The Syntax of Nominative-genitive Conversion in Japanese: Tense and (Shrinking) Clausal Nominalization

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1 Introduction

One of the oft-discussed topics in the literature of Japanese generative syntax is so-called *Nominative-genitive Conversion* (NGC), where the subject can optionally appear in genitive case or nominative case in the nominal context such as the relative clause in (1) or the nominal complementation in (2).

(1) [kinoo Taroo-{ga/no} kat-ta] hon
yesterday Taro-NOM/GEN buy-PAST book
'book that Taro bought yesterday'

(2) Boku-wa [kinoo Taroo-{ga/no} Kyooto-ni tui-ta-{koto/no}]-o sira-nakat-ta
I-sc top yesterday Taro-NOM/GEN Kyoto-at arrive-PAST-FN -ACC know-NEG-PAST
'I didn't know that Taro arrived at Kyoto yesterday.'

Since Harada (1971), many researchers have been working on NGC, and roughly speaking, there are two theoretical headings on the market in the study of NGC. One is D-licensing, whose representatives are Miyagawa (1993, 2011) and Ochi (2001). The other is C-licensing originally put forth by Watanabe (1996) and recently developed by Hiraiwa (2001, 2005). Although Watanabe and Hiraiwa are different regarding the specifics of C-licensing, they converge to put an emphasis on the function of C, namely, *wh*-agreement for Watanabe and the predicate-adnominal (P.-A.) form that involves an affixal C for Hiraiwa. As we will see, both D-licensing and C-licensing as they are can be empirically and theoretically challenged. However, my intention does not lie in any attempts to refute the previous analyses. Rather, both D-licensing and C-licensing are on the right track, but they are simply insufficient for their empirical coverage, and their theoretical apparatus needs more consideration. As we will see, certain cases can be derived via D-licensing whereas others cannot.

The analysis to be deployed below crucially hinges on the temporal interpretation of a given nominalized clause that hosts NGC. That there are cases where NGC and tense are intertwined is pointed out by Miyagawa (2012), and my proposal will push this new trend of NGC further, arguing that tense encoded in Pesetsky and Torrego's (2001) T-feature plays a crucial role in licensing all the cases of NGC. Then, I will also contend that case morphology is determined at the morphological component in accordance with the case hierarchy proposed by Marantz (1992). A number of arguments countenancing the configurational approach to case morphology have been made (Bobaljik 2008, Levin 2017, McFadden 2004, among others), but there is little discussion on NGC from this conception of case in the literature, so the theory

of NGC to be proposed below, if on the right track, will contribute to this alternatve picture of the case theory itself.

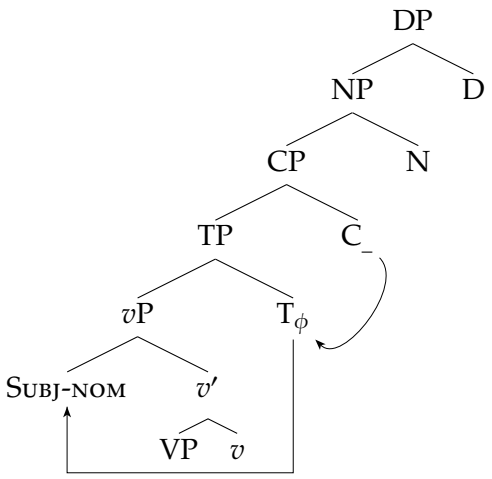
This paper is organized as follows. In Section 2, we will go over previous approaches from D-licensing and C-licensing, discussing their empirical and theoretical challenges. Specifically, in Section 2.1, I will show that the data Miyagawa (2011) presents to support his analysis are just partially true, so if we consider other factors relevant to his data, his analysis turns out to be insufficient. Turning to C-licensing, in Section 2.2, we will extensively discuss the relevance of the P.-A. form and the way Hiraiwa (2001, 2005) derives it, whereby we will see that a careful evaluation of his analysis divulges some theoretical issues, especially concerning the impossibility of NGC in the *no-da* construction. In Section 3, we will consider the relevance of tense in the context of NGC, pointing out the way Miyagawa (2012) uses the term "dependent" tense is misleading and must be reconsidered under the tense semantics of Arregui and Kusumoto (1998). In Section 4, I will then propose a novel analysis to derive NGC by utilizing the notion of T-feature in lieu of traditional Case-feature in tandem with the post-syntactic configurational theory of case. Section 5 demonstrates how the proposed analysis can derive various patterns of NGC plus the case Kobayashi (2012) points out to be problematic for C-licensing. Then, in Section 6, we will reconsider the significance of D-licensing, deliberating over why the judgements of NGC examples are divergent among Japanese speakers (Ogawa et al. 2018). After discussing NGC in the double-nominative construction in Section 7, we will conclude.

2 Previous attempts reevaluated

2.1 D-licensing and its challenges

Miyagawa (1993, 2011) and his related papers argue for D-licensing. Especially, Miyagawa (2011) proposes that NGC is not a *bona fide* case alternation, but the different case morphology reveals different structures as in (3). To analyze cases like (1), assuming with Chomsky (2008) that the set of ϕ-features originates only in phase heads (v, C and D), he argues that the ϕ-set of C is inherited by T, which functions as a probe. Then, Agree(T,Subj) results in nominative case as in (3a). In contrast, when genitive case manifests itself on the subject, the relative clause lacks the CP-layer, so that T is void of ϕ-features that render it a probe. Then, D enters into an Agree relation with the subject, valuing the latter with genitive case, as in (3b).

(3) a.



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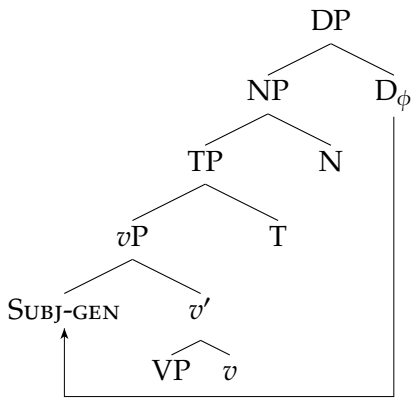


To motivate the pertinent structural difference, Miyagawa provides, among others, two major arguments. Therefore, we will go over them one by one, and I will show that they are empirically insufficient once a further scrutiny of related data is carried out, and hence that they do not constitute arguments for D-licensing. In addition, I will also discuss another potential problem of Miyagawa's D-licensing pointed out by Ochi (2017).

2.1.1 Condition B

Miyagawa (2011) observes that the coreference between the possessor, which is presumably located in Spec-DP, and the nominative subject pronoun is fine, but crucially not the genitive subject pronoun. This contrast is explained in terms of Condition B just like the case of ECM in English in (5). The ECM complement is (nonfinite) TP, and the head of such TP is defective in the sense that it lacks features to probe, which as we discussed above, come from C by inheritance. This motivates Miyagawa to contend that relative clauses with a genitive subject have a smaller structure, namely TP.

(4) a. Mary$_i$-no [kanozyo$_i$-ga kika-nakat-ta] hihan
Mary-GEN she-NOM hear-NEG-PAST criticism
'Mary's criticism that she didn't hear'
b. *Mary$_i$-no [kanozyo$_i$-no kika-nakat-ta] hihan
Mary-GEN she-GEN hear-NEG-PAST criticism
Intended 'Mary's criticism that she didn't hear'
(Miyagawa 2011, 1270-1272, (16))

(5) *John$_i$ expects him$_i$ to win. (Miyagawa 2011, 1272, (19))

Although the relevant judgment is maybe right, some of my language consultants and I myself in fact do not see any clear disparity between (4a) and (4b) for the intended interpretation. As Miyagawa admits, even for him, (4b) is not totally impossible: "as indicated in [(4b)], when the subject is genitive, coreference becomes difficult, *if not impossible*" (Miyagawa 2011, 1272, emphasis mine). Given this, there should be some granularity in the pertinent judgement. Also, as Miyagawa points out, Japanese is a *pro*-drop language, and having an overt pronoun is a marked option. The possessor and the genitive subject are adjacent, which makes the latter sound redundant with the same case morpheme. Then, if we have enough space between the possessor and the genitive subject, the sentence becomes much better:

(6) Mary$_i$-no [kinoo guuzen-ni-mo kanozyo$_i$-no kiite-simat-ta] hihan
Mary-GEN yesterday by.chance-COP.ADV-also she-GEN hear-ASP-PAST criticism
'Mary's criticism that she happened to hear yesterday.'

In (6), the adverb *kinoo* 'yesterday' signalizes the left edge of the relative clause (Nakai 1980), and another adverb *guuzen-ni-mo* 'by chance' is also there. If this spacing is crucial to allow the presence of an overt pronoun, then the contrast between (4a) and (4b) may not so much concern itself about the grammar *per se* as allude to the processing/comprehension of such sentences. Also, the analysis to be proposed below can capture the uncertainty of the judgment of (4b) in structural terms as we will see in Section 6.

2.1.2 CP-adverbs

Turning to the other argument, Miyagawa (2011) gives (7), where the genitive subject is not compatible with evaluative adverbs like *saiwai-ni* 'fortunately' whereas it is fine with modal adverbs like *kitto* 'probably'.[1]

(7) a. [saiwai-ni Taroo-{ga/*no} yon-da] hon
fortunate-COP.ADV Taro-NOM/GEN read-PAST book
'the book that Taro fortunately read'
b. [kitto Taroo-{ga/no} yon-da] hon
probably Taro-NOM/GEN read-PAST book
'the book that Taro probably read'

(Miyagawa 2011, 1273, (26))

The badness of (7a) with genitive case, according to Miyagawa, is due to Cinque's (1999) hierarchy of adverbs. That is, evaluative adverbs are CP-adverbs whereas modal adverbs are TP-adverbs. Therefore, since the genitive-subject structure lacks CP under Miyagawa's analysis, *saiwai-ni* cannot be accommodated. Two caveats however need to be mentioned at this juncture. One is that without an appropriate context, (7a) as it is sounds odd for many speakers in the first place, irrespective of the case morphology. This is because (7a) is only a noun phrase without any explicit matrix sentence. Evaluative adverbs are speaker-oriented (Kubota 2015, Sawada 1978), so it should be that the evaluation of *saiwai-ni* is ascribed to the speaker of some matrix sentence that is missing in (7a). Nambu (2012) explicitly illustrates this point as in (8).

(8) Naomi-wa [saiwai-ni keesatu-{ga/no} mituke-ta] saifu-o kooban-ni
Naomi-TOP fortunate-COP.ADV police-NOM/GEN find-PAST wallet-ACC police.station-to
toriniit-ta.
pick.up-PAST
'Naomi picked up a wallet at the police station that fortunately, the police found.'
(Nambu 2012, 222, (11b))

Although Nambu himself presents (8) to show that the relative clause that hosts NGC can be CP, the discussion on the categorial status of the relative clause is more subtle, and the source of the contrast between (7a) and (8), I submit, is the nature of the relative clause in each example. As is pointed out by Haegeman (2002), under Rizzi's (1997) articulated CP structure, non-restrictive relative clauses project a full-fledged clause, namely ForceP, as in (9a), whereas restrictive relative clauses are structurally reduced to be FinP as in (9b).

(9) a. $\ldots [_{ForceP} \ldots [_{FinP} \ldots]] \ldots$ (Non-restrictive relative clause)
b. $\ldots [_{FinP} \ldots] \ldots$ (Restrictive relative clause)

Now, let us assume that ForceP is big enough to accommodate evaluative adverbs. As discussed by Schreiber (1971), Sawada (1978) and Kubota (2015), evaluative adverbs cannot be in the scope of question (among others), so to the extent that Force is the locus of interrogative semantics, they should be above it. Then, I simply assume that evaluative adverbs adjoin to ForceP.

[1] Here, I am more precise in glossing (7a) in that *saiwai-ni* is a nominal adjective composed of the nominal part *saiwai* 'fortune' and the copula conjugated in the adverbial form. Also, many speakers prefer to add *-mo* 'also' to the relevant adverb, hence *saiwai-ni-mo*. Therefore, I will have it in my original examples.

However, the question is how to distinguish one of the two types of relative clause from the other, since Japanese has no surface marking such as a comma in English (i.e. *the book (which) John bought* vs. *the book, which John bought*). However, there is one way to do so: Ishizuka (2008) argues that the order of the demonstrative and the relative clause renders an overt distinction between them. Witness:

(10) a. sono [Taroo-ga yon-da] hon
that Taro-NOM read-PAST book
'that book Taro read'
b. [Taroo-ga yon-da] sono hon
Taro-NOM read-PAST that book
'that book Taro read' or 'that book, which Taro read'

Ishizuka observes that the DEM(OMSTRATIVE)-R(ELATIVE)C(LAUSE) sequence is only construed restrictively while the RC-DEM sequence is ambiguous between the restrictive and non-restrictive interpretations. To diagnose these two, she provides, among others things, the availability of *tokorode* 'by the way', which is only allowed in the non-restrictive relative clause. As (11) shows, only the RC-DEM sequence is compatible with it.

(11) CONTEXT: Mr. Ito has a son, and ...
a. [Kyonen tokorode isya-ni nat-ta] sono musuko-ga
last.year by.the.way doctor-COP.ADV become-PAST that son–NON
senzitu kekkonsi-ta.
the.other.day get.married-PAST
'The son, who became a doctor last year by the way, got married the other day.'
b. *Sono [kyonen tokorode isya-ni nat-ta] musuko-ga
that last.year by.the.way doctor-COP.ADV become-PAST son–NON
senzitu kekkonsi-ta.
the.other.day get.married-PAST
Intended 'The son, who became a doctor last year by the way, got married the other day.'

(based on Ishizuka 2008, 6, (13), (14))

Now, turning back to the evaluative adverb in question (*saiwai-ni*), we see a contrast with respect to the availability of it in tandem with the word order between the demonstrative and the relative clause. As (12b) shows, the DEM-RC sequence with the relevant adverb is unacceptable, whether the subject appears in nominative or genitive case.

(12) a. [Saiwai-ni(-mo) Taroo-{ga/no} yon-da] sono hon-wa
fortunate-COP.ADV-also Taro-NOM/GEN read-PAST that book-TOP
Murkami Haruki-niyotte kak-are-ta.
Haruki Murakami-by write-PASS-NONPAST
'That book, which fortunately, Taro read was written by Haruki Murakami.'
b. *Sono [saiwai-ni(-mo) Taroo-{ga/no} yon-da] hon-wa
that fortunate-COP.ADV-also Taro-NOM/GEN read-PAST book-TOP
Murkami Haruki-niyotte kak-are-ta.
Haruki Murakami-by write-PASS-NONPAST
Lit 'That book (which) fortunately Taro read was written by Haruki Murakami.'

In this respect, we do not know which of the restrictive or non-restrictive structure Nambu's (2012) example has, since in Japanese, demonstratives are optional, and its interpretation is sometimes retrieved from the context. Nonetheless, the current discussion holds for his example, too. Observe:

(13) Naomi-wa (*sono) [saiwai-ni keesatu-{ga/no} mituke-ta] (sono) saifu-o
Naomi-top that fortunate-cop.adv police-nom/gen find-past that wallet-acc
kooban-ni toriniit-ta.
police.station-to pick.up-past
'Naomi picked up the wallet at the police station, which fortunately, the police found.'

As in (13), when the demonstrative is overt, it cannot precede the relative clause. Then, given the discussion here, Miyagawa's (2011) argument based on the evaluative adverb is insufficient to exclude the CP structure for the genitive subject. That is, the relative clause may be as small as FinP (or maybe TP), but there is a case where it projects up to ForceP, and the genitive subject is still possible.

2.1.3 Nominative object

As we have seen, under Miyagawa's (2011) analysis, the presence of a genitive subject entails the lack of CP, which is responsible for nominative case. However, as Ochi (2017) correctly points out, the genitive subject can appear with the nominative object (and the other around, too). As Hiraiwa (2001, 2005) shows, the patterns in (14) are all possible. Crucial are (14b) and (14c), where the gen-nom and nom-gen array are employed, respectively.

(14) a. [Totemo yoku John-ga nihongo-ga hanas-er-u] riyuu
very well John-nom Japanese-nom speak-can-nonpast.adn reason
b. [Totemo yoku John-no nihongo-ga hanas-er-u] riyuu
very well John-gen Japanese-nom speak-can-nonpast.adn reason
c. [Totemo yoku John-ga nihongo-no hanas-er-u] riyuu
very well John-nom Japanese-gen speak-can-nonpast.adn reason
d. [Totemo yoku John-no nihongo-no hanas-er-u] riyuu
very well John-gen Japanese-gen speak-can-nonpast.adn reason
'the reason why John can speak Japanese very well'
(based on Hiraiwa 2005, 119, (3.65))

Of course, one can imagine that the genitive or nominative case that is assigned to the object is different from that assigned to the object. Thus, in the nominal context, we could come up with the following derivation:

(15) $[_{DP}$ D $\ldots$ $[_{TP}$ $\ldots$ subj-gen $[_{vP}$ v $[_{VP}$ V obj-nom/gen]]]] (Order irrelvant)

In (15), Agree(D,subj) applies, hence genitive case on the subject. Independently of this Agree, nominative or genitive case is licensed on the object via Agree(v,obj). This analysis is difficult to implement, to the extent that we syntactically associate the realization of each case morpheme with a specific functional head. Therefore, this also challenges Miyagawa's D-licensing.

2.2 C-licensing

2.2.1 Watanabe (1996): *Wh*-agreement

The dissociation of the genitive subject in the relative clause from the external D was first proposed, to my best of knowledge, was Watanabe (1996) and his related works. Based on the similarity between NGC in Japanese and Stylistic Inversion in French in that they only occur in the *wh*-movement environment, Watanabe proposes that they are derived via abstract agreement at C, namely *wh*-agreement. According to him, *wh*-agreement at C cancels the EPP-feature of T, so the subject remains in situ inside *v*P, where genitive case is assigned to the subject, so as he puts, genitive case indicates that the subject does not move to Spec-TP (or Spec-Agr$_S$P in his term). Although intriguing, the analysis has some issues.

First, as pointed out by Hiraiwa (2005) among others, not all the constructions that are considered to involve operator movement allow NGC. For instance, matrix questions do not allow the subject to be marked with genitive case.

(16) a. Taroo-{ga/*no} ki-masi-ta-ka.
Taro-NOM/GEN come-POL-PAST-Q
'Did Taro come?'

b. Dare-{ga/*no} ki-masi-ta-ka.
who-NOM/GEN come-POL-PAST-Q
'Who did come?'

c. Taroo-wa nanigo-{ga/*no} hanas–masi-ta-ka.
Taro-TOP what.language-NOM/GEN speak-POL-PAST-Q
'What language can Taro speak?'

As Watanabe notes, (16) is problematic, so that he assumes that *wh*-agreement is possible when the entire *wh*-phrase is moved. Since Japanese is a *wh*-in-situ language, the overt *wh*-operators does not move, and for him, null operators (overtly) move in (16) (cf. Watanabe 2003). This then explains why NGC is impossible in (16).

Second, there are cases where *wh*-agreement on C is not necessary though NGC is possible. Hiraiwa (2005) provides a set of examples like (17), where there is no *wh*-movement involved, and for that matter, no external D.[2]

(17) a. John-wa [ame-{ga/no} ya-mu made] ofisu-ni i-ta.
John-TOP rain-NOM/GEN stop-NONPAST.ADN until office-DAT COP-PAST
'John was at his office until the rain stopped.'

b. [Boku-{ga/no} omou-ni] John-wa Mary-ga
I-NOM/GEN think.NONPAST.ADN-DAT John-TOP Mary-NOM
sukini-tigaina-i.
like-must-COP.NONPAST
'I think that John likes Mary.'

[2]However, (17a) is controversial for whether it does not involve any nominal expression. Maki and Uchibori (2008) argue that cases like (17a) have a covert noun, which corresponds to *toki* 'time' in (i).

(i) John-wa [ame-{ga/no} ya-mu **toki** made] ofisu-ni i-ta.
John-TOP rain-NOM/GEN stop-NONPAST.ADN time until office-DAT COP-PAST
'John was at his office until the rain stopped.'

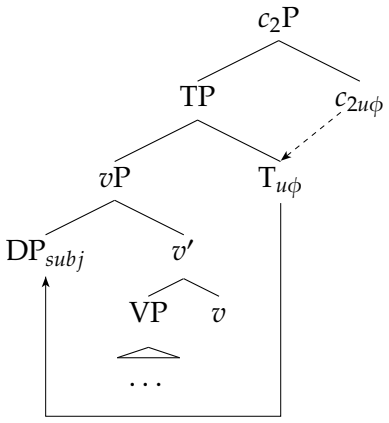
c. [Sengetsu ikkai denwa-ga at-ta kiri] John-kara nanimo
last.month once call-NOM/GEN COP-PAST.ADN since John-from anything
renraku-ga na-i.
call-NOM NEG-COP.NONPAST
'There has been no call from John since he called me up once last month.'
(Hiraiwa 2005, 107-108, (3.30)-(3.32))

Note that in these examples, the embedded predicate is conjugated in what Hiraiwa terms the predicate adnominal (P.-A.) form (glossed as ADN), known as *rentai-kei* in the traditional Japanese grammar. He contends that this morphology is decisive in licensing the genitive subject. Let us then consider how valid his argument is in the next section.

2.2.2 Hiraiwa (2001, 2005): The predicate adnominal form and NGC

Hiraiwa (2001, 2005) proposes that the P.-A. form is the reflex of a selectional relation between C and T, more specifically, between the supercategorial c_2 and T as in (18).

(18)



(Hiraiwa 2005, 115, (3.54))

Under Hiraiwa's (2005) analysis, c_2 (which corresponds to C that immediately selects T, i.e. Fin) and T function as a probe together due to the relevant selectional relation, which is reminiscent of Chomsky's (2008) theory of feature inheritance. That is, there is a tight syntactic connection between C and T to render T a probe. Given this, Agree(c_2-T,DP$_{subj}$) applies, checking the *u*Case-feature of the subject DP. Then, Hiraiwa goes on to argue that at Transfer, a categorial feature [+N] is inserted to c_2, resulting in the special verbal morphology via the amalgamation of (V/*v*-)T-C due to the affixal nature of C/c_2, hence the P.-A. form. Then, the Case-feature of the subject can be spelled out as nominative or genitive. Although complex, the gist of his analysis lies in the special selectional dependency between C and T, the insertion of the categorial [+N] feature at Transfer, and the claim that genitive case and nominative case are treated on a par just like Watanabe's (1996) analysis. What differentiates Hiraiwa from Watanabe is whether the genitive subject moves to Spec-TP, with which I do not concern myself below.

Note at this point that there are several questions that can be posed for Hiraiwa's analysis. First of all, it is rather unclear how to determine the insertion of a [+N]-feature and its concomitant nominalization, or what mechanism is responsible for its insertion at Transfer. He writes, "if a [-N] categorial feature is inserted into c_2–either because it is the root clause or c_3 [, which corresponds to ForceP, KS] requires a [-N] c_2–the predicate takes an ending inflection" (Hiraiwa 2005, 115). Then, it is not so obvious what prevents a [+N]-feature from begin inserted to the

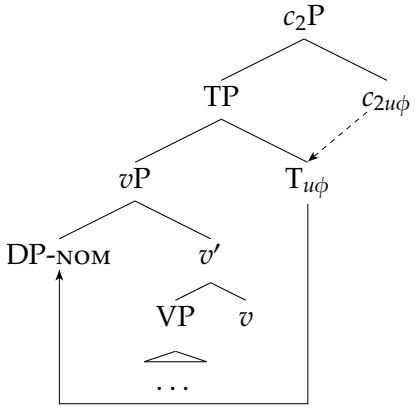
root C (c_2), which would result in NGC in the root clause.[3]

Another concern is that not all the contexts where the P.-A. form is employed allow NGC. For instance, so-called the *no-da* construction prohibits NGC in spite of the P.-A. form in it. To explain this, Hiraiwa (2005) argues for an additional licensing mechanism for NGC, which says that c_3 that selects c_2 must be a goal for a later Agree relation between c_3P and some probe, say x. Roughly put, the embedded clause must bear an external case via Agree(c_3P, x). To make this Agree possible, c_3 thus has to be endowed with inherent ϕ-features. Hiraiwa contends that this derives the contrast between (19) and (20); the latter has an external accusative case. Then, the difference between (19) and (20) can be structured as (21a) and (21b), respectively.

(19) Taroo-{ga/*no} tensai-na no-da.
Taro-NOM/GEN genius-COP.ADN FN-COP.NONPAST
'It is that Taro is a genius.'

(20) Boku-wa [kinoo Taroo-{ga/no} Kyooto-ni tui-ta-no]-o sira-nakat-ta
I-TOP yesterday Taro-NOM/GEN Kyoto-at arrive-PAST-FN -ACC know-NEG-PAST
'I didn't know that Taro arrived at Kyoto yesterday.'

(21) a.



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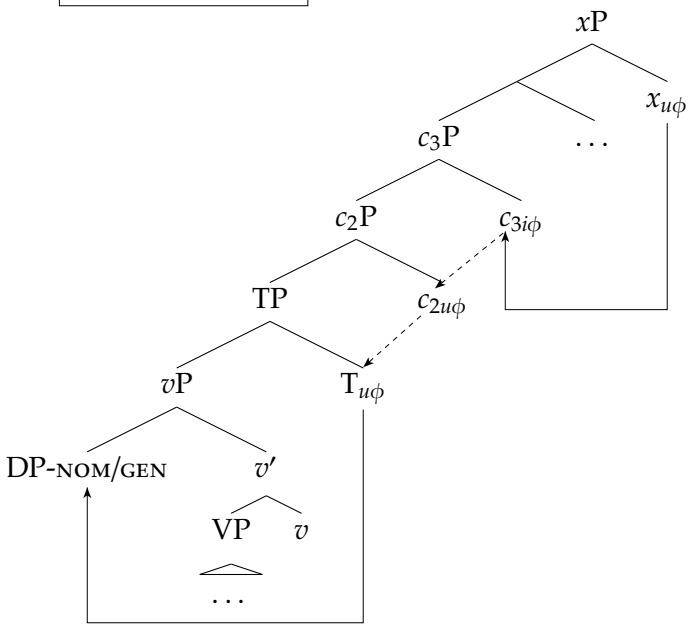


[3]However, in some dialects spoken in the western part of Kyushu island, the genitive subject in the matrix setting is possible; see Ochi and Saruwatari (2014).

Notice however that this undermines Hiraiwa's analysis of NGC itself since (18), which should be for the relative clause, and (21a) are structurally identical, yet only the former licenses NGC. Also, he assumes that the nominalizer *no*, which I gloss as FORMAL NOUN: FN, is a complementizer, and Hiraiwa (2005) and Hiraiwa and Ishihara (2002, 2012) argue that it resides in Fin. This much said, we are now led to the following two questions. First, why does the relative clause not have *no*, which is allegedly a complementizert? This is exactly the question Murasugi (1991) posed, and the answer she gave was that the relative clause in Japanese only projects TP. However, this cannot be maintained across the board since as we saw above, at least the non-restricted relative clause in Japanese should be larger than TP. The other question is what determines the affix nature of C that Hiraiwa argues is involved in the formation of the P.-A. form. Since C (c_2) is affixal, it enters into a selectional relation with T, and the resulting amalgam of (V/*v*-)T-C is spelled out in the P.-A. form. This may provide an answer to the first question. That is, in the relative clause, the affixal null C amalgamates with T, so that such an instance of C can stay phonologically null. This line of reasoning is actually discussed by Kaplan and Whitman (1995), who argue that verbs in the P.-A. form incorporate to null C in the relative clause to support it. Then, (22a) is structured as in (22b); the copula *da* is inflected in the P.-A. form, i.e. *na*.

(22) a. [kami-ga kirei-na] hito
hair-NOM pretty-COP.ADN person
'a person whose hair is pretty' (Kaplan and Whitman 1995, 33, (7b))

b. [$_{NP}$ [$_{CP}$ [$_{IP}$ [$_{VP}$ kami-ga kirei t_V] t_I] [$_C$ [$_I$ [$_V$ na]]]] [$_{NP}$ hito]]
hair-NOM pretty COP.ADN person
'a person whose hair is pretty' (Kaplan and Whitman 1995, 34, (9))

This analysis is motivated by the historical fact in Classical Japanese. First, let us look at (23), where the P.-A. form is the rightmost element in the verbal complex, following the tense suffix. Crucially, the P.-A. form, unlike Modern Japanese, has it own morphological realization independent of the tense suffix. The overt P.-A. inflection is morphologically retained only for the copula *na* (adnominal) vs. *da* (conclusive) in Modern Japanese, but, such an inflection was observed for other predicates in Classical Japanese.

(23) [$_{NP}$ [$_{CP}$ [$_{IP}$ otoko-no t_V t_I] [$_C$ [$_I$ [$_V$ kitari]-ker]-u] [$_{NP}$ kariginu]]
man-GEN wearing-PAST-ADN=C hunting.clothes
'the hunting clothes the man is wearing'
(Kaplan and Whitman 1995, 32, (6), from *Ise Monogatari* 'The Tales of Ise')

Interestingly, in Classical Japanese, the embedded clauses that are introduced by *no* in Modern Japanese were introduced by the P.-A. suffix without *no* as (24) shows.

(24) a. [$_{CP}$ Kaku t_V [$_C$ mukaF-**uru**]]-wo okina-Fa nak-i
thus come.meet.NONPAST-ADN -acc old.man-TOP cry-ADV
nagek-u.
mourn-NONPAST.CONCL
'(You), old man cry and mourn at (our) coming to meet (her).'
(*Taketori Monogatari* 22 'The Tale of the Bamboo Cutter')

b. [$_{CP}$ Kono yoo-ni mukae-ru [$_C$ **no**]]-o okina-wa nai-te
this way-in come.meet-NONPAST FN -acc old.man-TOP cry-ADV

nagek-u.
mourn-NONPAST.CONCL
'(You), old man cry and mourn at (our) coming to meet (her).'
(Kaplan and Whitman 1995, 35-36, (11); gloss and boldface are mine)

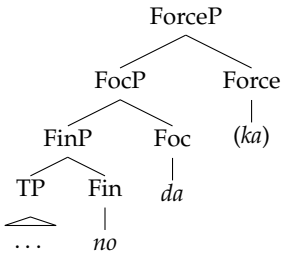
The verb in (24a) moves to C which is, according to Kaplan and Whitman (1995), the locus of the P.-A. suffix. In contrast, no such movement is employed in (24b). I will remain neutral to the issue of whether such movement occurs at all in (Classical and Modern) Japanese, but Nishiyama (1999) contends that C is involved in the P.-A. inflection. Then, the adnominal copula *na* in Modern Japanese signalizes such movement to, or the presence of, the pertinent affixal C, which is phonologically null. However, things are not so simple, since *na* can cooccur with *no* as shown in (25).

(25) Taroo-wa [Hanako-ga kirei-na-no]-o mitome-ta.
Taro-TOP Hanako-NOM pretty-COP.ADN-FN -ACC admit-PAST
'Taro admitted that Hanako was pretty.'

Therefore, predicates in the P.-A. form and the nominal complementizer *no* do not constitute a complementary distribution, contrary to what Hiraiwa (2005) and Kaplan and Whitman's (1995) theory predicts.

Then, the question is why the affixal c_2 does not need the external licensing by Agree(x, c_3P) for NGC, whereas c_2 as incarnated as *no* does. Also, we need to ask why both instances of c_2 lead to the P.-A. form while only the affixal c_2 licenses the amalgamation of (V/v-)T-C, which is by assumption is the source of the P.-A. form under Hiraiwa's (2005) analysis. These are the concerns Hiraiwa must address, and insofar as I can see, he does not.[4]

[4] Hiraiwa (2005) can also be considered to say that c_3 is responsible for clausal nominalization, since c_3 can also be the one to which a [+N]-feature is inserted (Hiraiwa 2005, 99). Then, whether one has *no* or not may be determined by the presence of c_3 with [+N]. Then, the amalgamation that involves the affixal c_2 applies in both the nominal complement and the relative clause, but only in the former does *no* appear due to the presence of c_3 with [+N]. However, this may also be problematic and contradictory to what he says for the the *no-da* construction. Consider:

(i)


(i) is based on Hiraiwa and Ishihara (2012, 166, (48)), and there is no nominalized item in the matrix CP domain which corresponds to c_3. Of course, some amendment could be rendered so as to have c_3 realized *no* only for the nominalized complement like (20). Then, this predicts that the complement is rather large, containing the full-fledged CP, since Hiraiwa explicitly states "c_3 corresponds to the "Force" head in Rizzi's Left Periphery Theory. c_2, on the other hand, corresponds to the "Fin(niteness)" head" (Hiraiwa 2005, 19). Again, this is a doomed move because embedded topicalization is impossible in the nominal complement as in (ii).

(ii) John-wa [kono hon-{*wa/o} Mary-ga yon-da-no]-o kookai-si-tei-ru.
John-TOP this book-TOP/ACC Mary-NOM read-PAST-FN -ACC regret-do-ASP-NONPAST
'John regrets that this book, Mary read.' (Maki et al. 1999, 9, (12a))

(ii) thus shows that the nominal complement lacks TopP, and hence ForceP (unless the relevant TopP is the one

2.3 Interim summary

In this section, we have overviewed some recent ideas concerning the nature of NGC by considering the two major approaches, pointing out that they are both theoretically and empirically inadequate. Miyagawa's (2011) D-licensing would suffer from the fact that the genitive subject is possible even in the relative clause that is structurally larger than TP, and the availability of the nominative object together with the genitive subject (or vice versa). On the other hand, C-licensing may overgenerate in the sense that all the cases where *wh*-agreement or the P.-A. form is employed are expected to sanction NGC, contrary to the fact.

3 Dependent tense and NGC

Another issue that has been raised recently by Miyagawa (2012) is concerned with the applicability of NGC in the temporal adjunct clause like (26).

(26) a. [Kodomo-{ga/*no} warat-ta toki], tonari-no heya-ni i-ta.
child-NOM/GEN laugh-PAST time next-GEN room-in COP-PAST
'When the child laughed, I was in the next room'

b. [Kodomo-{ga/no} ki-ta toki], tonari-no heya-ni i-ta.
child-NOM/GEN come-PAST time next-GEN room-in COP-PAST
'When the child came, I was in the next room'

(Miyagawa 2012, 151-152, (9), (13))

As in (26a), unergative verbs do not allow genitive case on the subject in the temporal adjunct clause, whereas unaccusative verbs do. This is surprising if Miyagawa's (2011) D-licensing is on the right track, since *toki* 'time' can be regarded as a noun, which is dominated by DP. Therefore, Miyagawa (2012) argues that *toki* is not a noun but a complementizer without any DP structure. Then, the question that needs to be considered under his analysis turns out to be not why NGC is impossible in (26a) but why it is possible in (26b). Note also that C-licensing cannot explain this contrast. That is, under Hiraiwa's (2005) account, the morphology of the verbs in the examples in (26) is the P.-A. form anyway, so both should allow NGC, contrary to the fact.

To explain why NGC is implementable in (26b), Miyagawa (2012) proposes another way to license NGC, according to which weak v which is inside a clause that is temporally dependent on the interpretation of matrix tense is the licenser. Then, by specifying the role "weak" v, the impossibility of NGC for unergative verbs can be captured, and Miyagawa tries to establish a parallelism between this sort of NGC and the *Genitive of Negation* (GN) observed in Slavic languages such as Russian, the term originating from Pesetsky (1982), to my best of knowledge. Like NGC in the dependent-tense clause, only the internal argument undergoes GN. However, such NGC differs from GN in several ways. First, NGC is restricted to the embedded context, but GN can apply in the matrix context. Second, the internal argument of transitive verbs can also be an input to GN, whereas there is no such thing as Accusative-genitive Conversion; the object of an agentive transitive verb can be subjected to GN, so that "weakness" of v is not relevant in GN.[5] Third, the accusative object and the genitive object under GN in Russian yield different interpretations. For instance, observe:

above ForceP).

[5]But see Asano and Ura (2010) for such a case alternation in Kansai Japanese.

(27) a. Oni postroili gostinicu.
They build.PAST hotel-ACC
'They built a/the hotel.'
b. Oni ne postroili gostinicu.
They NEG build.PAST hotel.ACC
'They didn't build the hotel.' (a "definite" "planned" hotel)
c. Oni ne postroili gostinicy
They NEG build.PAST hotel.GEN
'They didn't build a hotel.' (non-specific)

(Partee et al. 2011, 137, (2))

As is obvious from (27b) and (27c), GN is optional, but the interpretations are different: the genitive object is necessarily interpreted as existential under negation while the accusative object is referential. This will never happen in NGC in (26b); the interpretation of the subject in (26b) is the same, whether it bears nominative case or genitive case. This is confirmed by the translation Miyagawa (2012) provides; see (26b). Given these discrepancies between NGC and GN, I am rather skeptical about treating them as the same (or at least, related) constructions.

The notion of "dependent tense" is defined by Miyagawa (2012) in such a way that the interpretation of tense in the subordinate clause is determined by the tense of a structurally higher clause (Ogihara 1994). For instance:

(28) [Hanako-ga te-o age-ta toki] kore-o watasite kudasai.
Hanako-NOM had-ACC raise-past time this-ACC give.IMP please
'Please hand this (to her) when Hanako (lit.) raised her hand.' (Miyagawa 2012, 158, (35a)).

For (28), Miyagawa (2012) writes, "the inflection on the verb within the adverbial clause is that of past tense, yet, the event it refers to occurs at a future time. The past inflection simply indicates a sequence in which Hanako raises her hand and then an event of giving something to her should take place" (Miyagawa 2012, 158). However, this is misleading. First, though the connective *toki* 'time' most plausibly denotes the simultaneity of two event times (Arregui and Kusumoto 1998, Kusumoto 1999), Miyagawa's (2012) statement just cited can be interpreted as if *toki* can mean 'after'. This cannot be maintained since *toki* can cooccur with the present tense while *atoni* 'after' cannot, and Miyagawa himself gives such a potentially problematic example. Observe:

(29) a. [Hanako-ga te-o age-ru toki] kore-o watasite kudasai.
Hanako-NOM had-ACC raise-past time this-ACC give.IMP please
'Please hand this (to her) when Hanako (lit.) raises her hand.' (Miyagawa 2012, 158, (35b)).
b. [Hanako-ga te-o age-{ta/*ru} atoni] kore-o watasite kudasai.
Hanako-NOM had-ACC raise-past after this-ACC give.IMP please
'Please hand this (to her) after Hanako raises her hand.'

He says, "In [(29a)], the verb within the temporal clause has the "present" inflection, which again denotes a future event. In this sentence, it simply refers to an event of Hanako raising her hand either after or at the same time as an event of giving something to Hanako" (Miyagawa 2012, 158-159). Again, this is not all about the fact regarding (29a), since the interpretation

of (29a), unlike (28) or (29b), can be habitual as pointed out by Arregui and Kusumoto (1998) and Kusumoto (1999).[6] That is, it means, "Please give this to Hanako whenever she raises her hand," which of course entails the episodic interpretation, and the event of (28) can only be interpreted episodically. Therefore, if the term "dependent tense" is simply considered to be equivalent to the relative time by which the embedded tense refers to the matrix event time as its reference time (cf. Reichenbach 1947), which Ogihara (1994) intends to mean and Miyagawa (2012) adopts, intricate factors such as the compatibility between *toki* and present tense as well as past tense and the universal quantification in (29a) cannot be explained.

In fact, more serious are examples like (26), since if the dependent tense is defined by the relative time, namely, the embedded tense is under the scope of the matrix tense as Ogihara (1994) contends, then the simultaneous reading is predicated to be impossible in (30), which is however not the case as Arregui and Kusumoto (1998) and Kusumoto (1999) discuss.

(30) [Kodomo-ga warat-ta toki], tonari-no heya-ni i-ta.
child-NOM laugh-PAST time next-GEN room-in COP-PAST
'When the child laughed, I was in the next room' (cf. (26a))

Since Japanese is not a sequence-of-tense (SOT) language, the tense in the temporal adjunct clause cannot be deleted via the SOT rule exploited by Ogihara (1994) and his related works, so if the embedded past is construed relative to the matrix past, pluperfect construal would ensue counterintuitively. This reinforces the claim that the dependent tense is not necessarily the relative tense. In addition, (31) is ambiguous in that the temporal adjunct clause allows the high and low reading.[7]

(31) Watasi-wa [Junko-ga [Satosi-ga kaet-ta-to] it-ta toki] kare-ni at-ta.
I-TOP Junko-NOM Satoshi-NOM leave-PAST-C say-PAST time he-DAT meet-PAST
'I met Satoshi when Junko said that he left.' (based on Arregui and Kusumoto 1998, 14, (32))
High: At the time when Junko spoke
Low: At the time when Satoshi left

Following Geis (1970), Arregui and Kusumoto (1998) propose that this ambiguity is derived by relativization. That is, as the temporal *wh*-pronoun is moved from different positions in English as shown in (33), a null operator is moved in (31).

(32) I encountered Satoshi in Amherst when you said he had left. (Arregui and Kusumoto 1998, 8, (14))

(33) a. I encountered Satoshi in Amherst at a time [which$_1$ you said at t_1 [he had left]].
b. I encountered Satoshi in Amherst at a time [which$_1$ you said [he had left at t_1]].
(Arregui and Kusumoto 1998, 8, (15))

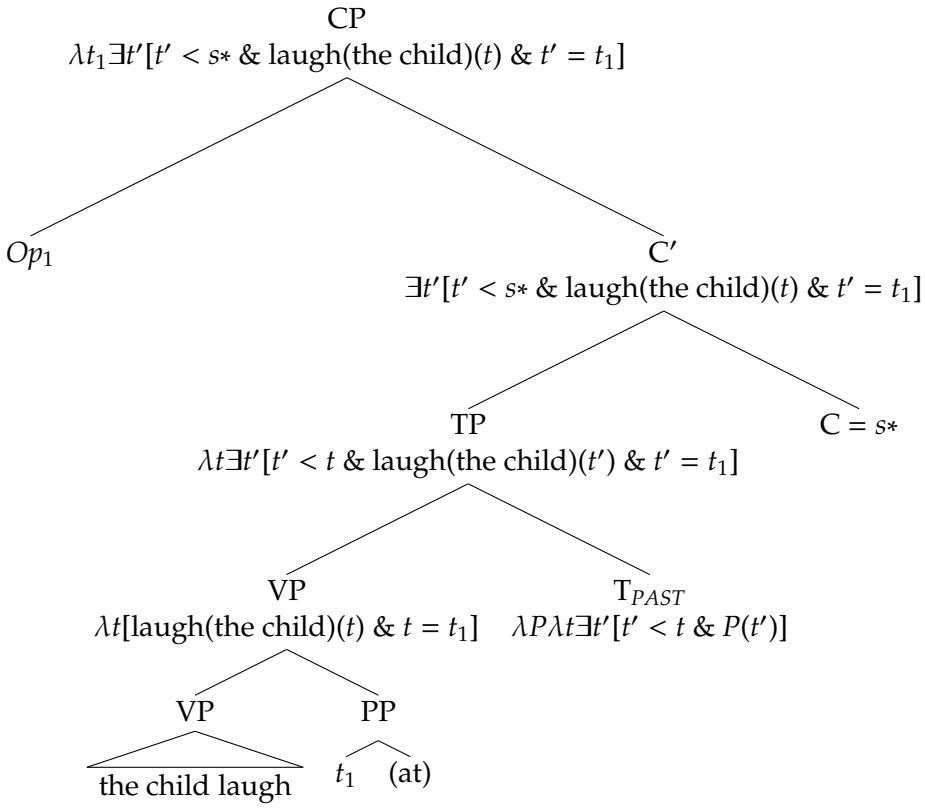
Given this, Miyagawa's (2012) claim that *toki* is a complementizer loses its validity. Then, Arregui and Kusumoto (1998) put forth the following structure to derive the simultaneous reading of two pasts in examples like (30).[8]

[6] I will not discuss the details of such an interpretation; see Arregui and Kusumoto (1998) and Kusumoto (1999).

[7] In Arregui and Kusumoto's (1998) original example, *toki* is affixed by a postposition, but the absence of it is crucial for Miyagawa (2012) to regard *toki* as a complementizer, so I omit it from (31). However, the relevant ambiguity remains intact.

[8] Here, we do not use event semantics , but even if we do, T will takes a set of events VP denotes, turning events

(34)



(34) is the structure of the *toki*-clause, and what is important here is that it has its own speech time argument $s*$, which is the actual utterance time. Arregui and Kusumoto (1998) argue that $s*$ is introduced by C. Given this, the matrix clause and the embedded temporal clause each have $s*$ independently of the other, so that the past tense is interpreted relative to the speech time, not the relative time. This said, the function of *toki* is to identify these two time intervals as identical/simultaneous as in (35), deriving the temporal semantics of (30).

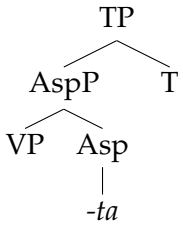
(35) $\exists t'[t' < s* \text{ \& in-the-next-room(I)}(t') \text{ \& } \exists t''[t'' < s* \text{ \& laugh(the-child)}(t'') \text{ \& } t'' = t']]$
(cf. Arregui and Kusumoto 1998, 15, (33b))

Now, let us consider whether the CP analysis with $s*$ can derive other cases of dependent tense. In fact, it cannot readily deal with (28), since if the temporal clause has its own $s*$, the past tense refers to the time before the utterance time, which is not what Miyagawa (2012) means. Therefore, we still need to keep the relative-tense analysis. For the past-tense marker, it is also possible to assume that *-ta* in (28) is in fact an aspectual marker. This is plausible given that the past marker is the combination of past and aspect (Kratzer 1998). Following this conception, Hara et al. (2013) propose (36). Given this, we can speculate that the reference time of T is relativized to the matrix event time, and the combination of the aspectual Asp *-ta* and T yields the interpretation of the event time of AspP anterior to the reference time of T. Alternatively, we can also speculate that there is no TP/CP projected, and that AspP as a relative clause is directly combined with *toki*. These two possibilities are illustrated in (37a) and (37b); s is of

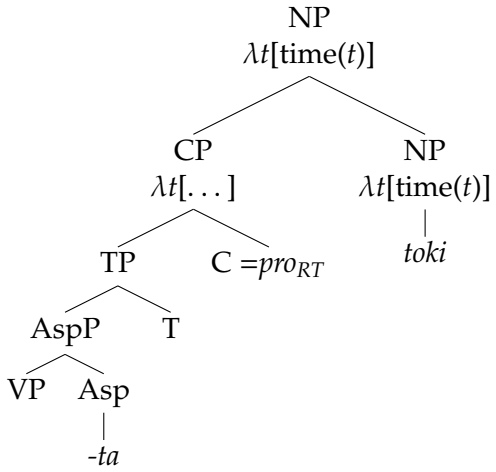
to their run times through the temporal trace function (Krifka 1998). Thus, the overall analysis will not change a lot, although we need to reconsider the denotation of PP under the framework of event semantics.

event type.[9]

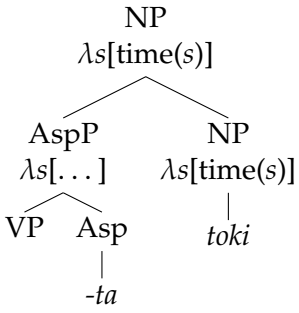
(36)



(37) a.



b.



In (37a), C brings a temporal pronoun that corresponds to the relative-time argument that is plugged into the denotation of TP. Just as Arregui and Kusumoto (1998) assume that $s*$ is pronominal (Partee 1973), I assume that it is also pronominal whose interpretation is determined by the matrix tense. Since we have now introduced event semantics to our study, (37a) and (37b) are different with respect to their host categories. That is, the former should be adjoined to TP or above, whereas the latter, to v/VP. But this difference is just trivial, to the extent that both of them can derive the required interpretation: *-ta* in (28) is interpreted in the future.[10]

[9] I assume that *toki* is type-flexible, so it can denote a set of time intervals or events. Also, its meaning is just the set of abstract entities being time.

[10] Note that I assume that T whose interpretation is the relative time is morphologically null. Given this, one may say that it is nothing wrong to have such a morphologically null T denote future in the matrix context. It then selects with AspP headed by *-ta*, which would correspond to *will have (done)* in English. However, this will never happen:

(i) *Taroo-wa raisyuu-no kono zikan-made-ni kaet-ta.
Taro-TOP next.week-GEN this time-by-DAT return-ASP/PAST
Intended 'Taro will have come back by this time next week.'

I suggest that (i) is bad because of the morphology of T and Asp. The nonpast/present/future morpheme in Japanese is *-(r)u*, which should reside in T. Then, if we attach it to AspP headed by *-ta*, it will yield **-ta-ru*, which is impossible. For the future perfect, we can say:

(ii) Taroo-wa raisyuu-no kono zikan-made-ni kaet-te-i-ru.
Taro-TOP next.week-GEN this time-by-DAT return-ASP/PAST-COP-NONPAST
'Taro will have come back by this time next week.'

Here, *-te* is attached to the verb, which is, according to Nakatani (2004), a variant of the past marker. It is then suffixed by a copula in the nonpast form. If *-te* can also be the head of Asp (cf. Kusumoto 2001), (ii) suggests that

To recap, as we have seen, the notion of dependent tense Miyagawa (2012) espouses is not so simple, and there are intricate tense-semantic factors involved. The treatment of *toki* as a complementizer is also dubious given the discussion above. Also, some data show that the *toki*-clause should be CP, whereas others do not. For that matter, Ogihara (1994) may be right, but at the same time, Arregui and Kusumoto (1998) may be right. Therefore, I will not choose one specific option, especially whether the *toki*-clause is CP or not. Rather, I will argue below that clauses where NGC occurs are flexible in terms of their sizes.

Before leaving this section, let us come back to the data fact with which we began our discussion on Miyagawa (2012). That is, unergative verbs in the *toki*-clause does not allow NGC. As we saw, the adjunct clause in question can be CP, so it should be that NGC is possible to the extent that C-licensing is on the track, save its challenges discussed in Section 2.2. We predict this especially for the simultaneous interpretation of two past morphemes. This prediction is borne out.

(38) [Saiwai-ni(-mo) Hideharu-no kudaranai zyooku-ni Ayaka-{ga/no}
fortunate-COP.ADV-also Hideharu-GEN stupid joke-DAT Ayaka-NOM/GEN
aisowarai-si-ta] (sono) toki Shintaroo-wa siroi me-de sono yoosu-o
polite.smile-do-PAST that time Shintaro-TOP white eye-with that state-ACC
mi-tei-ta.
look-ASP-PAST
'When fortunately Ayaka gave a polite smile to Hideharu's stupid joke, Shintaro was looking at him coldly.'

In this example, *saiwai-ni(-mo)* 'fortunately', a CP-adverb, is employed. This indicates that the temporal clause is CP, and NGC is possible. Note that the predicate is unergative, but NGC is still possible. Another prediction is that (31) also allows NGC since it is a relative clause that can be CP (at least FinP). Again, the prediction is borne out, and the sentence is still ambiguous.

(39) Watasi-wa [Junko-{ga/no} [Satosi-ga kaet-ta-to] it-ta] toki
I-TOP Junko-NOM/GEN Satoshi-NOM leave-PAST-C say-PAST time he-DAT
kare-ni at-ta.
meet-PAST
'I met Satoshi when Junko said that he left.'
HIGH: At the time when Junko spoke
LOW: At the time when Satoshi left

Then, the question is why the contrast in (26) is observed by speakers including Miyagawa (2012) at all. In fact, some of my language consultants state that the contrast in (26) is real whereas others see no difference in the acceptability. However, if we reinforce the CP structure like (38), the judgment becomes more uniform, allowing NGC (although there would be speakers who still reject genitive case in (38)). That is, the size of the clause where NGC applies affects the acceptability of NGC. In this connection, the acceptability of NGC has been sometimes pointed out to be something fluctuating, not clear-cut. This observation dates back to Harada (1971), and recently Nambu (2014) and Ogawa et al. (2018) analyze the acceptability of NGC statistically. Especially, Ogawa et al. (2018) find: (i) NGC is more acceptable with a

the combination of perfect Asp and nonpast/future T is possible, but only when the copula supports the relevant morphological sequence.

certain class of adjectives which they argue do not have to have VP, TP and CP, so that they are only AP, (ii) as the clause of NGC becomes bigger from VP to TP to CP, the acceptability goes down accordingly, (iii) the larger the structure of NGC becomes, the older people will accept NGC. These are interesting observations, to which I will come back in Section 6.

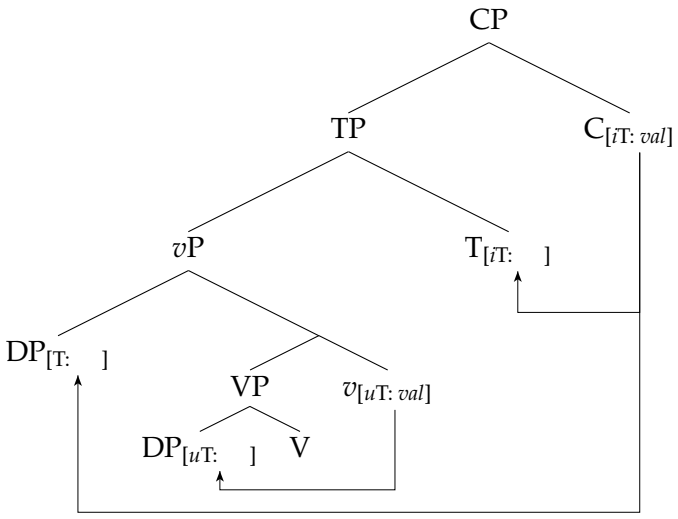
4 Toward a flexible theory of NGC: Tense and clausal nominalization

In this section, to explain the data we have hitherto discussed, I will propose a new, although greatly owed to the wisdom of previous researches, way to derive NGC. Concretely, assuming with Pesetsky and Torrego (2001, 2004) that traditional Case-features are T-features, I propose the following:

(40) a. The argument DPs enter into an Agree relation with some functional head to have their uninterpretable unvalued T-features valued.
b. T has an interpretable unvalued T-feature corresponding to the reference time, and C has a valued interpretable T-feature corresponding to the utterance/relative time (except the *no-da* construction to be discussed below).
c. When a given clause is nominalized, DPs that have their T-features valued inside the nominalized clause can be optionally spelled out in genitive case besides their usual cases like nominative or accusative case as long as morphology allows it.
d. The realization of case morphology is determined under the disjunctive case hierarchy proposed by Marantz (1992).

Let me explain (40) one by one. (40a) says that DPs are endowed with unvalued uninterpretable T-features in lieu of uninterpretable Case-features, and I assume that T-features cover both tense and aspect (cf. Svenonius 2002). Together with (40b), the clausal architecture where Agree applies to value DPs' T-features exhibits an affinity to the way temporal semantics is computed. For instance, consider (41), where I assume Pesetsky and Torrego's (2007) valuation-based Agree and Reverse Agree for the valuation of T-features (Wurmbrand 2014 among others).

(41)



Suppose that (41) is a matrix past sentence like *Taroo-ga hon-o kat-ta* 'Taro bought a book'. Then, C's T-feature is the utterance (speech) time (UT). Under the Reichenbach's (1947) tense logic,

past is derived by placing the reference time (RT) before UT. T is thus like a temporal adposition as Demirdache and Uribe-Etxebarria (2007) propose. I contend that Agree(C,T) establishes this RT < UT relation. *v*'s T-feature corresponds to event. Presumably, when T selects *v*P, *v*'s T-feature will be an input to the temporal trace function of T (i.e. $\tau(s)$) placed before UT.

Turning to (40c), following the tradition of the *Distributed Morphology* (DM), I propose that the nominal-category defining head *n* is merged to a given projection of the clausal spine. This rendition of nominalization liberates us from some assumptions such as Hiraiwa's (2005) inserting a [+N]-feature at Transfer or Watanabe's (1996) *wh*-agreement. Also, this lets us implement nominalization in various levels of a clause, whereas the presence of C is crucial for Hiraiwa (2001, 2005) and Watanabe (1996). Given that nominalization is possible in such various clausal levels as VoiceP/*v*P, TP, VP and even CP (Baker 2011, Harley 2009, Kornfilt and Whitman 2011), it is natural to assume that we simply merge a nominal head to some projection of a clause. As we will see, NGC is possible even in a structure smaller than TP. This is predicted by the proposed analysis, but not C-licensing.

For the case realization in NGC, DPs' uninterpretable T-features, once valued and deleted syntactically, can be spelled out as genitive as well as their usual case incarnation. In a sense, I treat genitive case and nominative case in NGC as the same as argued by Hiraiwa (2001, 2005) and Watanabe (1996). However, I include accusative case in this homogeneity. One may say that this wrongly predicates Accusative-genitive Conversion, but this will never happen, given (40d). That is, since I assume that case assignment is configurational (Aoyagi 2004, Bobaljik 2008, Marantz 1992), it obeys the case hierarchy in (42), where the rule application goes from left to right by referring to the c-command relation among DPs in TP; see Marantz (1992).

(42) Lexically governed case > Dependent case (ACC, ERG) > Unmarked case (NOM in a clause, GEN in DP)

Since (42) is a hierarchy, accusative case is always considered before nominative or genitive case is assigned. Thus, at the point of case calculation when NGC is considered, accusative case has already been assigned. That is, I assume that genitive case is not selected in the NGC context if there is a clausemate accusative case, which derives *Transitivity Restriction* (TR) widely discussed in the NGC literature.[11]

5 Explaining the pattern

5.1 Relative clause and NGC

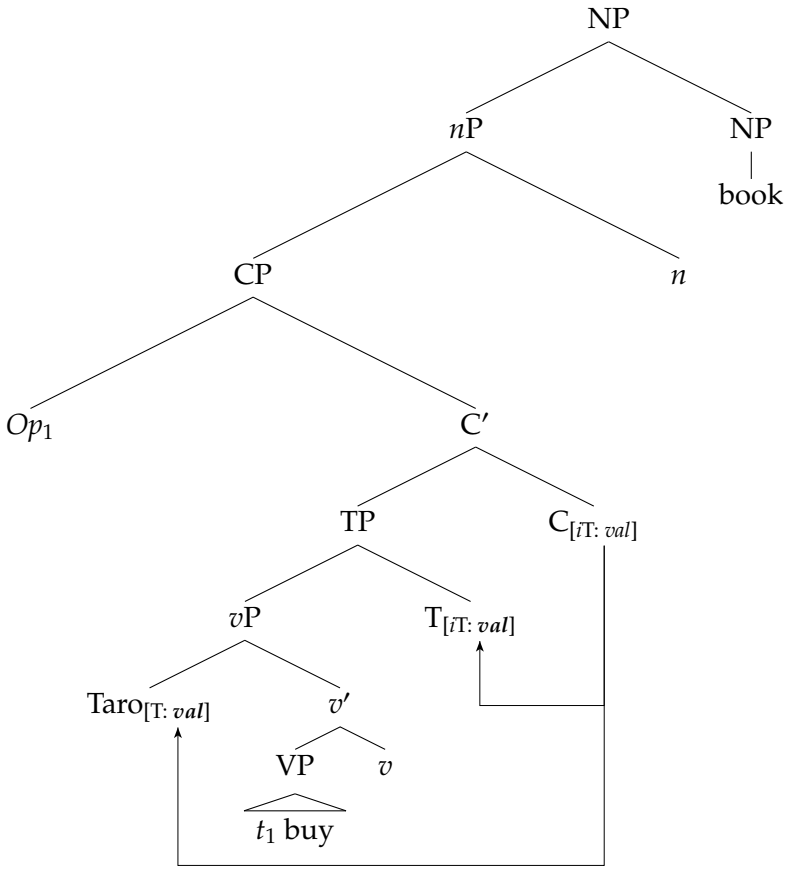
Let us start from the simplest case, namely (1), where the nominalizing head *n* selects the relative clause. I assume that *n* is semantically an identity function, so it simply takes and returns the semantics of the relative clause.

[11] Hiraiwa (2005) also considers TR as a morphological constraint as in (i)

(i) Acc-Nom Generalization
Spell-Out of morphological Accusative case is contingent on structural Nominative Case. (Hiraiwa 2005, 145, (3.141))

This sort of interdependence between structural Case and morphological case is also discussed by Baker (2015).

(43)



Then, when the Vocabulary Insertion (VI) applies (Halle and Marantz 1993), DP with unmarked case will get its phonological exterior as nominative or genitive case. TR does not intervene the morphological assignment of genitive case since there is no overt accusative case.

For the morphology of the verb, it should be that the P.-A. form is employed, although we do not have any overt distinction between the P.-A. form and the conclusive form, expect the copula, i.e. *na* vs *da*. Anyway, this is what Hiraiwa (2001, 2005) assumes. If the P.-A. form is invisibly active for all predicates in Japanese, we can capture this by simply assuming the morphological rule as in (44).[12]

(44) V-*v*-T-C ↔ P.-A. form / _____ *n*

Then, let us consider the tense interpretation of the relative clause. For example, consider:

(45) Hanako-wa [kinoo Taroo-{ga/no} kat-ta] hon-o sensyuu kat-ta.
Hanako-top yesterday Taro-nom/gen buy-past book-acc last.week buy-past
'Hanako bought the book the day before last week that Taro bought yesterday.'

Each of two past times in (45) is independently interpreted relative to the actual UT or the speech time $s*$. Therefore, to the extent that UT is introduced in C (Arregui and Kusumoto 1998), C of the relative clause and that of the matrix clause have their own T-features that correspond to $s*$.

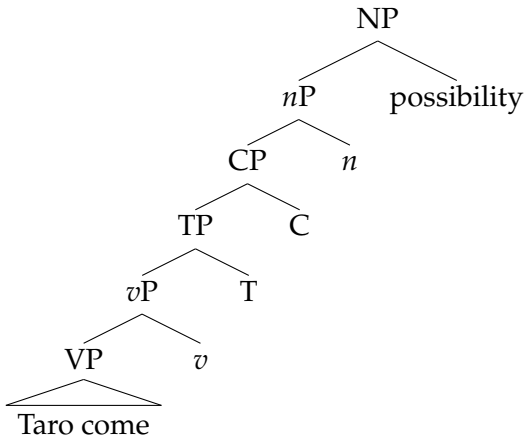
[12]The complex V-*v*-T-C may result from syntactic head-movement or morphological PF-merger. I leave open the question of which is the right choice.

Another case that may be relevant here is the appositive clause like (46).

(46) [Taroo-{ga/no} ku-ru] kanoosee
Taro-NOM/GEN come-NONPAST possibility
'possibility that Taro will come'

In this case, clausal nominalization applies via Merge(CP,*n*), which leads to the P.-A. form under (44).[13] The structure is thus (47), where the head noun selects the nominalized CP.

(47)



5.2 Why NGC is impossible in the *no-da* construction

Recall that the *no-da* clause cannot host NGC. For instance, we have (48).

(48) Taroo-{ga/*no} ki-ta no-da.
Taro-NOM/GEN come-PAST FN-COP.NONPAST
'It is that Taro came.'

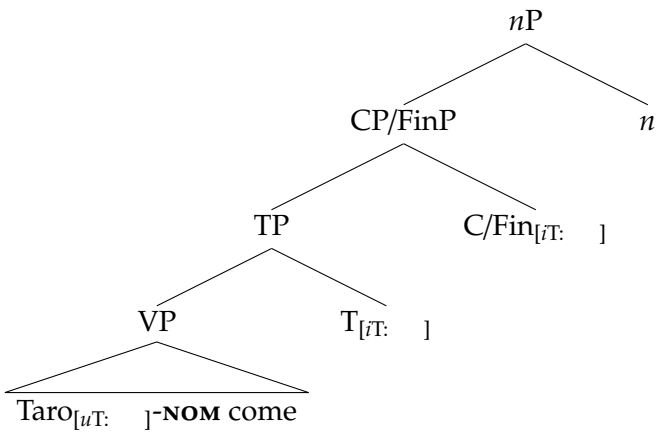
For the structure of the *no-da* clause, unlike Hiraiwa and Ishihara (2002, 2012), I propose a biclausal structure. To see this, let us start from the embedded clause of the *no-da* clause as in (49). Specifically, I argue that the embedded clause as CP/FinP lacks its own intrinsic T-feature value, so that it cannot Agree with the subject DP. Therefore, at the point when the embedded CP/FinP is constructed and its complement is Spelled-Out, the subject has its uninterpretable T-feature unvalued. Then, I propose that a DP with an unvalued T-feature cannot get a case morpheme under case competition in (42), although I assume that such a DP can be a case-competitor to assign a dependent case to another DP in the same case-competition domain. This is because uninterpretable features, unless valued and deleted, are illegitimate at the morphological component, i.e. a usual assumption in the generative framework. However, I do not assume that this leads to a derivational crash at the morphological component, since an elsewhere form of case is available. In principle, this is what Marantz (1992) terms "default case" that is computed after the hierarchical competition in (42) is all done.[14] Then, let us

[13] Admittedly, postulating *n* in the appositive clause as well as the relative clause itself is an assumption. But this should be theoretically on the right track if clausal nominalization is carried out by merging a nominalizing head (Kornfilt and Whitman 2011), and such a head is *n* in the DM framework.

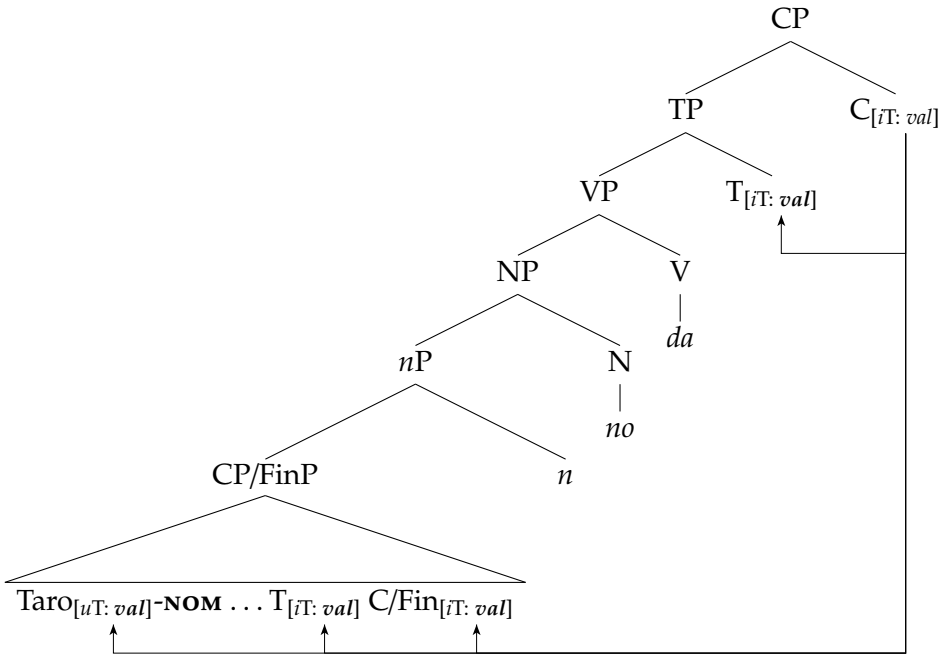
[14] I assume that the case morphology of a transitive clause is considered in terms of the whole CP (or its Spell-Out domain, TP). This assumption is utilized by many works such as Baker (2015), Bobaljik (2012) and Embick (2010).

assume that the default option in a clause is nominative in Japanese (cf. Fukui 1986). This much said, the derivation proceeds, constructing the matrix clause as in (50).

(49)



(50)



For (50), following Fox and Pesetsky (2005), I argue that the interior of the Spell-Out domain is still visible to later syntactic operations.[15] Therefore, the matrix C that has a T-feature value can value all the unvalued T-features in its c-commanding domain. The case of the embedded subject remains default nominative in spite of this Agree because it has been already determined in the previous cycle of the derivation.[16]

Baker argues that what has undergone Spell-Out is still visible for case determination by using his notion of *soft phase*, and Bobaljik and Embick also contend that the domain that is subject to freezing (under Chomsky's (2000) *Phase Impenetrability Condition*) and the domain that is accessible for rules of allomorphy are distinct.

[15]It is sometimes assumed that defectiveness of a given phase head dismantles its function to trigger Spell-Out. For instance, Takahashi (2011) proposes that the presence or absence of Case-features defines phasehood. However, I assume that the embedded C without T-value still triggers Spell-Out, especially to the morphological component. This could be implemented in the model of Spell-Out proposed by Richards (2013), who claims that the timing of Spell-Out to PF and that to LF can be different.

[16]Another possibility is that the embedded subject moves to the matrix clause, say Spec-TP as a derived subject

Then, a couple of clarification questions would arise, especially with respect to why the embedded C lacks a T-feature, and why I do not assume *no* is not Fin but a formal noun with a biclausal structure, unlike Hiraiwa and Ishihara (2002, 2012). To answer the first question, consider (51).

(51) a. Boku-wa [kinoo Taroo-ga Kyooto-ni tui-ta-no]-o kesa
I-sc top yesterday Taro-NOM Kyoto-at arrive-PAST-FN -ACC this.morning
kii-ta
hearPAST
'I heard this morning that Taro arrived at Kyoto yesterday.'

b. *Kesa Taroo-ga kinoo Kyooto-ni tui-ta no-da-ta.
this.morning Taro-NOM yesterday Kyoto-at arrive-PAST FN-COP.PAST
Lit. 'This morning, it was that Taro arrived at Kyoto yesterday.'

As in (51a), past under past is interpreted in such a way that the embedded past is relative to the matrix past, allowing two independent time adverbs. In contrast, this is impossible in (51b), which is temporally contradictory. I thus take this fact as indicating that the embedded clause of the the *no-da* construction lacks its own time. Then, the two past morphemes in (51b) are evaluated to one single time, namely the matrix UT as $s*$. Note that it is implausible to assume two instances of $s*$ in the matrix and embedded C. This is because if so, the temporal semantics of each clause would be interpreted independently, so that (51b) is predicted to be possible. Thus, what we want is (52a), not (52b).[17]

(52) a. $\exists t'[t' < s* \ \& \ \text{be}(t') \ \& \ \text{arrive(taro)(at-kyoto)}(t')]$
b. $\exists t'[t' < s* \ \& \ \text{be}(t') \ \& \ \exists t''[t'' < s* \ \& \ \text{arrive(taro)(at-kyoto)}(t'')]]$

Given the contrast in (51), the embedded C in (51a) has a T-feature specified as relative time to the matrix event time.[18] Therefore, Agree applies, so that the embedded C values the subject's T-feature.

For why I do not employ the structure proposed by Hiraiwa and Ishihara (2002, 2012), where *da* is located in the head of FocP, I point out that the matrix copula can be suffixed by the past marker as in (53). This shows that it is a usual verb.

(53) Taroo-ga ki-ta no-da-ta.
Taro-NOM come-PAST FN-COP.PAST
'It was that Taro came.'

However, Hiraiwa (2005) argues that focus particles like *-dake* 'only' cannot intervene between

position, as shown in (i).

(i) $[_{CP}[_{TP}\ \text{DP}_1\ [_{VP}\ [_{CP/FinP}\ \ldots t_1\ \ldots]\ \text{be}\ ]\ \text{T}\ ]\ \text{C}\ ]$

In this case, the T-feature of the subject DP will be valued by the matrix C before case calculation under (42). However, since the subject DP has now moved out of the nominalized embedded clause, the option of genitive case cannot be considered, hence nominative case.

[17]Here, I remain very sloppy for the semantics of the matrix copula, since it is orthogonal to the current purpose of my investigation. However, it may be that the copula takes some covert pronoun as its subject that is like a so-called *weather it* or *ambient it* in English, and links it to the embedded clause. If so, the semantics of the copula must be so updated.

[18]The choice of the relative time is obligatory in this context, presumably due to the fact that the matrix tense c-commands the embedded tense.

no and *da* as in (54b), which shows the different status of *no* in (54b) from that in (54a).

(54) a. Boku-wa [Taroo-ga Kyooto-ni tui-ta-no]-dake-o kii-ta
I-sc top Taro-nom Kyoto-at arrive-past-fn -only-acc hearpast
'I only heard that Taro arrived at Kyoto.'
b. John-ga genki-na no(*-dake)-da.
John-nom healthy-nonpast.adn fn-only-cop.nonpast
'John is only healthy.' (based on Hiraiwa 2005, 152, (3.157))

However, this is not only for the *no-da* clause itself. If the current analysis is on the right track, NP headed by *no* is a predicate, and the predicate NP in general resists the attachment of *-dake*. As in (55), if *-dake* attaches to a predicate NP, the host must include the copula that is conjugated in the P.-A. form (in the case of nominal particles like *-dake*). Probably, we can say that this is due to the predicate NP incorporating into the copula; anyway, what is important here is that we need not accept Hiraiwa and Ishihara's structure to exclude (54b).

(55) a. *Taroo-ga kodomo-dake-da.
Taro-nom child-only-cop.nonpast
Intended 'It is only that Taro is a child.'
b. Taroo-ga kodomo-na-dake-da.
Taro-nom child-cop.adn-only-cop.nonpast
'It is only that Taro is a child.'

Finally, Negative Concord Items (NCI) like *-sika* 'only' that are in need of clausemate negation cannot be licensed by the matrix negation as the contrast in (56) shows, which indicates that the *no-da* construction is biclausal, setting aside the exact mechanism of how to license NCI.

(56) a. Taroo-sika ko-naka-ta no-da.
Taro-only come-neg-past fn-cop.nonpast
'It is that only Taro came.'
b. *Taroo-sika ki-ta no-dewanai.
Taro-only come-past fn-cop.neg.nonpast
Intended 'It is that only Taro came.'

Summing up, the impossibility of NGC is explained in terms of the absence of T-feature in the embedded clause, which nicely fits the temporal interpretation of the *no-da* construction.

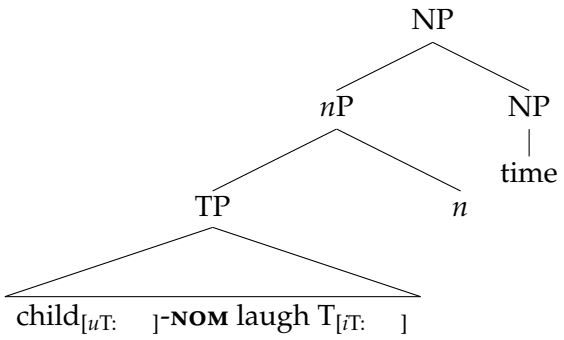
5.3 The unaccusative vs. unergative contrast in the dependent tense context

As we saw in Section 3, in the temporal adjunct clause introduced by *toki* 'time', unergative verbs are not readily compatible with NGC, although they are nevertheless fine with NGC under a certain grammatical setting (i.e. (38)). What does the fact Miyagawa (2012) points out imply? Why are his examples not so good or impossible for a certain group of Japanese speakers? In fact, they tells us much more about NGC than they are supposed to. As we discussed, the acceptability of NGC examples is not absolute, so speakers vary for it: some prefer a certain set of examples to others, but others do the other way around.

To explain the disparity observed in the relevant judgement among speakers, I argue that for those who do not accept unergative verbs with NGC, the temporal adjunct structure lacks CP, so that $s*$ is missing. Consider (57), where I ignore *wh*-movement for simplicity's sake. In

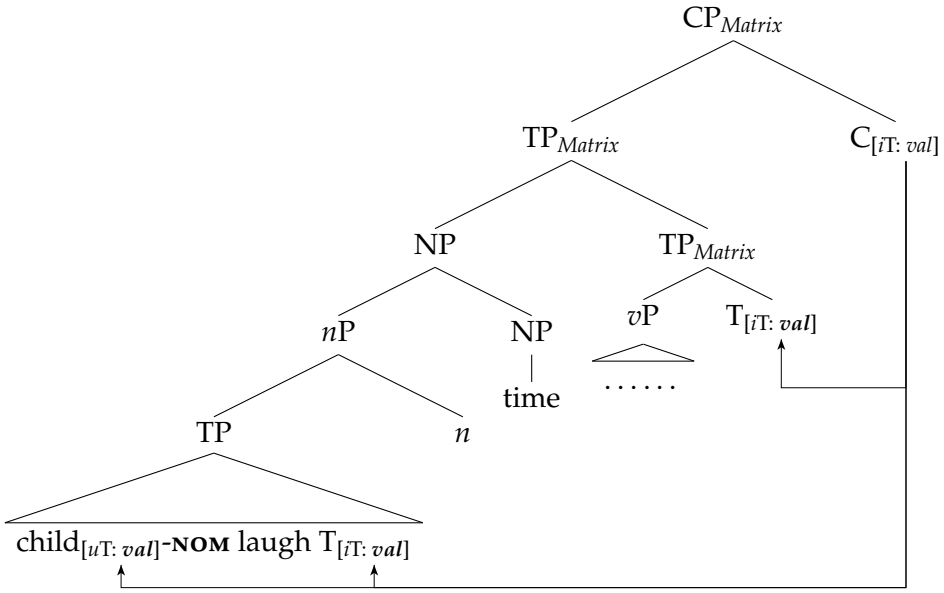
this structure, the subject DP cannot have its T-feature valued due to the lack of C. In this sense, this is a case of TP-nominalization by merging *n* to TP (cf. Yoda 2013, 85, (51c)). Given that adjuncts constitute their own Spell-Out domain (Uriagereka 1999), the subject in the temporal adjunct clause will be sent to the morphological component without T-value. Therefore, it gets a morphologically default case, hence nominative case, just like the *no-da* construction.

(57)



As we discussed, the top node of NP denotes type of $\langle i, t \rangle$, a set of time intervals. Therefore, (57) will be combined with the matrix TP. After the matrix C is merged, all the unvalued T-features are valued. This derives the simultaneous reading as Arregui and Kusumoto (1998) observe.

(58)



Now, what will happen to the cases where we need the relative tense. As we saw, the relevant tense combination is such that the tense of the matrix clause is nonpast/future whereas the embedded tense is past/perfect relative to the matrix event time. For instance, we have (59).

(59) [Taroo-{ga/no} odot-ta toki] min'na-wa bikkuri-su-ru-daroo.
Taro-NOM/GEN dance-PAST time everyone-TOP surprise-DONONPAST-MODAL
'When Taro dance, everyone will be surprised (to see how he dances).'

I do not give a grammatical judgment. Some may find (59) acceptable while others do not. If one likes this example with the genitive subject, that means s/he employs (37a), and if not, (37b) is the option, since the latter lacks TP/CP.

Then, the question is why unaccusative verbs are more likely to be accepted with NGC. For this, I conjecture that since the subject is an internal argument, it Agrees with unaccusative v. This departs from Chomsky's (2000) *Phase Theory*. However, since we use T-features instead of Case-features that are available only to (strong) phases by assumption, it is possible to assume that even unaccusative v encodes its own event information in the form of T-feature. If so, the internal argument of an unaccusative predicate can have its T-feature valued by unaccusative v, which is congenial to the analysis by Miyagawa (2012) in that weak v licenses NGC in the temporal adjunct clause. After the internal DP and weak v Agree for the T-feature valuation, genitive case or nominative case will be selected under (40c), so whether the temporal adjunct clause is CP or TP/AspP does not matter.

5.4 NGC and *v*P-nominalization

The current analysis does not hinge on C-licensing and D-licensing for NGC, and what's more, the nominal status of the clause that hosts NGC is also not attributed to the P.-A. form that Hiraiwa (2001, 2005) argues involves C. All the current analysis needs for the genitive subject are: (i) T-feature and (ii) clausal nominalization via n. Therefore, the genitive subject and the P.-A. form are just side effects of these. Then, one prediction from the proposed mechanism is that NGC is possible even in a very low area in the clause. That is, n does not attach to CP or TP. I argue that this state of affairs is exemplified in the following example.

(60) Han'nin-{ga/no} tukamari-sidai, renraku-o kure.
criminal-NOM/GEN catch.ITV.CONT-order call-ACC give.IMP
'Give me a call, as soon as the criminal is caught.' (based on Kobayashi 2012, 8, (28), gloss is mine)

As noted by Kobayashi (2012), the verb form is not in the P.-A. form but in the continuative (Cont.) form, aka. *renyou-kei* in the pedagogical Japanese grammar. In (60), the verb in the Cont. form is combined with a nominal head *sidai* 'order', which functions as if it is a temporal connective meaning 'as soon as'. Setting aside the details of the Cont. form (see Yoda 2013 and Volpe 2005), we can see that the verb suffixed by *sidai* projects at least *v*P, since accusative case can be assigned to the object as in (61).

(61) [Han'nin-ga nani-ka utagawasii ugoki-o mise-sidai] renraku-o kure.
criminal-NOM what-Q suspicious move-ACC show.CONT-order call-ACC give.IMP
'Give me a call as soon as the criminal tries to do any suspicious move.'

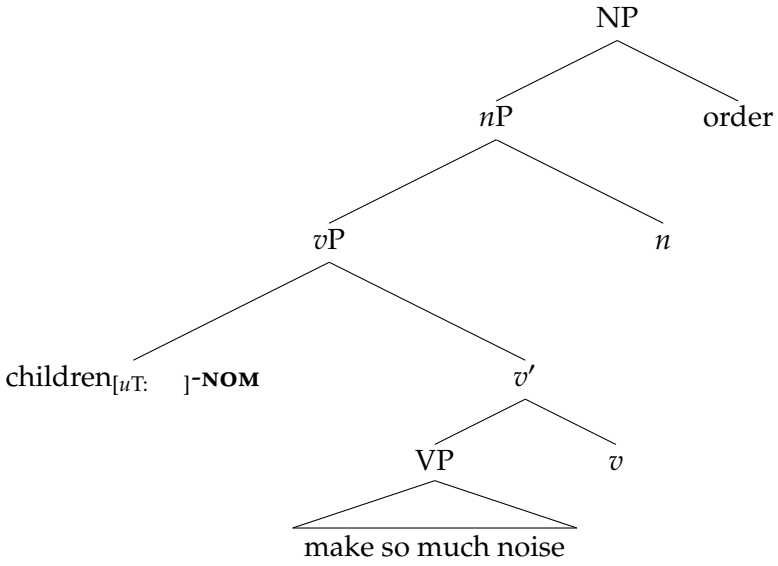
As I said, the verb morphology lacks a tense suffix, so T and C can be regarded as absent. This then predicts that unaccusative verbs are compatible with NGC, whereas unergative verbs are not, which is indeed the case as shown in (62).

(62) Zisyuutyuusitu-de kodomo-tati-{ga/*?no} sawagi-dasi-sidai,
study.hall-in child-PL-NOM/GEN make.so.much.noise-start.CONT-order
sensee-ni renraku-site.
teacher-DAT call-do.IMP
'Let the teacher know as soon as the children start making so much noise in the study hall.'

The impossibility of the genitive subject in (62) can be understood in terms of the lack of a

T-value assigner for the subject DP. I thus propose the following structure:

(63)

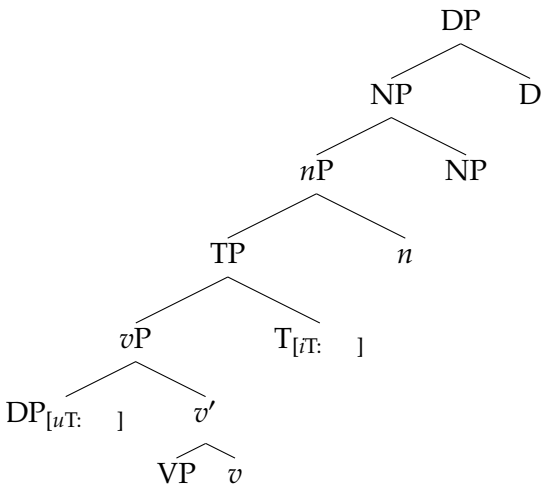


Since the clause introduced by *sidai* 'order' is an adjunct, it constitutes an independent Spell-Out unit (Uriagereka 1999). Therefore, (63) will be sent to the morphological interface, where the offending unvalued uninterpretable T-feature will be salvaged by default case, so that the subject will get nominative case. However, the interior of the adjunct clause is syntactically visible, so Agree into the adjunct clause is possible. The unvalued T-feature will thus be valued and deleted by Agree with the matrix C. The derivation will converge.

6 D-licensing back again: Shrinking clausal nominalization

The present analysis allows clausal nominalization to occur in various levels of a clause. Then, there is nothing wrong if the relative clause is TP, insofar as tense semantics works well. If so, the relative clause as TP may involve *wh*-movement to Spec-TP, or it does not involve such a movement with *pro* serving as a variable (Murasugi 1991). Whichever it is, the structure is compatible with what Miyagawa (2011) proposes; consider (64).

(64)



Here, *n* nominalizes TP, and C is absent, so the subject DP and T have their T-features unvalued. To derive the genitive subject in (64), let us assume with Baker (2015) that D is a phase, and that when its Spell-Out domain has a case-less DP, genitive case will be assigned to it. In this sense, genitive is the default case of the nominal domain defined as the Spell-Out domain of D. Although I do not assume, unlike Miyagawa (2011), Agree(D,DP) by which D assigns genitive case to the subject DP, the idea that D plays the deterministic role of NGC essentially replicates the D-licensing tradition.[19] The value of the T-features in the relative clause will come from the matrix clause. If it is assigned by the matrix *v*, it will be the event time *v*P denotes. If it comes from the matrix C, it will be the speech time.[20]

Then, suppose that case morphology is hosted by D. This predicts that even those who reject genitive case for the subject of unergative verbs in the adjunct *toki* 'time' clause, adding a case particle to such an adjunct clause sanctions the genitive subject, as pointed out by Miyagawa (2012). Compare (65) with (26a).

(65) [Kodomo-{ga/no} warat-ta toki]-ni, tonari-no heya-ni i-ta.
child-NOM/GEN laugh-PAST time -DAT next-GEN room-in COP-PAST
'When the child laughed, I was in the next room'

The temporal adjunct in (65) is attached by a dative case marker, and it may involve the CP structure or the TP structure. Even if the latter is selected, genitive case is possible (or obligatory) due to the presence of D.

The current analysis also captures TR in the TP-nominalized relative clause, since the default case in the Spell-Out domain of D is genitive, which is however incompatible with accusative case. Therefore, if accusative case is assigned in the earlier stage of the competition hierarchy in (42), the default genitive case cannot be used. Since the default nominative case cannot also be used in this context, the structure in (64) necessarily fails, which in turn forces us to employ the CP relative clause. This is virtually the same state of affairs in (3) from Miyagawa (2011).

Now, let us consider what the current analysis implicates in the unequivocal acceptability judgements of various kinds of NGC among Japanese speakers. In this connection, Ogawa et al. (2018) and their related works observe that the frequency of the genitive subject has been declining in the last 100 years or so, stating that stative predicates are more acceptable with NGC than eventive predicates, and that younger generation is less likely to accept NGC. Assuming with Ogawa et al. (2018) that eventive predicates need CP (and TP), these data facts indicate that genitive case has been taken over by nominative case in the nominalized CP domain. Historically speaking, in Classical Japanese, both *-no* and *-ga* were employed as nominative case as well as genitive case, and as time went by, *-no* became the genitive/possessive marker whereas *-ga*, the nominative marker. The choice of *-no* and *-ga* in Classical Japanese is

[19] One may ask whether the relative clause is independently Spelled-Out. One possible phase head is *n*. However, even if so, I suggest that its Spell-Out does not apply at the point of (64) (cf. Embick 2010). Another conceivable way of Spell-Out is due to the adjunct status of the relative clause. As I assume throughout this paper, adjuncts undergo Spell-Out independently of that triggered by phase heads, namely *Multiple Spell-Out* in the sense of Uriagereka (1999). Then, the subject DP would get default nominative. However, we can also consider the relative clause to be a complement if Kayne's (1994) head-raising analysis is correct. Yet another possibility is that D directly selects the relative clause and the head NP adjoins to the relative clause via Late Insertion (Lebeaux 1988), and there should be nothing wrong in this derivation, at least semantically. In any case, I assume that D is the first phase that triggers Spell-Out in (64).

[20] Since examples like (45) allow the tense of the relative clause is independently construed relative to the speech time, when such an interpretation is selected, the object DP with the relative clause moves to the edge of *v*P before *v* values the T-features of T (and the subject DP) in the relative clause.

said to have been dependent on the meaning of a host DP. For instance, a given DP referring to someone that had a socially superior position was more likely to appear in genitive case, and chances are that *-ga* was more likely to be used to mark various kinds of entities, which may have led to the modern usage of *-ga* as the nominative marker (Yamaguchi 1985; also, see Yamamoto 2007). Then, the usage of *-no* in the nominalized CP clause under NGC is not a genuine instance of genitive case, but it is in fact nominative case, presumably a residue of Classical Japanese, i.e. nominative in disguise (NinD) in the sense of Watanabe (1996). Given this, the genuine instances of NGC dubbed Harada's (1971) Dialect A/B, that is, those cases where *-no* and *-ga* (relatively freely) alternate to pronounce nominative case in the nominalized CP have been losing their positions in the (morphological) grammar of Modern Japanese, if Ogawa et al. (2018) are on the right track.

Given all the discussion above, several kinds of confusion observed all over the previous researches, e.g. that some people prefer D-licensing to C-licensing while others do the other round, and that some people like Miyagawa's (2011) judgement while others do not, etc., can be understood to mean that *-no* as NinD has been mixed up with *no* licensed by D, and the former is getting closer to death as Ogawa et al. (2018) show. Thus, when we consider NGC in Japanese, we need to distinguish the two of them from each other.

Then, whether one accept the genitive subject is regulated by the following two factors: one is whether one can accept NinD, and the other is whether one always constructs CP even when a given sentence can be structured as small as e.g. VP/AP. For instance, consider:

(66) [me-no kiree-na] on'nanoko
eye-GEN pretty-COP.ADN girl
'girl whose eyers are pretty'

The predicate here is what Ogawa et al. (2018) call *Possessive Adjective* (PA), and NGC with PA can be accepted by (almost) all the speakers and generations they statistically surveyed. Interestingly, the copula in the P.-A. form has no tense marker. Then, departing from Nishiyama (1999), let us assume that *-na* can be realized without T and C. Since the copula is located in Pred under Nishiyama's (1999) analysis, we can provide a structure like (67), where the merger of *n* results in the copula plus *n* spelled out as *-na*.[21] However, we can also think like (44) of the morphology realizing *-na* from Pred-V-T-C-*n* as Nishiyama argues, so the relative clause in (66) can be ambiguous.

(67) $[_{NP}\ [_{nP}\ [_{PredP}\ [_{AP}$ eyes pretty] $\underbrace{\text{COP.ADN}\ ]\ n}_{\textit{-na}}\ ]$ girl]

However, Ogawa et al. (2018) maintain that when choices of this sort are compared, the simpler structure is the option in learning a language due to the *Minimal Structure Principle* proposed by Bošković (1997).

(68) *Minimal Structure Principle* (MSP)
Provided that lexical requirements of relevant elements are satisfied, if two representations have the same lexical structure and serve the same function, then the representation that has fewer projections is to be chosen as the syntactic representation serving that function. (Bošković 1997, 25)

[21] For Ogawa et al. (2018), PA only projects AP.

Under MSP, the relative clause in (66) is PredP (nominalized by *n*). Therefore, the genitive case there cannot be NinD, and even those who do not accept it allow (66) due to D-licensing. Obviously, such speakers cannot get a genitive subject in examples like (38). One caveat to mention at this point is however that the current analysis does not force learners to follow (68). Namely, for some speakers, all the nominalized clauses are CP under some default template of the clausal architecture, except some clear cases that signalize smaller clauses, e.g. (60). In this sense, some nominalized clauses can be shrunk for some speakers, and they are not for others. To illustrate this point, recall what we discussed for the temporal adjunct clause headed by *toki* 'time', which at least needs TP (or AspP). Since it does not have an external D, the only source of the genitive subject (for unergative verbs) is NinD, and this requires the presence of C with a valued T-feature. But this option is less likely for young speakers. Also, Miyagawa's (2011) diagnostics we discussed in Section 2.1 are appropriate only for those speakers who use TP relative clauses for NGC.

To recap, the above-mentioned intricate factors are intertwined, giving rise to the complex state of affairs in the study of NGC. In this sense, both C-licensing and D-licensing are correct, but both of them are insufficient in that they try to derive all the genitive subjects under the same mechanism, save for Miyagawa's (2012) attempt.

7 NGC in the double-nominative construction

Before we conclude this paper, let us consider another phenomenon discussed by Hiraiwa (2001, 2005) and pointed out by Ochi (2017) to be problematic for D-licensing. The relevant examples are give in (14), repeated here:

(69) a. [Totemo yoku John-ga nihongo-ga hanas-er-u] riyuu
very well John-NOM Japanese-NOM speak-can-NONPAST.ADN reason

b. [Totemo yoku John-no nihongo-ga hanas-er-u] riyuu
very well John-GEN Japanese-NOM speak-can-NONPAST.ADN reason

c. [Totemo yoku John-ga nihongo-no hanas-er-u] riyuu
very well John-NOM Japanese-GEN speak-can-NONPAST.ADN reason

d. [Totemo yoku John-no nihongo-no hanas-er-u] riyuu
very well John-GEN Japanese-GEN speak-can-NONPAST.ADN reason

'the reason why John can speak Japanese very well'

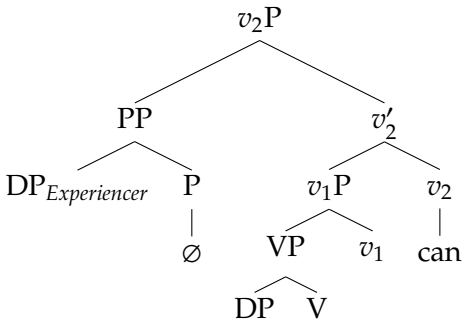
(based on Hiraiwa 2005, 119, (3.65))

It is sometimes argued that the nominative object obligatorily takes higher scope over negation and potential. Based on this, nominative case on the object is sometimes considered to be assigned/checked by, and (covertly) raised to, T (Sano 1985, Tada 1992). However, recent studies such as Nomura (2005), Takahashi (2011), Takano (2003) and Shimamura and Wurmbrand (2014) show that the nominative object allows the reconstructed reading. This can mean that the nominative object is licensed in its based position, and then moved/QRed to scope over negation and potential when necessary. Since we dissociate the morphological case from the structural licensing via T-feature, we do not have to assume the tight connection between case morphemes and the pertinent scope interpretations.

Then, I argue that nominative case appears on the object because the experiencer subject does not c-command the object. To be specific, following Landau (2009) and Rezac (2008)

among others, I contend that the experiencer is introduced as PP. Given this, the experiencer subject DP does not c-command the object DP as in (70), so both of them get nominative case (Baker 2015). Note that we do not need assume that v suffixed by the potential inflection has no power to value the T-feature of the object, unlike e.g.Ura (2000), who assumes that the potential suffix optionally deprives v of the ability to assign structural accusative Case. v has its own T-feature value. Then, I propose (70), where I assume that the potential suffix heads another vP (cf. Takano 2003).

(70)



In (70), the T-feature of the experiencer DP is valued by P if P also has its own valued T-feature: P is self-sufficient as Pesetsky and Torrego (2004) argue. Since either of the DPs c-commands the other, the subject DP and the object DP can both get either of *-ga* (nominative case) or *-no* (NinD), so that all the case-arrays in (70) are derivable.

Let us assume that the inherent/lexical case involves the same PP structure (Baker 2015). Then, the proposed analysis can also explain the DAT-NOM/GEN array. Crucially, accusative case is not allowed on the object as shown in (71).

(71) [Totemo yoku John-ni nihongo-{ga/no/*o} hanas-er-u] riyuu
very well John-DAT Japanese-NOM/GEN/ACC speak-can-NONPAST.ADN reason
'the reason why John can speak Japanese very well.'

Here, I assume that the dative case *-ni* in (71) is the overt realization of P, and that *-ga* must be morphologically deleted when *-ni* is overt. This assumption is motivated since nominative case is replaced by other particles like *-wa* (topic) and *-mo* 'also' (focus), as pointed out by Richards (2013), hence *Taroo(*-ga)-wa/mo*. If these particles are attached to a give DP in addition to nominative case with the deletion of nominative case, case morphemes can also stack, but only the outer case is realized (but see Baker 2015 and Levin 2017 for Korean). Since the object is not c-commanded by the subject, it cannot get a dependent case, i.e. accusative case.

Notice that Spec-v_2P is not filled in (70). Since the PP argument should serve as both the experiencer of v_2 and the agent of v_1, it must be in Spec-v_1P. One possible way to satisfy this requirement is to have PRO as Takano (2003) does. However, this leads to another question under the PP analysis of experiencer, namely whether PP can control PRO. I thus suggest another strategy. That is, I assume with Shimamura and Wurmbrand (2014) and Wurmbrand (2014) that the "argument-of" relations are established by valuing ϕ-features of v/V via (Reverse) Agree. To render this possible, I also adopt Rezac's (2008) idea that PP becomes ϕ-transparent for its complement DP through Agree(P,DP). This much said, the theta relations in (70) can be obtained as follows:

(72) $[_{v_2P}\ [_{PP}\ \mathrm{DP}_{[\phi:\ val]}\ \mathrm{P}_{[\phi:\ \boldsymbol{val}]}\ ]\ [_{v_1P}\ \ldots\ v_{1[\phi:\ \boldsymbol{val}]}\ ]\ v_{2[\phi:\ \boldsymbol{val}]}\ ]$

Given the current analysis, one may say that the NOM-ACC array in (73), which is regarded as the basic case alignment in the literature, cannot be derived.

(73) [Totemo yoku John-ga nihongo-o hanas-er-u] riyuu
very well John-NOM Japanese-ACC speak-can-NONPAST.ADN reason
'the reason why John can speak Japanese very well.'

However, I maintain that this is also derivable, since we can also base-generate the external argument in Spec-v_1P. It is not a base-generated experiencer, so it is not realized as PP but DP. Then, it can move to Spec-v_2P, valuing the ϕ-features of v_2. This is in principle the same as what Hornstein (1999) argues for θ-roles. In this case array, genitive case cannot appear on the subject due to TR.

8 Conclusion

In this paper, we have investigated the nature of NGC in terms of tense (T-feature) and different sizes of clausal nominalization. The proposed analysis not only captures the relevant data of NGC discussed in the literature (both D-licensing and C-licensing) but explains why the judgements of NGC examples are divergent among speakers. The central claim is that the genitive subject results from two mechanisms: one is NinD in the context of clausal nominalization, which descends from Classical Japanese and is now getting closer to extinction, and the other is Spell-Out by D. These two modes of case assignment are morphological processes, but syntax also plays an important role as the tradition of Case-features does, since argument DPs are in need of the valuation of their T-features, which then explains various impossible cases of NGC such as the *no-da* construction and Miyagawa's (2012) dependent tense. As I said in the beginning of this paper, the current analysis is a serious attempt to study NGC in terms of the case assignment as a post-syntactic operation (Bobaljik 2008, Marantz 1992, McFadden 2004, Levin 2017, i.a.). Insofar as the proposed mechanism of NGC is on the right track, it will be a welcome result for such a perspective toward the case theory.

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