysis too can account for (39a–d) in terms of Chomsky's (1995) copy theory of movement: to externally merges in AUX/Modal and internally merges in T/I (i.e. raises to T/I), leaving its copy behind. Suppose that the original copy does not undergo deletion in PF. Then it follows that the moved to and its copy are pronounced in AUX/Modal and T/I, respectively.¹⁷

Let us now compare Radford's analysis and the to-raising analysis. Evidence in support of Radford's analysis relates to the fact that languages like Scottish English allow to to precede a modal can/could as follows:

(41) a. You'll have to can do it whether you like it or not.
    (= You'll have to be able to do it ...)

b. I would like to could swim.
    (= I would like to be able to swim.)

c. I want to can do that.  ((a–c) Brown (1991: 75, 78))

(41a–c) too correspond to double modal constructions in (32a–c). Radford's analysis can account for the cooccurrence of to with a modal by saying that to merges in T and the modal merges in AUX. On the other hand, the data in (41) denies the possibility of to merging in AUX/Modal and raising to T/I since this raising of to prevents the modal from merging in AUX/Modal. Likewise, Nomura's analysis cannot account for (41a–c) since it expects both to and the modal to merge in Modal. It is also reasonable that to precedes can/could, because it is purely an infinitival marker and decides a clause type. Notice that Brown (1991) and Boertien (1979) do not show any negative examples where not cooccurs with to can/to could. Hence, it is not clear at present whether such negative sentences are possible or not.

From the above argument, Radford's analysis seems to be favored over the other two analyses. However, his analysis runs into the same problems as pointed out in the last section. First, he needs to make it clear how and when to is classified into two types, i.e. wide-scope to and narrow-scope to. Such a scope difference is syntactically fixed in relation to not. Can we sort it into two types (e.g. in the lexicon) before its external merger? Second, he needs to show whether the wide-scope to and the narrow-scope to are regarded as the same identical lexical item or as two different lexical items, since they head/project different phrases, TP and AUXP

¹⁷ This idea was suggested by an anonymous EL reviewer.
(see (38a, b)). If they are identical, we wonder whether *to* has properties of both *T* and *AUX* and why *to* exhibits a contrast in selecting a complement: *to* in *T* selects a NegP complement, whereas *to* in *AUX* selects a vP complement.\(^{18}\) If they are different, we predict that they are allowed to cooccur in *T* and *AUX*. Is this prediction correct in all cases? If it is not, how is their cooccurrence blocked?

Further, if structures like (38a, b) are correct, this induces us wrongly to consider that both <not to *V*> in (37a) and <to not *V*> in (37b) are cases of sentential negation since *not* in both cases stands in the identical place, Spec-NegP. It should be noted that NegP is a projection containing a sentential negative *not*, but not a constituent negative *not* (see Kaneko and Endo (2001: 14–21)). If so, we erroneously predict that (37a, b) exhibit entirely the same meaning. In fact, as Radford points out, there is a subtle meaning difference between them: (37b) implies "a much more deliberate act of defiance" than (37a). Notice that the same discussion holds for the *to*-raising analysis too.

To sum up, we have examined three approaches to the <not to *V*> vs. *<to not V>* ordering. We have come to the conclusion that each approach has merits and demerits, which makes it difficult to decide which one is most plausible. It goes without saying that further research is needed to account for these two orders. We also have to bear in mind that all three leave the same problem unresolved: how to account for the contrast between (19a–d) and (22a, b).

6. Nomura’s Analysis of To-Infinitival Complements

Nomura attempts to exclude the conventional distinction between control *T* and ECM/raising *T* (Chomsky (1995, 2000, 2001, 2004, 2005)) and argues that there is only one type of nonfinite *T* (p. 63). To achieve this, he proposes the following for the Case checking of infinitival subjects:

\[
\begin{align*}
\text{(42) a.} & \quad \text{"Lexical subjects are assigned oblique Case always by the prepositional complementizer } & \text{for."} \quad \text{(p. 68)} \\
\text{b.} & \quad \text{"PRO is assigned null Case by the null prepositional complementizer } & \text{\(\varphi\)."} \quad \text{(p. 68)}
\end{align*}
\]

He claims that (42a, b) are based on the following premise:

\[
\text{(43) "Infinitival clauses are basically CPs from the viewpoint of}
\]

\(^{18}\) I am thankful to an anonymous *EL* reviewer for drawing my attention to this point.
Raising infinitivals in (43) include ECM cases with subject-to-object raising (henceforth, ECM-raising, to use Chomsky’s (2005: 20) term). With regard to Case checking of ECM-subjects, he adds (44) to (42a, b) (p. 73):

(44) ECM-subjects are assigned accusative Case by the matrix verb.

According to Nomura’s analysis, the to-infinitival complements (to-ICs) of try-type in (45a) and believe-type in (45b) are constructed like (46a, b):

(45) a. John tried to solve the problem. (p. 71)
    b. I believe him to be honest. (p. 73)

(46) a. \[vP John v [vp tried [CP [C φ PROi] [IP ti’ [ModalP to [vp ti solve the problem]]]]]] (p. 72)
    b. \[vP I v [vp himi believe [Ip ti’ [ModalP to [vp ti be honest]]]]] (p. 73)

In (46a), as observed in (11b), φ enters into a head-head relation with PRO, which has raised from Spec-vP to C through Spec-IP (see fn. 5). Thus, PRO is assigned null Case by φ (see (5d) and (42b)). In (46b) him has ECM-raised from Spec-vP to Spec-VP through Spec-IP, so that it establishes a Spec-head relation with believe. Thus, him is assigned accusative Case by believe (see (5b) and (44)). Notice that Nomura assumes that V, not v, has an accusative-assigning property.

He claims that want-type to-ICs are CPs (Bošković (1997)) and that examples of (47a)-type are not counterexamples to (42a):

(47) a. I want \[cp him to solve this problem\]. (p. 78)
    b. I want very much \[cp for him to solve the problem\]. (p. 78)

Given (42a), it follows that him in (47a) has to be assigned oblique Case by for, but in fact for does not show up. It seems that him is assigned null Case by φ. To account for this, he advances the following with respect to (47a)-type for-less to-ICs:

(48) “For is generated in the underlying structure” and it “can be phonetically deleted under the perceptual condition in the surface structure.” (p. 79)

According to (48), him in (47a) is assigned oblique Case by for in the same way as him in (47b), but for in (47a), unlike for in (47b), is deleted in PF.

He adduces three pieces of evidence in favor of (48). The first evidence comes from the coordination test in (49):

(49) I want \[xp Mary to come to Japan\], and \[cp for her to see my parents\]. (p. 78)

Second, “some people (or the dialects) allow” (50) instead of (47a):
Third, the pseudo-cleft version of (47a) requires for:

(51) What I want is *(for) Mary to solve this problem. (p. 79)

His claim that the want-type verb in (47a) is not an ECM-verb also relates to the following binding contrasts between want-type and believe-type verbs, presented by Lasnik and Saito (1991: 336, 337):

(52) a. ?I believed [those meni to be unreliable] because of each other’si statements.
    b. ??*I wanted [those meni to be fired] because of each other’si statements.

(53) a. ?*Joan believes [him to be a genius] even more fervently than Bob’si mother does.
    b. ?Joan wants [him to be successful] even more fervently than Bob’si mother does.

7. Problems with Nomura’s Analysis of To-Infinitival Complements

Here I would like to show that Nomura’s analysis above contains many problems. Due to space limitations, I point out each problem only briefly here.

First, as criticized in section 3, when the to-IC subject is assigned Case by for or ϕ as in (46a), (47a, b), and (11a, b), it must overtly raise to C from Spec-vP. Such movement of DP/NP to head position yields a violation of the Chain Uniformity Condition (12). Second, by the same token, (12) hinders the to-IC subject from wh-moving from C to Spec-CP (e.g. who, do you want ti to come?). Third, movement of the to-IC subject to C ((46a), (47a, b), (11a, b)) or to the matrix Spec-VP ((46b)) is not triggered by any uninterpretable features since within Nomura’s framework C and V have only interpretable [P]/[Pϕ] and [V], respectively, and N does not have Case. Fourth, his analysis needs to account for how the associate of there in examples like (13c, d) and like “John wanted there to be a sunset” overtly enters into a Spec-head/head-head relation with T/V/C to receive Case.

A fifth problem arises with respect to try-type examples like (54b, c):

(54) a. *John tried [CP ϕ IP Mary to solve the problem]]. (p. 77)
    b. *I tried (very hard) [CP for IP him to go home].

(b) Matsubara (2002a: 250)

(c) John tried [for Harry to read War and Peace].

(c) Culicover and Jackendoff (2001: 495)

He rules out (54a) by saying that Mary cannot be assigned Case by ϕ ((42a,
If so, Nomura cannot rule out (54b, c) since *him and *Harry can be assigned Case by *for. To exclude (54b, c), it is necessary to assume that *try-type verbs always select control C headed by \( \varphi \). This implies that we still need the distinction between control C and noncontrol C, just as the conventional one between control T and noncontrol T (ECM/raising T). This is contradictory to his central proposal to eliminate such a distinction.

A sixth problem relates to his claim in (43) that raising infinitival structures are “marked.” His claim is based on the fact that ECM constructions are not observed in languages like French, Italian, German, etc. (p. 88, fn. 8). But this is clearly incorrect since his claim holds only for *believe-type to-ICs but not for causative and perceptual ICs or verbless small clauses, all of which involve Case-assignment via ECM, i.e. ECM constructions. Further, he does not mention anything about *seem/likely-type raising infinitivals. Does he claim that they are marked too?

Further problems arise from (48), which Nomura advances to adjust (47a)-type examples to (42a). (48) turns out to be an ad hoc assumption in the following points: it is not clear what makes *for deletable and undeletable. Why is *for in (47a) deleted and *for in (47b)/(50) not deleted? If *for assigns Case to *him in (47a, b) and *Mary in (50), there is no reason why *for in (47a) undergoes deletion, whereas *for in (47b)/(50) surfaces. What is more, if *for assigns Case to *him in (47a), he cannot account for the deviance of (55a, b) since *John/William should be assigned Case by *for:

(55) a. *It is wanted/preferred [John to come to the party].
   b. *What John wants is [William to win].

In addition, it is difficult to see what the “perceptual condition” is in (48) and thus he needs to define it more clearly.

Furthermore, deriving examples like (47a) from those like (50) via *for-deletion gives rise to a violation of Müller’s (1997) Fewest Steps Condition, defined as (56):

(56) If two derivations \( D_1 \) and \( D_2 \) are in the same reference set and \( D_1 \) involves fewer operations than \( D_2 \), then \( D_1 \) is to be preferred over \( D_2 \).

(Müller (1997: 117))

Given (56), we always choose the derivation of examples like (50) over that of those like (47a) since the former involves no superfluous steps in

---

19 Nomura denies the Empty Category Principle (ECP)-based account of complementizer-deletion (pp. 75, 76).
derivation. This causes us to fail to derive examples like (47a). In this sense, it is doubtful whether Nomura’s for-deletion is justifiable in the minimalist framework (see Matsubara (2002a)).

Importantly, Nomura’s CP-analysis of (47a)-type to-ICs via for-deletion cannot be uniformly extended to other want-type nonfinite clauses like (57a, b) since they are never headed by for, as is evident from (58a, b):

\[
(57) \quad \begin{align*}
& a. \text{Mary wanted [Bill punished severely].} \\
& b. \text{John didn’t like [Bill coming to the party].}
\end{align*}
\]

\[
(58) \quad \begin{align*}
& a. \text{*Mary wanted [for Bill punished severely].} \\
& b. \text{*John didn’t like [for Bill coming to the party].}
\end{align*}
\]

If Bill in (57a, b) is assigned Case by for, we incorrectly predict that (59a, b) are grammatical:

\[
(59) \quad \begin{align*}
& a. \text{It was wanted [Bill punished severely].} \\
& b. \text{It wasn’t liked [Bill coming to the party].}
\end{align*}
\]

Therefore, these arguments lead us to conclude that (48) is not tenable.

As for the coordination test in (49), furthermore, Andrew Radford (p.c.) and Kevin Gregg (p.c.) show the opposite result:

\[
(60) \quad \begin{align*}
& a. \text{I want [you to study English] and [for her to study French].} \\
& b. \text{I didn’t want [you to hurt him] or [for him to hurt you].}
\end{align*}
\]

Likewise, Radford (2004: 132) judges (61) as deviant:

\[
(61) \quad \text{We didn’t intend [you to hurt him] or [for him to hurt you].}
\]

Notice that intend in (61) is similar to want in that it can take either a (47a)-type or (47b)/(50)-type to-IC (Radford (2004: 132)). (60) and (61) do not support Nomura’s claim that (47a)-type to-ICs are CPs.20

20 Iwakura (2000, 2002, 2004, 2007) and Matsubara (2002a, 2005, 2006, 2007) suggest that (47a)-type to-ICs are not CPs but TPs and that want-type verbs taking these to-ICs are ECM verbs. Nakajima (2001) takes this position too (Iwakura (2002: 272, fn. 23)). Iwakura and Matsubara advance uniform TP-analyses of all for-less to-ICs in accord with Bošković’s (1997: 25) Minimal Structure Principle. Under Nomura’s analysis, on the other hand, both the TP-analysis and the CP-analysis of for-less to-ICs coexist. (For empirical and conceptual problems with the CP-analysis of (47a)-type to-ICs, see Iwakura (2000, 2004)).

Given the TP-analysis of (47a)-type to-ICs, one may wonder how to filter out (ib), which contrasts with (ia):

\[
(62) \quad \begin{align*}
& a. \text{John was believed to be an idiot.} \\
& b. \text{John was wanted to win the race.}
\end{align*}
\]

Iwakura (2002: 272) proposes that “if want-class verbs select a defective T or an empty T, they select T with Case.” This requires the infinitival T in (ib) to have Case. Since the passive verb wanted is not a Case-assigner, the Case feature of the infinitival T is
Contrary to the binding fact in (52) and (53), I can provide evidence for ECM-raising of want-type for-less to-IC subjects in terms of the Superiority Condition. Compare the believe-type (62a, b) and the want-type (63a, b), in which when is a modifier to the matrix clause:

(62)  a. Who did John prove to be guilty when?
    b. ?When did John prove who to be guilty?

(63)  a. Who did John want to fix the radio when?
    b. ?When did John want who to fix the radio?

(62a) and (63a) indicate that who is higher than when as a result of ECM-raising to the matrix Spec-VP, satisfying the Superiority Condition.

Another piece of evidence for ECM-raising of want-type for-less to-IC subjects comes from the possibility of quantifier float. Compare believe-type (64a) and want-type (64b):

(64)  a. I believe the students all to know French.
    b. I wanted the students all to study linguistics.

Following Sportiche (1988), Bošković (2002) accounts for (64a) by saying that all the students lands in the intermediate Spec-TP in the course of ECM-raising, where all is stranded. If this is correct, the same account should hold for (64b): all is in Spec-TP and the students is in Spec-VP.

A further argument for ECM-raising of want-type for-less to-IC subjects left undeleted. This causes the derivation to crash, blocking the derivation of (ib). For further details, see Iwakura (2002). Note that Iwakura (2000: 233–235) provides an alternative account for the deviance of (ib) by proposing that “want-class verbs with Acc-to complements have the capacity to assign two values of Acc, regardless of whether they are active or passive.” For further details, see Iwakura (2000).

Matsubara (2007: 45–48) rules out (ib) by hypothesizing that want-type v*-V has its φ-features, but not its Case feature, absorbed by a passive morpheme. Assuming that Case deletes under matching of φ-features (Chomsky (2001: 6)) (see fn. 2), wanted does not assign Case to John since it has lost φ-features under passivization. This causes the derivation to crash with the Case feature of wanted left undeleted.

I leave the issue of the TP-analysis vs. the CP-analysis to future research, but it is not clear how the latter analysis accounts for the similarities between (62) and (63), (64a) and (64b), (65) and (66), and (67a) and (67b), below.

21 There is great variation regarding the judgment on (52a, b) and (53a, b). See Matsubara (2006, 2007) for the relevant informant tests.

22 I owe the judgments on examples in (62) and (63) to Radford (p.c.) and Gregg (p.c.). Radford points out that (62b) is perfectly grammatical in the following context (see Matsubara (2007: 41, fn. 8)):

(i) I know John at some point proved someone guilty, but I can’t remember when exactly he proved who to be guilty.
can be formulated in relation to extraction from subject. Chomsky (2005) suggests that extraction from ECM subjects is possible, as follows ((65b) is judged by Radford (p.c.)):

(65) a. Of which car did they believe the (driver, picture) to have caused a scandal?

(Chomsky (2005: 20))

b. It was the CAR (not the TRUCK) of which they believed the (driver, picture) to have caused a scandal.

To account for the grammaticality of (65a), Chomsky argues that the DP subject, the (driver, picture) of which car, lands in the intermediate Spec-TP in the course of ECM-raising, where of which is extracted to the outer Spec-v*P; otherwise, the derivation cannot converge because of the Inactivity Condition and the Phase-Impenetrability Condition. Similar remarks apply to (65b).

Given this, we can see from the grammaticality of (66a, b) that the same account should hold for want-type for-less to-IC subjects: they ECM-raise to the matrix Spec-VP. (66a, b) are provided by Radford (p.c.):

(66) a. Of which car would you have liked the driver (not) to cause a scandal?

b. It was the CAR (not the TRUCK) of which they would have liked the driver (not) to cause a scandal.

(65) and (66) enable us to say that want-type for-less to-IC subjects undergo ECM-raising to the matrix Spec-VP in the same way as believe-type to-IC subjects. Then we wonder how Nomura’s CP-analysis of want-type for-less to-ICs accounts for the similarities between (62) and (63), (64a) and (64b), and (65) and (66), with regard to ECM-raising.

In addition, both types of to-IC subjects behave similarly with regard to extraposition from subject, as in (67a, b), where the when-clause is linked with the matrix clause ((67a, b) are judged by Radford (p.c.) and Gregg (p.c.)):

(67) a. I believed [professors to be excellent [who had shown up on many TV programs]] when I was still a high school student.

b. I wanted [professors to retire [who had poor academic evaluations from students]] when I was still a university student.

In summary, this section makes it clear that Nomura’s analysis of to-infinitival complements has many problems to overcome. In particular, Nomura’s CP-analysis of want-type for-less to-ICs has to account for why these to-IC subjects ECM-raise to the matrix Spec-VP, since A-movement across CP into the matrix clause is impossible (at least in English).
8. Conclusion

The book under review is one of the studies that have attempted to justify a projection headed by a finite modal, infinitive to, or a subjunctive covert modal, i.e. ModalP. This review has centered on three issues: i) Nomura’s new theoretical framework, ii) his two major arguments for ModalP, i.e. scope ambiguities of modals and not and derivation of the <not to V> word order, and iii) his analysis of to-infinitivals. I have critically examined some of Nomura’s proposals and pointed out their problems. I have also shown possible alternative analyses and compared them with his analysis. Needless to say, much more future work is required to decide which analysis is better.

The important point to note is that unless Nomura’s new theory in section 2 is proved adequate, it seems difficult to accept his analyses, whatever they are. Not all readers will agree with his theory and everything suggested in his book, but it will likely inspire minimalist linguists to explore the existence of ModalP and reconsider sentential structures. In this sense, Nomura’s work is an important contribution to minimalist syntax. Somewhat distracting is the fact that his book contains numerous typographical errors, which may cause us to misunderstand his arguments.

REFERENCES


says on Minimalist Syntax in Honor of Howard Lasnik, ed. by Roger Martin, David Michaels and Juan Uriagereka, 89–155, MIT Press, Cambridge, MA.


Iwakura, Kunihiro (2007) “Want-Class Verbs, Three-Place Verbs and Oblique Case,”


Matsubara, Fuminori (2006) “Subject Raising in Exceptional Case-Marking Complements, Want-Type To-Infinitival Complements, and These Complement Types,” ms., Kochi University.

Matsubara, Fuminori (2007) “Believe-Gata To-Huteishiku Hobushugo vs. Want-Gata To-Huteishiku Hobushugo (Believe-Type To-Infinitival Complement Subjects vs. Want-Type To-Infinitival Complement Subjects),” *Eigo-Eibeibungaku Ronshu* (Journal of English Language and Literature) 16, 35–49, Yasuda Women’s University.


Sawada, Harumi (1993) *Shiten to Shukansei: Nichi-Eigo Jodooshi no Bunseki* (View-
point and Subjectivity: Analyses of the Japanese and English Auxiliaries), Hituzi Syobo, Tokyo.


Faculty of Education
Kochi University
2–5–1 Akebono-cho, Kochi-shi
Kochi 780–8520
e-mail: fuminori@cc.kochi-u.ac.jp