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SOME ASPECTS OF NEGATION

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1. Introduction

The main purpose of this paper is to demonstrate that certain idiomatic modal phrases such as *kamo shirenai* 'may' do not allow a NEG element to be taken out of their complement clauses nor to be attached to the matrix predicates to which the modal phrases belong. A number of observations which favor my discussion of the modal focus phrases will be introduced. I will show that incorporation processes of Japanese word formation claimed in Kageyama (1980) support my argument in that a modal compound expression such as *ni tigai nai* 'must (epistemic)' must be treated as one integrated focus unit.

2. Compound modals and their losses of negative meanings

In section 2, I will show certain modal phrases with NEG elements. I will discuss the integrity of the whole modal phrases, on the one hand, and the losses of the negative meanings, on the other hand. I will then present an analysis of neutralization of negation in connection with my discussion of the loss of negation.

Japanese is generally treated as agglutinative. Although we do not find many inflectional changes in accordance with cases or many conjugations with mood and tense, we notice that it is rich in affixation of auxiliaries and particles. Complex affixation processes give rise to combined phrases such as (1).

- (1)a. Doositemo [daigaku ni ika]-se₁-taku₂-nak₃-atta₄
 by-all-means college-DAT go -CAUS-wish-NEG-PST
 -rasii₅
 -seem
 Lit.: '(The person) seems not to have wanted to let (someone)
 go to college.'
- b. Taroo-no egaita e -to Jiroo -no₁ -to₂
 Taroo-GEN painted drawing and Jiroo-GEN with
 -o₃ -dake₄-wa₅ -ne₆, mite yatte
 -ACC-only-CNTRST-CNFRM, see give(AUX)
 hosii -nda -yo.'
 want-ASSRTN-really
 'I really want you to take an opportunity to go and see Taroo's and
 Jiroo's pictures at least.'

[Umehara 1989: 305]

In (1a), we observe that five auxiliaries are affixed to a verb *iku* 'go' to compose a long predicate, whereas in (1b) six particles, i.e., affixal elements which do not have any inflectional changes, are lined up to compose a long object noun phrase with proper nouns *Taroo* and *Jiroo*. These two examples may be a little extreme concerning the number of affixed elements constituting a long phrase, but it is not true to say that five or six affixations in a unit are exceptional in such a phrase formation process. Because of its rich affixation processes, Japanese seems to tend toward the formation of such complex words and phrases which may cause some problems about the analytical interpretation of each component of a whole phrase.

Among the examples, I notice that NEG elements often play a part in forming certain compound words/phrases that are used to paraphrase English modal expressions such as 'may (epistemic)', 'must (epistemic)', 'cannot (epistemic)', etc. In examples in (2) below, NEG is a component of the modals, whether or not the corresponding English has a negative meaning.

- (2)a. [Kare-wa asita kao-o miseru] kamo
 he-TOP tomorrow face-ACC show maybe
sire -nai.
 know-NEG
 ‘He may show up tomorrow.’
- b. Kono arasi da-kara, asita-wa kyuukoo
 this storm Cop-because tomorrow-TOP no-class-
-ni tigainai.
 -to falseness-NEG
 ‘Because of this storm, there must be no class tomorrow.’
- c. Kono purezento-wa boku ate-ni okurareta
 this present-TOP me addressed-to sent-be
hazu-ga nai.
 Notch-NOM-NEG
 ‘This present cannot be sent to me.’

The modal expressions *kamo sirenai* ‘may’ of (2a) and *ni tigai nai* ‘must (epistemic)’ of (2b) seem to have lost the meaning of NEG placed at the end of the sentences and have become a single integrated unit to signify a modal meaning such as ‘may’ and ‘must’ respectively. The loss of the NEG meaning seems to be involved in idiomaticity, depending on the degree of the loss.

Notice that in (3) these two do not have a positive (affirmative) counterpart nor a negated one.

- (3)a. *Kare-wa asita kao-o miseru kamo sireru. (← 2a)
 show maybe know
- b. *Kare-w asita kao-o miseru kamo sire -naku nai.
 maybe know-NEG-NE
- c. *Kono arasi-daga, asita-wa kyuukoo ni tigai aru.
 no class to falseness-Cop

Intended Meaning: 'Though it is stormy, classes may not be canceled tomorrow.'

- d *Kono arasi-daga, asita-wa kyuukoo ni tigai naku nai.
no class to falseness NEG-NEG

Intended Meaning: 'Though it is stormy, classes may not be canceled tomorrow.'

Because the compositions of the modal phrases are tight and frozen just like idioms, it seems that no element can be put in them to extend their meanings. I will later discuss another possibility of a NEG placement in main and subordinate clauses, which discussion will support my argument for the integrity or frozen nature of the complex modal predicate phrases *kamo sirenai* and *ni tigai nai*.

As (3) shows, the two modals do not have the affirmative counterpart. This fact should naturally follow from the above observation that *kamo sirenai* and *ni tigai nai* have lost their NEG meaning and are regarded semantically as affirmative modal expressions, while morphologically NEG *nai* still remains in the phrases. Especially in an example with *kamo sirenai* we find out that the sentence only with part of the modal expression remains acceptable, though colloquial, in spite of the lack of *sirenai* portion of the phrase in (4).

- (4)a. Kare-wa asita kao-o miseru ka-mo.
he-TOP tomorrow face-ACC show maybe
'Maybe he will show up tomorrow.'
- b. Zaisei houan-wa ziki-ni tooru kamo.
budget bill-TOP soon-to pass maybe
'Maybe the budget bill will soon pass.'

The meaning of the modal *kamo* would be in opposition to *kamo sirenai* in terms of negative polarity if NEG *nai* retained the negative property.

The fact that *kamo* itself represents the meaning like "maybe," together with the fact that its full phrasal counterpart indicates the same meaning as *kamo*, supports my observation that the NEG of *kamo sirenai* does not retain its negative meaning any

more and instead functions as a negation neutralizer of the verb unit in *sirenai* 'know-NEG'. Concerning the discussion of NEG as a neutralizer, Labov (1972) argues that a deep-seated knowledge of an underlying 'any' in negative quantifier 'no' is present at an abstract level in native speakers. So, 'no' is underlyingly understood as NEG + 'any.' Labov then gives examples of a particular schizophrenic verbal pattern of reversing affirmative and negative in a consistent and predictable way. Example (5) is one of the examples of sentences that a patient uttered with affirmative and negative reversed. In (5), Labov argues that the patient demonstrated the knowledge unconsciously.

(5) Home . . . there's any place like.

Labov adopts Klima's argument that the negative is normally attracted to the indeterminates like 'any' and 'ever', which then are realized as 'no' and 'never'. However, Labov notes that, in the example, the patient canceled a negative element in his reversed but consistent manner. Furthermore, concerning the discussion of cancellation of negation, Labov gives another example (6).

(6) Doctor: Can you tell me now who invented the airplane?

Patient: I do know.

D: You do know.

P: Yes, I know . . .

D: What you mean to say is that you don't know.

P: I do know. If I don't know, I, I, I, I wouldn't be able to tell you.

D: You're not able to tell me, though, are you?

P: Yes I am, for I do know.

Labov argues that the patient of this example operated at an abstract level, reversing the negative modality of each underlying sentence by an alpha rule such as

(7) $[\alpha\text{NEG}] \rightarrow [-\alpha\text{NEG}]$

The effect is to remove any realization of an underlying negative that was present at an abstract level. The patient regards NEG as a neutralizer of negation. Such an import by the patient is due to his understanding, contrary to that of other people, that he will retain the underlying negative forces of sentences only with his neutralization operation like (7). Therefore, to the patient, his utterances in (6) represent the underlying negation, though they are interpreted in an opposite manner by the doctor. Labov emphasizes that the rule is one of the phenomena that justify the use of a feature notation [+NEG] and thereby require the existence of a [-NEG].

If I adopt the above notations that Labov proposes, the NEG of *kamo sireani* can be marked as a feature such as [-NEG] which accounts for the contrastive uses of the two different *nai*'s in between an ordinary negative sentence and *kamo sirenai*. My argument for neutralizing effects of NEG in the complex modal expressions at issue seems to support the notion of [-NEG]. Because of a new phrasal meaning as a kind of idiom, the whole phrase *kamo sirenai* weakens its NEG component. If NEG maintained its force, the whole phrasal meaning would be an indeterminate one like 'may, may not.' If, on the other hand, a speaker's decision on the possibility of the proposition of the subordinate clause does not rest on a good ground for it, the possibility may be taken as fifty fifty: i.e. either it may happen or may not. Then, *kamo* alone can be enough to represent the modal meaning of *kamo sirnai*. The only function of the NEG we can recognize in this case will then be to neutralize the NEG meaning itself. Hence the function of [-NEG].

3. Further evidence in support of neutralization of negation

In this section, I further give examples of similar modals in which affirmative counterparts are not allowed. I will also show pairs of examples in which polarity contrasts are absent in spite of their affirmative/negative forms. I will argue that these facts will be accounted for in terms of [-NEG] effects.

As for idiomaticity, I illustrate modal expressions at issue with a set of similar examples that contain NEG *nai* but lack the affirmative counterpart of the modal phrases.

- (8)a. Beebii-sittaa de soto-ni de-nai no -wa
 Baby-sitter due-to outsidego-out NEG CONTRST
 tamara-nai.
 stand-NEG
 ‘(I) can’t endure that I don’t go out while baby-sitting.’
- b. *Beebii-sittaa de soto-ni de-nai no -wa
 Baby-sitter due-to outsidego-out NEG CONTRST
 tamaru.
 stand
 ‘(I) can’t endure that I don’t go out while baby-sitting.’
- c. Taroo-ga paatii-ni ko-nai -no-wa yamu-o e-nai.
 Taroo-NOM party-to come-NEG CNTRST can-help-NEG
 ‘We will accept it, if Taroo doesn’t come to the party.’
- d. *Taroo-ga paatii-ni ko-nai -no-wa yamu-o-eru.
 Taroo-NOM party-to come-NEG-CNTRST can-help
 ‘We won’t be all right, if Taroo doesn’t come to the party.’
- e. Asita soto-ni de-kake-nai -no-wa tumara-nai.
 Tomorrow outside go-out-NEG CNTRST tighten-NEG
 ‘I will not be happy if I don’t go out tomorrow.’
- f. *Asita soto-ni de-kake-nai -no-wa tamaru.
 Tomorrow outside go-out-NEG-CNTRST tighten
 Intended Meaning: ‘I will be happy if I don’t go out tomorrow.’
- (9)a. Asita paatii-ni ika-nai.
 Tomorrow party-to go-NEG
 ‘(I) won’t go to the party tomorrow.’
- b. Asita paatii-ni iku.
 Tomorrow party-to go
 ‘(I) will go to the party tomorrow.’
- c. Asita paatii-ni ika-naku {-mo/-wa} -nai.

Tomorrow party-to go-NEG NEG
 '(I) may go to the party tomorrow.'

As is shown by the contrast between the sentences containing modal expressions in (8) and the ordinary sentences in (9), the modal expressions in (8) that are similar to the modal *kamo sirenai* and *ni tigai nai* do not allow a positive counterpart, unlike the sentence of (9). Therefore, the parallel facts between (3) and (8) seem to support my view that these expressions have lost or reduced greatly their original, compositional meanings and have become idiomatic : in other words, the meanings are frozen, and as a result it is impossible to negate them. In the following section, I will show how the insertion of an additional NEG element will be blocked.

We also see a number of examples in Japanese that seem to have lost a clear compositional meaning of NEG, as seen in the pairs of paraphrases below:

- (10)a. Tonde-mo nai koto-da = Tonda koto-da
 fly -even NEG thing-Cop fly-Prfct thing-Cop
 'Unbelievable! / That is not possible!'
- b. Baka iu-na. = Baka ie.
 Fool-say-NEG fool say
 'Don't be a fool.'
- c. Jyoodan jya nai. = Jyoodan des-yoo
 joke Cop-NEG joke Cop-Cnfrm
 'No kidding'

With the given data, it seems appropriate to argue that this kind of phenomena can be the reflection of the deep-seated [-NEG] knowledge in Japanese.

I have shown other NEG-containing modal phrases that have lost their compositional meanings such as NEG and have become an idiomatic, integrated unit that represents modality, just as *kamo sirenai* and *ni tigai nai* have. In the next section, I discuss how the modal constructions that we have seen above will block the generation of their affirmative/positive counterparts.

4. Modality and NEG-raising

In this section, I will discuss phenomena in which NEG-raising will be blocked when a focused modal phrase gives rise to some presupposition to its subordinate clause. I will then propose a general condition on the restriction of NEG-raising in light of focus-presupposition in modals.

Hooper (1975) raises examples (11), (12), and (13) and argues that each pair of (a) and (b) shares the same propositional meaning and allows NEG-raising (or NEG-transportation), whereas the pairs of (a) and (b) in (14) and (15) do not share the same propositional meanings.

- (11)a. I think these living conditions are not suitable.
- b. I don't think these living conditions are suitable.
- (12)a. John believes that Mary didn't pass the exam.
- b. John doesn't believe that Mary passed the exam.
- (13)a. We thought that the goats would not eat barbed wire.
- b. We didn't think that the goats would eat barbed wire.
- (14)a. Riggs would believe that a woman could not beat him.
- b. Riggs would not believe that a woman could beat him.
- (15)a. The professor could think that I have not studied for the exam.
- b. The professor could not think that I have studied for the exam.

She argues that weak assertive verbs such as *think* and *believe* are transparent only when they occur in the simple present or the past tense.

In discussing this, Nakau (1983) states that the difference of (14) – (15) from (11) – (13) is that the main clauses are focused due to the modal expressions such as *would* and *could* residing in them. Nakau's account for the focus in this case is that modality represents a speaker's mental attitude toward a whole sentence at the time of the utterance, and consequently the scope of the modals will be focused. On the other hand, in that case, the propositions of subordinate clauses give rise to *anaphoric presuppositions*, i.e. presuppositions that are assumed to be understood by the speaker, and consequently any element cannot be taken out of the domain of the frozen presuppositions. The notion *anaphoric presupposition* is differentiated in Nakau (1983)

from *factive presupposition* that is asserted as true by a speaker. He states that only in the anaphoric presupposition, a speaker may negate the factivity of the presupposition in an utterance. If his accounts for the relation of modality in main clauses to focus-presupposition phenomena are viable, the following ungrammaticalities of sentences (16) - (18) will be explained in terms of modality.

(16) *I didn't ever think that John would leave until tomorrow.

(17) *I never thought that John would leave until tomorrow.

(18) *At no time did I think that John would leave until tomorrow.

Nakau notes that all these main clauses contain modal expressions such as “ever” in (16) - (17) and “at any time” in (18), aside from NEG. Therefore, he argues that the subordinate clauses fall under the anaphoric presuppositions, which block association of NEG in the main clauses with *until tomorrow* in the subordinate clauses. Thus, we have the ungrammaticalities of (16) through (18). *Until tomorrow* has to be associated with NEG for its interpretation, but, because the subordinate clauses are frozen, the association process is blocked.

However, it is not the case that a focus will always fall on a main clause when a modal auxiliary verb resides in it. In (19), *would say*, not *would*, can be interpreted as one lexicalized unit. It constitutes one main verb, as in “I think” or “It would seem to me”, and allows NEG to be raised to a main clause.

(19)a. Today, I would say that my statement is only partly true.

b. A: Do you think Sally is pregnant?

B: {I wouldn't say she is. / I would say she isn't.}

In (19b), Nakau states that the truth of a proposition of the subordinate clause is questioned. The complement clause is not presupposed, and therefore allows NEG to be raised. That it is not presupposed, he argues, can be confirmed by the fact that *(she) isn't* of the complement clause corresponds to the focus in B's responses. I argue that Nakau's restriction on the relation of modals to NEG-raising can be maintained in Japanese, if I propose a somewhat modified condition on movement such as

NEG-raising in light of the Japanese modals in question.

- (20) When modals are focused and the propositions of their subordinate clauses comprise (anaphoric) presuppositions, any element cannot be taken out of the domain of the presuppositions.

I will therefore examine whether or not the aforementioned modals such as *kamo sirenai* abide by this condition.

As I already discussed in section 2 and 3, certain complex modals containing NEG do not seem to have their positive counterpart, and we have already observed how the complex modals in question behave in double negation and affirmative sentence tests. For my purpose of testing NEG-raising in these complex modal sentences, I reorder the aforementioned examples and add to them further data concerning NEG insertion into either of the main and subordinate clauses.

- (21) [with *kamo sire-nai* in (2) and (3)]

- a. [= (3b)] *Kare-wa asita kao-o miseru kamo sire-naku **nai**.
he-TOP tomorrow face-ACC show maybe know-NEG-NEG
Intended Meaning: 'It may not be that he will show up tomorrow.'
- b. Kare-wa asita kao-o mise-**nai** kamo sire -nai.
show-NEG maybe know-NEG
'It may be that he will not show up tomorrow.'

- (22) [with *ni tigai nai* in (2) and (3)]

- a. [= (3d)] *Kono arasi-daga, asita-wa kyuukoo ni tigai naku **nai**.
no class -to-falseness NEG-NEG
Intended Meaning: 'Though it is stormy, classes may not be canceled tomorrow.'
- b. Kono arasi-daga, asita-wa kyuukoo-de-**nai** ni tigai nai.
no class -Cop-NEG-to-falseness NEG
Intended Meaning: 'Though it is stormy, it is almost certain that classes will not be canceled tomorrow.'

(23) [with *tamara nai* in (8a, b)]

a. *Bebii-sittaa de soto-ni deru-no -wa

Baby-sitter due-to outside go-out -CONTRST

tamar-anaku-**nai**.

stand-NEG-NEG

Intended Meaning: 'It is not unbearable that I should go out while
baby-sitting.'

b. [= (8a)] Beebii-sittaa de soto-ni de-**nai** no-wa

baby-sitter due-to outside go-out-NEG CONTRST

tamara-nai.

stand-NEG

'It is unbearable that I won't go out while baby-sitting.'

(24) [with *yamu-o e-nai* in (8c, d)]

a. *Taroo-ga paatii-ni kuru -no-wa yamu-o e-naku-**nai**.

Taroo-NOM party-to come-CNTRST can-help-NEG-NEG

Intended Meaning: 'We will not accept the possibility that Taroo will
come to the party.'

b. [= (8c)] Taroo-ga paatii-ni ko-**nai** -no-wa yamu-o-e-nai.

Taroo-NOM party-to come-NEG-CNTRST can-help-NEG

'We will accept the possibility that Taroo will not come to the party.'

As (21) – (24) show, there is a clear contrast of the acceptability between the (a) sentences with NEG-raising and the (b) sentences with in-situ NEG. NEG-raising is blocked because of the modal expressions in the main clauses. The modals give rise to anaphoric presuppositions onto the subordinate clauses. In addition, there are a set of examples that can endorse the (anaphorically) presupposed nature of subordinate clauses that occur with the modal expressions in question, as seen in (25) and (26).

- (25)a. [Taroo-ga paatii-ni kuru] -koto-ga arie-naku-mo **nai**.
 [Taroo-NOM party-to come]-COMP-NOM exist-can-NEG **NEG**
 'It is not impossible that Taroo will come to the party.'
- b. [Taroo-ga paatii-ni kuru]-hazu-ga naku-mo **nai**.
 [Taroo-NOM party-to come]-notch-NOM NEG **NEG**
 'It is not impossible that Taroo will come to the party.'
- (26)a. *[[Taroo-ga paatii-ni kuru]-kamo shire-nai] -koto-ga
 [party-to come -maybe-know-NEG]-COMP-NOM
 arie-naku-mo **nai**.
 exist-can-NEG NEG
- b. *[[Taroo-ga paatii-ni kuru]-kamo shire-nai] -hazu-ga naku-mo **nai**.
 [party-to come-maybe-know-NEG]-notch-NOM NEG **NEG**

In (25), the higher predicates license NEG-raising onto the main clauses, whereas, in (26), NEG-raising is blocked when the lower clauses contain the underlined modal expressions at issue. In the examples, the main predicates, *arie-nai* in (25a) and *hazu-ga nai* in (25b), do not block NEG-raising. Therefore, only the modal phrase *kamo shirenai* is responsible for the blocking effect in (26). It seems clear that NEG-raising will be blocked because of the existence of such modal expressions that give rise to (anaphoric) presuppositions within their scope domain, *i.e.* the propositions of the (lower) subordinate clauses. Therefore, the general condition discussed above seems relevant to the constructions such as *kamo sire nai* and *ni tigai nai*. This fits my earlier observation that these modal expressions serve as one lexical unit; they do not allow any extraction. Given examples (21) – (24) and (25) – (26), it seems that Japanese observes the general condition that NEG cannot be raised to a main clause when a modal expression in the higher clause is focused and thereby the proposition of a subordinate clause is (anaphorically) presupposed.

5. Incorporation and compound words with *nai*

In this section, I argue that incorporation processes Kageyama (1980) has proposed for Japanese word-formation will support my argument developed above. In his theory, modal expressions such as *ni tigai nai* can be treated as one integrated focus unit derived in terms of *incorporation*.

In discussing Japanese word structures, Kageyama has proposed that word-formation rules in Japanese must have post-lexical ones, some of which he calls incorporation rules. Sino-Japanese nouns often compose light verb constructions with light verb *suru* 'do'. Kageyama argues that these constructions are derived from an incorporation rule called S-incorporation after other relevant syntactic rules. I will not discuss the validity of post-lexical natures or of other possible treatments of Sino-Japanese light verb formations in this paper. S-incorporation is applied to associate the meaning of (27a) with that of (27b).

- (27)a. Yuujin-ga sensee-ni [NPsitumon]-o [vsita].
friend-NOM teacher-DAT question-ACC did
'A friend asked a question to a teacher.'
- b. Yuujin-ga sensee-ni [v[situmon] [sita]].
friend-NOM teacher-DAT question-did
'A friend asked a question to a teacher (about something).'

Although we cannot translate (27b) into English exactly, the point is that, after the object noun *situmon(-o)* in (a) is incorporated into a verb *sita*, the noun, without its ACC marker, and the verb constitute one verb unit, as shown in (b). Kageyama claims that the basic meaning is maintained throughout the incorporation process. The validity of this analysis is that only the incorporation can account for the interpretation of null elements in a construction such as (28).

- (28) Amerika-jin wa yoku hatugen-suru ga, Nihon-jin-wa amari
Americans TOP well speech-do but Japanese-TOP very
[] si-nai.
[NULL] do-NEG

‘American people speak up well (at a meeting?), but Japanese don’t do [...].’

Kageyama claims that other approaches cannot recover the correct interpretation of the (implicit) null element. *Hatugen* cannot be deleted in the phrase *hatugen-suru* directly since the word is part of a constituent phrase, not a constituent itself. The incorporation, he demonstrates, can correctly interpret the null element as *hatugen-o* (not as *hatugen* or as *hatugen-o suru*), as seen in (29).

- (29) Amerika-jin-wa yoku [hatugen-o] [suru]-ga, Nihon-jin-wa amari
Americans TOP well speech-do but Japanese TOP very
[hatugen-o] [si]-nai.
[speech-ACC] do-NEG

Ordering of rules:

Deletion → Amerika-jin-wa yoku [hatugen-o] [suru]-ga, Nihon-jin-wa
amari [∅] [si]-nai.

S-incorporation → Amerika-jin-wa yoku [**hatugen-suru**]-ga, Nihon-jin-wa
amari [∅] [si]-nai.

[N.B.: the targets of each operation are underlined.]

Because of the coordination structure, each operation has to apply to identical forms of associated words. Other rule orderings would not recover the expected form, and the registration of each compound word of a form “Noun + *suru*” into the lexicon would result in the increase of a good number of entries in the lexicon; there are abundant examples of the same sort in Sino-Japanese light-verb constructions.

If this argument is viable, it gives support to the integrity of compound modal phrase *ni tigai nai* as one unit just like an idiom. The verb stem of *tigau* is supposed to be *tigawa-* when a negative follows, whereas *tigai* is a derived noun form of the verb *tigau*, as seen in examples of other derived nouns in (30).

- (30)a. okotari (n.) ← okotaru (v.) ‘neglect’
b. ituwari (n.) ← ituwaru (v.) ‘falsify’

- c. kawari (n.) ← kawaru (v.) ‘change’
- d. tayumi (n.) ← tayumu (v.) ‘loosen’

This noun *tigai* will be regarded as a subject of a clause with a negative predicate *nai* in the underlying structure if I adopt Kageyama’s incorporation, as in (31).

- (31) [...ni] [tigai-ga] [nai].
 ... to difference-NOM NEG
 (SUB) (PRED)
 → Incorporation: [...ni] [vtigai-nai] ‘must ...’

When the incorporation is not applied, *ni tigai-ga nai* will be realized as a set of separate phrases/words. These two expressions are close to each other in their meanings, but there is at least one clear syntactic difference, as in (32).

- (32)a. Kare-ga haiyuu-de aru {-ni / *koto-ni} tigai-nai.
 he-NOM actor exist [to / COMP-to] difference-NEG
 ‘He must be an actor.’
- b. Kare-ga haiyuu-de aru {*-ni / koto-ni} tigai-ga/wa nai.
 he-NOM actor exist [to / COMP-to] difference-NOM/TOP NEG
 ‘Certainly he is an actor.’

This contrastive fact clearly needs an account, and, in this respect, the incorporation operation (31) in the underlying structure will readily account for the contrast in (32) in terms of the difference in the phrasal unity. That is, *ni tigai nai* is treated as one single predicate. In (32a), *tigai (nai)* cannot license a complement clause because it is not an independent constituent that serves as a head noun. In contrast, in (32b), *tigai {-ga/ -wa}* is a constituent that functions as a subject and as a head noun licensing a complement clause. As I mentioned in (30), there are a number of derivational nouns similar to *tigai*, and they also have two parallel expressions with NEG that can be applied to an incorporation operation such as (31).

- (33)a. Kare-wa siken zyunbi-ni okotari-nai.
 he-TOP exam-preparation-to negligence-NEG
 ‘He does not neglect (=he concentrates on) the preparation for the exam.’
- b. Kare-wa siken-no zyunbi-o suru-koto-ni okotari-ga nai.
 exam-GEN preparation-ACC do-COMP-to neglect-NOM NEG
 ‘He does not neglect to prepare for the exam.’
- (34)a. Kare-wa kami-ni ituwari-nai.
 God-to falsity-NEG
 ‘He is loyal to God.’
- b. Kare-wa iu-koto-ni ituwari-ga nai.
 say-COMP-to falsity-NOM NEG
 ‘There is no falsity in what he says.’
- (35)a. Kare-wa ima-mo kenkoo-ni kawari-nai.
 now-also healthy change-NEG
 ‘He is as healthy now as he was before.’
- b. Kare-wa kagaku-o kenkyuu-siteiru -koto-ni
 chemistry-ACC study -do-PRGRSSV-COMP-to
 kawari-wa nai.
 change-TOP NEG
 ‘He is still studying chemistry, as he did before.’

These examples also give support to the argument that a form “a derived noun + *nai*(NEG)” such as *tigai nai* has an integral unity in its structure; the incorporated phrase is a constituent as a whole, and *tigai*, as part of it, cannot license a complement clause, as a head noun would do. Consequently, the integrated modal phrase is distinct from “a derived noun + *wa/ga* + *nai*” such as *tigai-ga nai*.

I have shown that a compound modal expression *ni tigai nai* is given an integral structure in terms of (S-)incorporation, and that the idiomaticity of the compound

modals can be evaluated partly in light of an integration process like incorporation.

6. A conclusive remark

I have argued that idiomatic modals such as *kamo sirenai* and *ni tigai nai* do not allow NEG to be taken out of their complement clauses, due to their integral modal meanings and functions. I have observed that *kamo sirenai* especially has lost its negative meaning and can be marked as [-NEG]. The fact that the modals lack their affirmative counterpart follows from the integrity of idiomatic phrases they share. When the modals are marked as a focus, they do not allow NEG to be taken out of their subordinate clauses that are presupposed. The incorporation of word-formation rules and examples of light-verb constructions with derivational nouns have given support to the syntactic integrity of the phrase *ni tigai nai*. A theoretical implication is that Japanese affixation gives rise to complex structures and functions that are involved in different grammatical levels such as lexical and semantic levels.

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