【Forum】

Tense Alternation Generalization Revisited:
A Reply to Akuzawa and Kubota

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Abstract: Tense Alternation Generalization (TAG) has been used in previous studies to account for some distinctive features of the constructions that are conceived as raising and control across tensed CP in Japanese (Uchibori 2000, Fujii 2006). Akuzawa and Kubota (2021), as well as Akuzawa and Kubota (2020) and Kubota and Akuzawa (2020), critically assessed the generalization, arguing that it is problematic. The current study attempts to respond to two of their criticisms: (i) the data used in Fujii (2006) to support the TAG-based argument for the raising analysis of the *yooni naru* construction are uncompelling; and (ii) the TAG approach suffers from the generalization being unexplained and stipulated, unlike the semantic approach that the two-author team proposes. To settle the first issue, we conducted an acceptability judgment experiment, whose results revealed that our participants' judgments were in line with those reported in Fujii. As for the second criticism, the current study holds that while the criticism is right in that TAG is stipulated, their semantic analysis of control does not achieve what the TAG approach achieves by relying on the stipulation.*

Key words: control, raising, nominative-genitive conversion, tense, *yooni naru*

1. Introduction

Tense Alternation Generalization (TAG, hereafter) is a generalization of how certain subordinate clauses can be classified in terms of finiteness. A formulation of the generalization reads, "Tensed subordinate clauses in Japanese are [−finite] if and only if their predicate does not alternate between the present tense form and past tense form" (Fujii 2006: 13). In their 2021 *Gengo Kenkyu* forum article, Akuzawa and Kubota (A&K, hereafter) argued against this generalization by addressing a number of potential challenges to the TAG-based raising analysis of the *yooni naru* construction in Japanese. The analysis has been entertained in previ-

ous studies, such as Uchibori (2000) and Fujii (2006). Consider (1).[1]

(1)   Hiroshi-wa   nattoo-o   {a.tabe-ru, b. *tabe-ta}   yooni nat-ta.
       Hiroshi-TOP natto-ACC   eat-NPST   eat-PST   COMP become-PST
       'Hiroshi started to eat natto.'

The key claim of the raising analysis is that the 'fixed tense' effect (i.e., that the tense of the *yooni* clause is "fixed" to nonpast in (1)) signals that the *yooni* clause is nonfinite and its nonfiniteness renders possible movement of the subject NP to the next higher clause.

Fujii provided one argument for this analysis, which used Nominative Genitive Conversion (NGC, hereafter) as a probe. As will be reviewed in detail below, A&K contended that either the acceptability judgments underlying the argument are questionable or Fujii's interpretation of these judgments is not warranted. In this article, we first address the rating experiment we conducted to assess A&K's claim. The experimental results confirmed that the originally reported contrast does exist. In addition to this judgment issue, the paper also attempts to defend the TAG approach to (obligatory) control (Fujii 2006, 2012). Although control was out of the scope of A&K (2021), the same team of authors cast serious doubt on the TAG approach to control in Akuzawa and Kubota (2020) and Kubota and Akuzawa (2020) (abbreviated A&K 2020 and K&A 2020, respectively). While we acknowledge the success of their semantic analyses of the fixed tense effects found in these constructions, we point out that the approach does not account for control, which suggests that although they are correct that TAG is an unexplained generalization, we still must assume it in order to cover certain fundamental data.
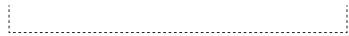
2. The raising analysis of the *yooni naru* construction

What is the raising analysis of the *yooni naru* construction? We start with the fixed tense effects in relation to control and raising. As alluded to above, TAG was introduced to handle obligatory control across tensed CP (Uchibori 2000, Fujii 2006, among others). In the *ketui suru* 'decide' construction given in (2), for instance, the subject of the complement clause must be bound by the matrix subject. A central proposal of the TAG approach is that a tensed CP complement such as the one in (2) is nonfinite, and its resistance to tense alternation reflects this. While past tense is not permitted in the complement of *ketui suru* 'decide' in (2), both past and nonpast are fine in the complement of a verb such as *soozoo suru* 'imagine'. As expected from TAG, *soozoo suru* 'imagine' never shows characteristics of control.

(2)   Hiroshi-wa   nattoo-o   {a.tabe-ru, b. *tabe-ta} koto-o   ketuisi-ta.
       Hiroshi-TOP natto-ACC   eat-NPST   eat-PST   KOTO-ACC decide-PST
       'Hiroshi decided to eat natto.'

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[1] As noted in previous studies, *yooni naru* sentences are potentially ambiguous. (1b) is fine under what A&K (2021) called a 'modal' reading. As they observed, one can tease apart the construction of our interest and the modal construction by their difference in meaning.

To look for a raising analog of (2), Uchibori (2000) and Fujii (2006) examined the *yooni naru* construction. As noted in (1), the *yooni* complement demonstrates a fixed tense effect, which entails that the clause is nonfinite under TAG. Notably, Fujii (2006) suggested two variants of the raising analysis: an overt raising analysis and a long-distance case assignment (or covert raising) analysis (p. 54). The two analyses are schematized in (3).

(3) a. Overt raising analysis: $[_{TP}$ Subj-NOM $[_{CP}$ ___ $[_{VP}$... $]$ T$_{[-fin]}$ yooni$]$ nar T$_{[+fin]}$ $]$

b. Covert raising analysis: $[_{TP}$ ___ $[_{CP}$ Subj-NOM $[_{VP}$... $]$ T$_{[-fin]}$ yooni$]$ nar T$_{[+fin]}$ $]$

In both analyses, the *yooni* clause is analyzed as nonfinite and transparent for the dependency between the embedded subject and the matrix Tense: Whether moved overtly or not, the embedded subject establishes a syntactic relation with the matrix T across the *yooni*-marked CP boundary.

With this in mind, we review Fujii's empirical argument for raising that exploits NGC. The argument relies on the contrast exemplified by (4a, b). This pair of examples is cited from A&K (2021), who modified Fujii's (2006: 51) examples.[2] The judgments are Fujii's.

(4)   Sirahanoya-no   saikin   John-ni   tat-u   yooni
       white.fur.arrow-GEN recently John-DAT   stand-NPST   COMP
       {a.*nat-ta-to,   b. (??) nat-ta-koto-ga}   hizyooni
          become-PST-COMP   become-PST-COMP-NOM   very
       yorokob-are-te i-ru.
       delight-PASS-TE be-NPST
       'John's recent appointments (for important tasks) have met with warm welcome.'

The argument goes as follows. Notice first that different complementizers, quotative *to* and nominal *koto*, are used to embed a *yooni naru* sentence. Either CP serves as the argument of *yorokob-are-te i-ru* 'is delightful (to people)'. Observe that complementizer choice affects the licensing of the converted genitive NP (i.e., *sirahanoya-no*) in the reported judgments. As widely accepted in the literature, *koto* (or the verbal complex followed by *koto*) has the ability to assign genitive case, while *to* (or the verbal complex followed by *to*) does not (Harada 1971, Hiraiwa

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[2] Two notes on (4a, b) are in order. First, as noted by A&K as well as previous studies, NGC tends to be less acceptable if the genitive NP is more distant from its licenser. The low acceptability of (4a, b) is likely due in part to the genitive NP being fronted. Second, a reviewer told us that the particular idiom used here sounds most natural in Goal-Theme order regardless of NGC. (A sentential idiom was used to ensure that *naru* does not have a thematic subject argument.) These confounding factors should be excluded in evaluating Fujii's argument.

2001, and others). Thus, the rather subtle contrast between (4a) and (4b) can be taken to suggest that when the genitive case of the subject argument of a *yooni* clause is licensed, it is licensed by the licenser located in the next higher clause. If the genitive case were licensed within the *yooni* clause, no such contrast should be obtained. Note in passing that the subject NP seems to be outside the *yooni* clause in (4a, b) since the adverb to its right modifies *naru*. Under the covert raising analysis mentioned in (3b), the word order is attributable to an operation like scrambling.

3. A&K's and K&A's criticisms of the TAG approach

Due to space limitations, we discuss only some of A&K's and K&A's criticisms in detail in Sections 4 and 5. There are, however, other criticisms that deserve discussion. Let us consider several of them briefly in this section.

First, A&K (2021) argued that the subject NP of the *yooni naru* construction stays within the embedded clause by presenting some data sets. The arguments based on these data sets, assumed to be valid and sound for the sake of discussion, do not undermine the raising analysis. The covert raising analysis handles them. For instance, A&K (p. 254) observed that the NPI *rokuna N* can be licensed by *yooni*-clause-internal negation, as in (5). If the clausemate condition assumed by A&K is a surface-structure condition, the acceptability of (5) shows that overt raising does not have to apply. As just noted, however, the covert raising analysis is consistent with the NPI's licensing inside the *yooni* complement.[3]

(5)   Rokuna zinzai-ga   atumara-na-i   yooni nat-ta.
       decent people-NOM   come-NEG-NPST COMP become-PST
       'It became so that no competent people would apply (for the position).'

Moreover, their other specific arguments against the raising analysis are not particularly successful. A&K (p. 254) cited the data shown in (6a, b), claiming that indirect passivization is applicable to standard raising sentences (e.g., one with *-kakeru* 'be about to') but not to *yooni naru* sentences. Assuming that indirect passivization cannot apply to sentences lacking lexical subjects, they took the contrast found in (6a, b) to indicate that the clause headed by *naru* lacks a lexical subject.

(6)   a. *Ken-ga   ame-ni   hur-u   yooni nar-are-ta.
          K.-NOM   rain-DAT fall-NPST COMP become-PASS-PST
          'Ken began to be adversely affected by the regular rain.'

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[3] An anonymous reviewer noted that it has been acknowledged in the literature (e.g., Hirakawa 2003) that *rokuna N* must thematically be an internal argument. The reviewer observed that if the NPI were fully licensed through being an internal argument of a negative clause, nothing would prevent overt raising of the NPI. For A&K's argument to go through, it is crucial that NPI licensing take place in surface structure. The question therefore boils down to the validity of A&K's (2021: 254) claim that the same NPI fails to be licensed in the construction they assumed involves overt raising.

b. Ken-ga   musuko-ni   keeki-o   tabe-kake-rare-ta.
    K.-ɴᴏᴍ   son-ᴅᴀᴛ   cake-ᴀᴄᴄ   eat-be.about.to-ᴘᴀss-ᴘsᴛ
    'His son almost eating the cake affected Ken adversely.'
c. *Ken-ga   ame-ni   huri-kake-are-ta.
    K.-ɴᴏᴍ   rain-ᴅᴀᴛ   fall-be.about.to-ᴘᴀss-ᴘsᴛ
    'Ken was affected adversely by it being about to rain.'

As an anonymous reviewer observed, however, (6a) and (6b) are not a minimal pair; when a *-kakeru* sentence parallel to (6a) is constructed as in (6c), the contrast is gone. The reviewer's judgment, which we concur with, suggests that *yooni naru* and *-kakeru* do not differ in the way A&K maintained they do.

Furthermore, the same reviewer brought to our attention additional evidence in favor of the raising analysis: The subject argument of the *yooni naru* construction triggers subject honorification in the matrix clause as well as in the *yooni* clause.

(7)   Yamada sensei-ga hinpanni   seki-o   {a.suru   yooni
      Prof. Y.-ɴᴏᴍ   frequently cough-ᴀᴄᴄ   do.ɴᴘsᴛ   ᴄᴏᴍᴘ
      narareta,   b. sareru   yooni natta}.
      become.ʜᴏɴ.ᴘsᴛ   do.ʜᴏɴ.ɴᴘsᴛ   ᴄᴏᴍᴘ become.ᴘsᴛ
      'Professor Yamada began to cough frequently.'

Subject honorification is applied to the matrix predicate *naru* in (7a) and to the embedded predicate in (7b). (7a) would never be allowed if it were not for a syntactic dependency between the subject argument and the matrix head responsible for honorific agreement.[4]

Besides their empirical arguments against the raising analysis, A&K/K&A raised a serious conceptual objection to the notion of "defective tense." A "fixed" embedded tense such as *-ru* in (1) and (2) is sometimes referred to as "defective" in the literature, as noted in Section 1. A&K (2021) and K&A (2020) argued that the TAG approach is at odds with the widely accepted claim that Japanese has a *relative tense* system. In the relative-tense approach, *-ru* found in (1) and (2) is not defective but a full-fledged nonpast tense marker. Notice that there is nothing wrong with a theory that combines TAG with A&K/K&A's relative-tense-theoretic approach to the fixed tense effects. Such a theory would still imply that the *koto* and *yooni* clauses in (1) and (2) are nonfinite in the relevant sense: The clause boundaries of these clauses are transparent for movement or feature checking triggered in the next higher clause. In fact, as will be clear in Section 5, we view their semantic analysis of the lack of tense alternation in these constructions to be highly convincing (except that we maintain that the analysis offers no account of control, which the TAG approach aims to explain).

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[4] Following a suggestion by the reviewer mentioned in the main text, we acknowledge that some previous studies (e.g., Kishimoto 2013) argued that it is in overt syntax that a honorific head requires a socially superior NP in its specifier. Our rebuttal of A&K's critique of the raising approach is consistent with this position, though we remain agnostic about the derivational timing of licensing subject-oriented honorifics.

Finally, A&K (2020, 2021) and K&A (2020) submitted some data points that cannot readily be accommodated by the TAG approach. For instance, A&K (2021) cited example (8).

(8) Saikin yoku ame-no   hur-u   *(yooni nat-ta).
     recently much rain-GEN   fall-NPST COMP become-PST
     'Recently, it has begun to rain often.'

We can reasonably assume, as A&K did, that the version of (8) with *yooni natta* is predicted to be unacceptable in the TAG approach because no genitive licenser such as *koto* is found here. The judgment that A&K reported for (8) contradicts that prediction. It should be noted, though, that there may be dialectal variation as to whether NGC is allowed in this type of *yooni naru* sentence. A reviewer observed that, similar to what was observed on the modal noun *hazu* 'necessity' by Niikuni, Wada, Kosuge and Ogawa (2019), *yooni* may currently be undergoing grammaticalization from a nominal complementizer to a nonnominal one. Under this possibility, *yooni* would be able to license NGC in a grammar where the item was not grammaticalized yet and was still nominal. Although we cannot afford to give a full analysis to determine how (8) is derived in such a grammar, the potential discrepancy in acceptability among speakers then would be less surprising.

With these said, we turn to the two specific criticisms by A&K and K&A that the current paper's focus is on. First, according to A&K, (4a, b) are "highly marginal at best" and the contrast, if it exists at all, may be due to a difference between *koto* and *to* irrelevant to NGC "such as factivity or mirativity" (A&K 2021: 255). Second, they wrote that "[the] main motivation for [the TAG approach] is simple (but essentially theory-internal)," arguing that the approach suffers from the fact that "[TAG] does not follow from any deeper principles of grammar" (A&K 2021: 250, 253).

In what follows, we defer the discussion of the latter point until Section 5 and rebut the former first. Section 4 therefore addresses the rating experiment conducted to settle the data issue.

4. The acceptability rating experiment
4.1. Participants and materials
Thirty L1 Japanese speakers were recruited at Tsuda University, where they were undergraduate students. Each participant received a small compensation for their participation.

Four conditions were tested by manipulating two independent variables: *Case* (nominative vs. genitive) and *Complementizer* (nominal *koto* vs. quotative *to*). In the sample tokens shown in (9), the judgments bracketed are along the lines reported in Fujii (2006).

(9)   Sono eigyoobutyoo-wa   motto sono   syoohin-{a. ga, b. ga,
       that sales.manager-TOP more that   product-   NOM   NOM
       c. (??) no,   d. (*) no}   ureru-yooni   naru-   {a. koto-o
          GEN   GEN sell.NPST-COMP become.NPST-   *KOTO*–ACC
       b. to, c. koto-o,   d. to} kakusinsimasita.
          TO   *KOTO*-ACC   *TO* convince.POL.PST
       'The sales manager was convinced that that product would sell better.'

Several notes should be made about the target items. As already mentioned in footnote 2, converted genitive NPs prefer to stay close to their licenser. Therefore, we placed the case-alternating NP (e.g., *sono syoohin* in (9)) immediately next to the predicate of the *yooni* clause in the stimuli. In addition, we included nonfactive and nonmirative verbs such *kakusin suru* 'be certain' in the target items, as A&K (2021) mentioned the possibility that any contrast present is due to factivity or mirativity associated with *koto*.

Given these four target conditions, twenty-four lexicalizations of each condition were created and distributed among 4 lists in Latin Square fashion. In each list, 24 target tokens were combined with 48 fillers.[5] There was one filler condition with a unique status. The relevant six items were acceptable sentences containing converted genitives inside relative clauses such as (10).

(10)   Sono kaisyain-wa   yoku   butyoo-no   susumeru
       that staff-TOP   often manager-GEN   recommend.NPST
       kankooti-o   otozuremasita.
       tourist spot-ACC   visit.PST
       "That staff visited the tourist spot that the manager often recommended."

The reasons for including the filler condition were as follows. As noted in previous studies, the acceptability of converted genitive sentences is subject to generational variation (Harada 1971, Niikuni, Wada and Ogawa 2017). The grammatical distribution of NGC has become progressively narrower over the generations. In the current experiment as well, the difference between the genitive-*koto* and genitive-*to* conditions might be blurred or even diminish in the ratings from the participants who disallow NGC all together. The filler type exemplified by (10) was added to determine the extent to which the participants would accept converted genitive sentences in an environment different from *koto* clauses. This manipulation would help determine whether the effect, if demonstrated, was due to the (in)applicability of NGC or not. We dub this special filler condition the *Filler*.no *condition*.

4.2. Results and discussion
The ratings obtained from each participant were z-score transformed prior to analysis. Then, the grand mean z-scores for the Filler.*no* items ($z = 1.63$) and

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[5] The filler items were selected so that the composition of each survey would be 1/3 clearly acceptable, 1/3 clearly unacceptable, and 1/3 mildly acceptable. They were all made to contain two clauses, as were the target items.

the by-participant mean z-scores for these items were calculated. This enabled us to see to what extent a given participant accepted typical NGC. We built linear mixed effects models by exploiting the lme4 package for R (Bates, Mächler, Bolker and Walker 2015) to look for interactions among three factors (i.e., *Case*, *Comp(lementizer)* and *Filler*.no). Each model included fixed effects of *Case*, *Comp* and *Filler*.no (the first two being dummy-coded) and their interactions. The model was then first fit with the maximal random effects structure, including by-participant and by-item random slopes and random intercepts for the fixed factors and their interactions, except *Filler*.no. We then repeatedly reduced the complexity of the model using the *anova* function and finally determined the best model to fit the data. See Table 1 for the results and random effects structures. As the table indicates, a highly significant three-way interaction was observed.

Table 1. Summary of the statistical analysis of the data. Random intercepts were included for participants and items, as were by-participant and by-item random slopes for Case.

	Estimate	Std. error	t-value	p-value
(Intercept)	0.391	0.121	3.238	0.003 **
Case	–0.654	0.270	–2.419	0.022 *
Comp	–0.003	0.142	–0.018	0.986
Filler.*no*	–0.005	0.163	–0.030	0.976
Case × Comp	0.863	0.284	–1.253	0.211
Case × Filler.*no*	–0.884	0.378	–2.342	0.026 *
Comp × Filler.*no*	–0.269	0.200	–1.344	0.179
Case × Comp × Filler.*no*	–1.445	0.400	–3.614	0.001 ***

Furthermore, the observed interaction was studied more closely to understand its nature more clearly. Using the ratings for the Filler.*no* items, the participants were divided into two groups: those who preferred relative-clause NGC above average (labeled 'Upper') and those who did not (labeled 'Lower'). Figure 1 shows how the factor *Comp* influenced the ratings of genitive *yooni naru* sentences in the 'Upper' and 'Lower' participant groups. A linear mixed effects analysis was run group by group.
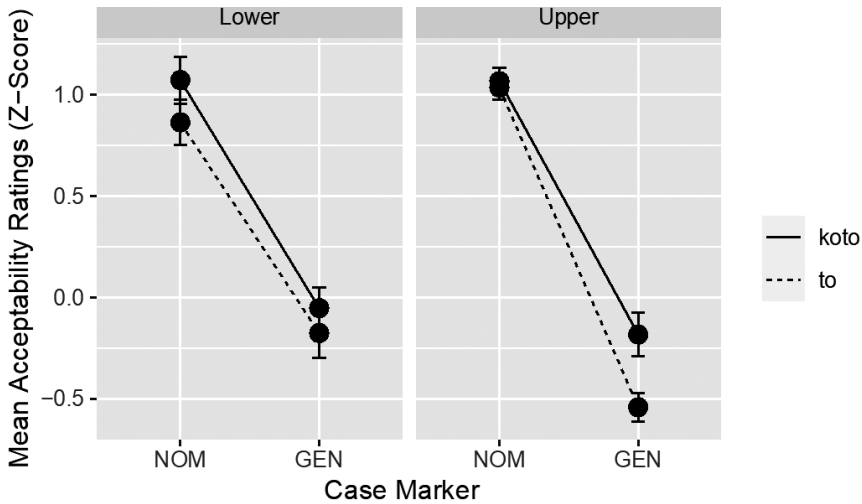
Figure 1. The mean z-score rating of each condition in the 'Upper' group, in which the participants relatively preferred relative-clause NGC, and in the 'Lower' one, in which the participants relatively disliked the same grammatical process. Error bars indicate standard errors.

It was revealed that while the *Case-Comp* interaction was not significant for the 'Lower' group ($t = 0.689$, $p = 0.491$), it was significant for the 'Upper' group ($t = -2.790$, $p = 0.006$). Crucially, the materials were constructed such that the significant 3-way interaction could not be attributed to a *koto-to* difference existing independent of NGC. Thus, the current experiment replicated the contrast in acceptability claimed to exist between (4a) and (4b).[6]

Finally, a reviewer asked whether any participants may have been speakers who allow the complementizer *yooni* to license converted genitives; see the discussion of (8) in Section 3. As far as we are aware, such speakers do not seem to have made up a significant proportion of the participants in the current experiment. If significantly many had been from that population, the relevant contrast between genitive-*koto* and genitive-*to* conditions would not have been found; both conditions involved *yooni* and that would have overridden the contrast.

5. TAG as a stipulated generalization

As noted in Section 3, A&K (2021) asserted that the TAG suffers from its status as an unexplained stipulation. A&K's point is fair: TAG was stipulated in previous studies. Fujii (2012) suggested that the generalization has something to do with the lack of a morphological indicative-infinitive distinction in Japanese, but no concrete theory has been advanced. Therefore, if A&K's (2020, 2021) and K&A's

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[6] Interestingly, genitive-*koto* sentences were quite marginal even for those sensitive to the key contrast. See the discussion of the ongoing grammatical change in the grammar of NGC in Section 4.1.

(2020) semantic approach covered without TAG the data the TAG approach was intended to cover, the generalization should be abandoned. In what follows, we argue that there is reason to believe that the semantic approach does not achieve what the TAG approach does.

Before proceeding, let us hasten to add that the two authors' semantic accounts of the fixed tense effects in the control and *yooni naru* constructions strike us as highly reasonable. This can be illustrated by K&A's (2020) analysis of *ketui suru* 'decide' found in (2). The meaning of this future-oriented matrix verb was analyzed as lexically demanding that the time for the deciding event t precede the time for the embedded natto-eating event t'. When nonpast *-ru* is used in the embedded clause as in (2a), the matrix verb's requirement on event ordering is readily satisfied. When past *-ta* is used instead as in (2b), the tense morpheme locates the natto-eating event in the past relative to the deciding event, which would contradict the matrix verb's meaning. This relative-tense-theoretic account is nice in that it needs no special assumptions regarding the semantic contributions of the tense morphemes to deal with the effect.

Now turn to the question of whether the semantic approach fares better than the TAG approach in accounting for a certain very basic fact about control. Continuing to use the *ketui suru* construction in (2) as a representative case, we look into how K&A (2020) attempted to capture the obligatory binding effect (i.e., that the embedded subject must be bound by a matrix element). K&A (2020: 8) proposed the denotation for *ketui suru* in (11), adding that "*ketsui–suru* presupposes that the controller x recognizes that engaging in some activity Q that is at his/her discretion at t (i.e., the matrix time) is a necessary condition for the realization of P (the content of the embedded clause) at a future time t'". (The presupposition in question is indicated by an underscore in (11).)

(11) $\lambda P \lambda x \lambda t \lambda w.$ $\forall w' \in Alt^{epst}_{x,t,w} : \exists t' > t. \exists Q.\textbf{\textit{discret}}(Q)(x)(t)(w')$
$\wedge \big[P(x)(t')(w') \to Q(x)(t)(w') \big];$ $\forall w'' \in Alt^{volit}_{x,t,w}.Q(x)(t)(w'')$

It should be noted that (11) makes the following true: While *ketsui suru* can be combined with a predicate, where the variable in subject position is bound by a lambda operator, it cannot be combined with a clause whose subject is filled with a full NP such as *John*. The reason is because a clause of the latter kind is of type <i, <s, t>>, to which (11) cannot apply due to type mismatch; types i and s are the types of time intervals and worlds, respectively. Abstracting away from the semantic contribution of *–ru* in the complement clause, the meaning of *ketui suru* in (11) can take (12) as the verb's direct object argument but not (13); in (13), j is the translation of *John*.

(12) $\lambda x \lambda t \lambda w.eat–natto(x)(t)(w)$ Type <e, <i, <s, t>>>
(13) $\lambda t \lambda w.eat–natto(j)(t)(w)$ Type <i, <s, t>>

This is how obligatory binding in control was ensured in K&A's semantic analysis.

A crucial question that arises at this point is how the theory can exclude

the possibility of substituting the subformula $P(x)(t')(w')$ in (11) with $P(t')(w')$. If this hypothetical version of *ketui suru* were available in addition to that in (11), it would unfavorably enable the verb to be combined with (13), failing to capture the obligatory binding effect. As far as we are aware, this question was not raised explicitly in A&K (2020) or K&A (2020). One might wonder whether Farkas' (1988) *responsibility* relation (which is "at the heart of the lexical meanings of verbs that induce control," according to A&K 2020: 6) bans this hypothetical lexical meaning. That is, it might be claimed that the hypothetical meaning in question is inconsistent with the following meaning component of (11): the intentional agent's (i.e., the controller's) recognition of the conditional (or causal) relation between the embedded proposition and the matrix action. That is unlikely to be a solution, however. As Farkas (1988) explicitly noted, the responsibility relation is not unique to control; it is found in finite constructions as well. In *John promised Mary that the children will be in bed by 8*, John is the intentional agent with the intention of bringing about the embedded situation (Farkas 1988: 36). In this connection, an anonymous reviewer noted that it should be asked whether the semantic approach can make a syntactic assumption to exclude the unwanted denotation of *ketsui suru*. While it can, one should make sure that such a solution to the problem would not be inconsistent with the thesis that *-ru* in control complements is a semantically and syntactically normal nonpast tense. For example, one can hypothesize that PRO always triggers lambda abstraction, making a complement denote a property such as "λx. x eats natto" (Chierchia 1989) and that these control clauses in Japanese require PRO subjects. A solution in this direction, however, would beg the question why these normal nonpast complements necessitate PRO. In summary, the semantic approach seems to fail to accommodate the obligatory binding effect in control if TAG is dispensed with.

6. Conclusion

The current paper has attempted to reply to some criticisms of TAG made by A&K (2020, 2021) and K&A (2020). Our experiment revealed that the participants' judgments were in line with Fujii's (2006) argument, contrary to what A&K (2021) would expect. The article also holds that while their semantic analysis of the fixed tense effects is highly insightful, it is not obvious whether it explains control.

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【要　旨】

時制交替の一般化再訪
——阿久澤・窪田論文に答う——

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　先行研究において，時制交替の一般化（Tense Alternation Generalization，以下 TAG）は日本語における時制節を含んだ繰り上げあるいはコントロールとされる構文を説明するために用いられてきた（Uchibori 2000, Fujii 2006）。Akuzawa and Kubota（2020, 2021），Kubota and Akuzawa（2020）はこの一般化を批判的に検討し，問題があると論じた。本研究は両氏の TAG 批判のうち，（i）TAG に定位した日本語ヨウニナル構文の繰り上げ分析を支持するとされているデータは説得力に欠けているとの批判，および（ii）TAG の接近法が，両氏の提案する意味論的接近法と異なり当該一般化が説明を欠く措定的規定であるという弱点を孕んでいるとの批判に答えることを試みる。まず（i）を解決するために容認度判断実験を行い，被験者の判断が Fujii（2006）の報告に沿っていることを示す。また TAG が措定的であるという（ii）の批判については，批判は正しいが，両氏の提案するコントロールの意味論的分析は TAG による接近法が措定的規定に頼って説明した事実を説明しないことを示す。