A Further Step towards a Minimalist Analysis of Japanese *-no*

Abstract. This paper examines the Japanese particle *no* in the possessive and qualitative/modification constructions by comparing it to Kayne's (1994) analysis of the French particle *de* in his Antisymmetry Framework, and proposes that these complex noun phrases in Japanese are best analyzed as involving subject relativization out of reduced relative clauses. I present new data, which falsify the well-accepted idea that *no* in the modification construction is a meaningless particle inserted at PF simply for morphological adjustment (Watanabe 2010). I also discuss the NP-ellipsis pattern, which has motivated the traditional dichotic approach in Japanese literature, and show that a consensus that the availability of NP-ellipsis depends on the argument status of the stranded possessor cannot be maintained once a wider range of data are taken into consideration. Lastly, arguments against den Dikken & Singhapreecha's (2004) predicate inversion analysis of *no* are presented.

1. Introduction

This paper deals with the Japanese particle *no* in the possessive (1a) and qualitative or attributive modification constructions (1b) in the framework of Kayne's (1994) Antisymmetry Theory, which assumes a head-raising analysis of relative clauses and the universal Spec-Head-Complement order.[1]

(1) a. Ken no {kuruma/ude}
Ken NO {car/arm}
'Ken's {car/arm}' [(In)alienable possession]

b. (i) namakemono no isya
idle.fellow NO doctor
Lit. 'the idler of a doctor' [qualitative]

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[1]The particle *no* is glossed as NO throughout this paper, in order not to bias the analysis.

(ii) pinku no kooto
pink NO coat
'a pink coat' [modification]

Note that the Japanese literature does not distinguish qualitative nominals from modification nominals, but subsumes the former under the latter and treats them uniformly as non-possessives.

Although quite a few languages use a meaningless linking element in both possessives and qualitative or modification constructions (e.g, English *of* (for inanimate possessors), Dutch *van*, Italian *di*, French *de*, Spanish *de*, Portuguese *de*, Catalan *de*, Mandarin Chinese *de*), distributions of particles differ in terms of the type of a modifier XP it may introduce. Japanese *no* is similar to French *de* in restricting its modifying elements to be non-finite XPs, as illustrated in (3a, b). In contrast, some languages like Mandarin use the same linking element (i.e, *de*) to introduce non-finite modifiers (2b) as well as finite or full relative clauses (3c).

(2) a. la voiture de Jean [French]
the car of John
'John's car'

b. wo de shu [Mandarin]
I DE book
'my book'

(3) a. kimi-ga kai-ta (*no) hon [Japanese]
you-NOM write-PST *NO book
'the book you wrote'

b. la fille {*de/que} tu connais [French]
the girl {DE/that} you know

c. ta xihuan de na (yi)-ge haizi [Mandarin]
he like DE that one-CL child
'the child that he likes' (Huang, et al. 2009:214)

Taking advantage of the rich research on French possessive and qualitative constructions, this article aims to understand the nature of Japanese *no* in complex nominals by comparing its distribution to that of French *de*. Den Dikken (1998) and den Dikken and Singhapreecha (2004) treat

Japanese *no* in the two constructions similarly to French *de* or Mandarin *de* and analyze it as a nominal realization of the copula inducing DP-internal predicate inversion (i.e, A-movement). In contrast, the Japanese literature generally takes a dichotic approach to the *no* particle, assuming that *no* in the possessive is 'the genitive case marker,' while *no* in the modification construction is 'the modification marker' (Kitagawa & Ross 1982) or 'the attributive form of copula' (e.g, Kuno 1973, Okutsu 1976).[2] These previous proposals will be discussed in sections 4 and 5. While building on the combination of findings from previous studies, I pursue a different analysis, which shares some fundamental insights from Kayne's (1994) analysis of French *de* as a prepositional complementizer. Specifically, I propose that all contexts where *no* appears in the form of [XP-no NP] have a common substructure involving 'relativization,' while adopting the idea advanced by den Dikken (1998, 2006) that these nominal constructions have the subject-predicate small clause as an underlying structure.[3]

1.1 French de

The parallelism between clausal and nominal structures has received much attention (e.g, den Dikken 1998, 2006, Kayne 1994, Koopman 2005, see also Zagona 2013, for a list of references). Kayne (1994: 103, 106) analyzes possessive and qualitative constructions uniformly, as illustrated in (4ai) and (4aii) respectively, and draws our attention to their parallelism to a full relative clause, with D/P^0*de* corresponding to C^0*that*, as shown in (4b).

(4) a. (i) la [$_{D/PP}$ voiture$_j$ [de [$_{IP}$ Jean [I^0 [e]$_j$ …
the car DE John

[2]The terminology of *no* in the modification construction in fact varies across researchers. Some other terms used are a contextual Case marker (Saito & Murasugi 1990, Saito, Lin & Murasugi 2008), a genitive linker (Hiraiwa 2012a), an appositive genitive particle (Hiraiwa 2012b), a meaningless linking element inserted at PF (Watanabe 2010). I will generally use the term the modification marker *no* (Kitagawa & Ross 1982) when discussing the literature.

[3]Japanese *no* is a multifunctional particle (e.g., Kuno 1973; Kitagawa & Ross 1982; Murasugi 1991; Kuroda 1992, 1999; Hiraiwa 2005; Watanabe 2010). Although literature does not agree in terms of the exact number of homophonous *no* particles Japanese has, three functions have been commonly distinguished based on its syntactic distribution: (i) a genitive case marker (and/or modification marker), (ii) pronoun, (iii) complementizer/nominalizer. This paper concerns only with the (i) use of *no*.

(ii) cet [$_{D/PP}$ imbécile$_j$ [de [$_{IP}$ Jean [I^0 [e]$_j$ …
that imbecile DE John

b. the [$_{CP}$ car$_j$ [that [$_{IP}$ John owns [e]$_j$ …

In (4ai) and (4aii), the underlying non-finitie IPs consist of the subject-predicate structure and the predicate NPs A'-move to the Spec of *de*. The interpretive difference between (4ai) and (4aii) arises from the relations the subject and predicate establish within the IP. However, there are some asymmetries the two constructions exhibit and positing the common substructure and derivation does not straightforwardly account for such asymmetries.

For example, Hulk & Tellier (2000:36; H&T) show that there are agreement mismatches in gender, as illustrated in (5).

(5) a. Le$_{masc}$ film$_{masc}$ de cette réalistarice$_{fem}$ est {fascinant$_{masc}$ / *fascinante$_{fem}$}
the film of this director is fascinating
'This director's film is fascinating.' [Possessive]

b. Ton$_{masc}$ phénomène$_{masc}$ de fille$_{fem}$ est bien {*distrait$_{masc}$/distraite$_{fem}$}
your phenomenon of daughter is quite absent-minded
'Your phenomenon of a daughter is quite absent-minded.' [Qualitative]

When the two nouns have different gender features, an external adjective or participle agrees in gender with the noun preceding *de* in the possessive construction (5a), while it agrees with the noun following *de* in the qualitative construction (5b). This contrast has led them to conclude that the noun preceding *de* is the head in possessives, while the noun following *de* is the head in qualitatives. Further, possessives and qualitatives differ in terms of the extractability of *de*-NPs: the *de*-NP may be relativized in possessives but not in qualitatives (H&T 2000:40).[4] To capture these differences, H&T (2000:39-40) propose that the head of each nominal construction is the small clause subject in the underlying subject-predicate structure, as illustrated in (6).

[4]The term NP is used in this article as a cover term for a nominal constituent, including DP or QP, with no theoretical significance implied. Thus, the *de*-NP here means the particle *de* and the nominal constituent following *de*.

(6) a. $D^0 \ldots [_{NumP}$ copain$_i$ Num^0 $[_{FP}$ $[_{NP}$ t$_i$] $[_{F'}$ $[_{F0+P}$ de] $[_{PP}$ t$_p$ Julien]]]]
friend DE Julien
'a friend of Julien's' [Possessive]

b. $D^0 \ldots [_{NumP}$ imbécile$_i$ $[_{Num0+F0+Q0}$ de] $[_{FP}$ $[_{NP}$ garçon] $[_{F'}$ t$_F$ $[_{QP}$ t$_Q$ t$_i$]]]]
idiot DE boy
'an idiot of a boy' [Qualitative]

H&T take the possessor in (6a) to be a locative (or a dative, in den Dikken's (1998) terms) and the possessed object to be the FP small clause subject. The possessed NP *copain* raises to Spec,NumP for agreement with Num^0 and a nullP must incorporate into F^0 to be licensed. In the qualitative construction like (6b), assuming that indefinite determiners are not generated under D^0 (e.g, Kayne 1994:86, Perlmutter 1970), they propose that what F^0 selects is QP, headed by an operator head lacking phi-features and in need of licensing through incorporation. The incorporation of Q to F^0 yields *de* because it bears operator features, and needs to be spelled out. Then to generate the correct surface order, the nominal predicate raises to Spec,NumP and the F^0 head raises to Num. Consequently, in H&T's structure, the fronted constituent is the possessed object in possessives while it is the nominal predicate in qualitatives. Further, H&T attribute the asymmetry in terms of extractability to the fact that the *de*-NP in only possessives is a maximal projection FP, while it is not in qualitatives, but a Num^0.

Equipped with the French data and analyses, we now return to Japanese complex nominals. The next section introduces basic facts concerning the possessive and qualitative or modification constructions in Japanese and motivates the current proposal that these complex noun phrases in Japanese involve subject relativization out of reduced relative clauses. Section 3 lays out the proposal for the two constructions in detail, and explains how the specifier property of *no* is responsible for generating head-final reduced relative clauses. Section 4 discusses the standard dichotic treatment of the particle *no* in Japanese literature, and discusses an NP-ellipsis phenomenon. Some arguments against den Dikken's (2006) proposal of *no* being a nominal copula inducing DP-internal predicate inversion are presented in section 5 and section 6 concludes.

2. Towards a unified treatment of possessive and modification constructions in Japanese

The Japanese possessive construction is basically a mirror image of the French possessive construction, with the possessor preceding the possessed NP. Both possessive constructions encode not only core alienable and inalienable possessions but a variety of semantic relations. The following shows some representative examples of Japanese possessives (with the so-called genitive Case *no*, see also Hiraiwa 2012b:13) and the French counterparts with *de*.

(7)

	Japanese	French	
a.	Mari no ude Mari NO arm 'Mary's arm'	le bras de Marie	[(In)alienable possession]
b.	Mari no odori Mari NO dance 'Mary's dance'	la danse de Marie	[Agent]
c.	sinrin no hakai forest NO destruction 'the destruction of the forest'	la destruction de la forêt	[Affected theme]
d.	kinoo no sinbun yesterday NO newspaper 'yesterday's newspaper'	le journal d'hier	[Time]
e.	NY no hakubutukan NY NO museum 'a museum in NY'	une musée de NY	[Location]

In Japanese possessives, the head is the noun following *no*. This is also the case with the modification construction, exemplified in (1b). Consequently, the head is the noun following *no* across the constructions. Although Japanese does not show feature agreements in gender or number, we can confirm this by the type of predicates these complex nominals can combine with: it must be predicated of the noun following *no*, and not the one preceding *no*.

In modification constructions, the constituent preceding *no* is not restricted to nominal predicates like (1b) but includes postpositional predicates like (8a,b) and tenseless IPs (i.e, +nominal) like (8c,d). Furthermore, a wide variety of relations can be encoded in the [NP no NP] frame (see

8e, f), especially in context.[5]

(8) a. Ken-to no yakusoku
Ken-with NO promise
'the promise with Ken' [PP no NP]

b. NY-e no syuttyo
NY-to NO business.trip
'the business trip to NY'

c. [$_{IP}$ ~~syoosetu-no~~ syuzinkoo-ga inu] no syoosetu
protagonist-NOM dog NO novel
'the novel whose protagonist (is) a dog' [Non-finite IP no NP]

d. [$_{IP}$ ~~syoonen-no~~ titioya-ga daitooryoo] no syoonen
father-NOM president NO boy
'the boy whose father (is) the president'

e. neko no sara
cat NO dish
'a dish for the cat'

f. isya no sekinin
doctor NO responsibility
'responsibility as a doctor'

All of these examples have the [Predicate *no* Subject] structure. However, I pursue a reduced relative clause analysis rather than den Dikken's (2006) predicate inversion analysis. Motivation for such an analysis is presented in the next section.

2.1 Motivating a reduced relative clause analysis

There are several properties of the Japanese possessive and modification constructions which have led us to adopt Kayne's (1994) relative clause analysis. First of all, Japanese has head-final relative clauses. Thus, the head-final property of these constructions is exactly what we expect if they are indeed reduced relative constructions. In his Antisymmetry framework, Kayne (1994) proposes

[5] Quantifiers also appear with *no* in the modification construction, as exemplified in (i). However, I restrict the scope of this paper to non-quantifier contexts.

(i) {ni-satu/takusan} no hon
{two-CL/many} NO book
'{two/many} books'

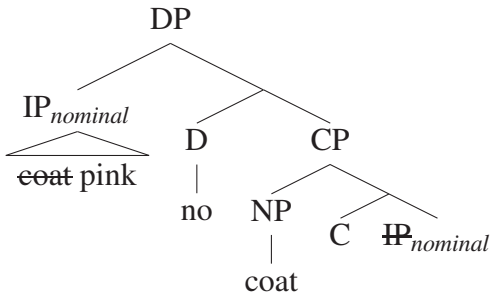
a raising analysis of head-initial relative clauses, reviving Vergnaud's (1974) promotion analysis. Specifically, in head-initial relatives, the relativized NP undergoes A'-movement to Spec,CP, as illustrated in (9a). Head-final relatives like Japanese ones are derived from head-initial relatives—a universal order [$_{DP}$D^0 CP]—by an additional leftward movement of the remnant IP to Spec,DP, as shown in (9b) (Kayne 1994:94).

(9) a. [$_{DP}$ [$_{D}$ the [$_{CP}$ book$_i$ [$_{C}$ that [$_{IP}$ Ken read t_i]]]]] [Head-initial RC]

b. [$_{DP}$ [$_{IP}$ Ken t_i read]$_j$ [D [$_{CP}$ book$_i$ [C t_j]]]] [Head-final RC]

According to Kayne (1994), one consequence of the proposed structure of head-final relatives is ambiguity between restrictive and non-restrictive interpretations. Since the relative clause is moved out of the scope of D on the surface, head-final relatives like (9b) should be compatible with both restrictive (through reconstruction) and non-restrictive readings. This is exactly the case with Japanese relative clauses (e.g, Kuno 1973: 235). Adopting Kayne's analysis of head-final relatives and extending it to the possessive and modification constructions in Japanese, I propose the following structure for (1bii), repeated below as (10).

(10) *pinku no kooto* '{a/the} pink coat'
[$_{DP}$ [$_{IP}$ ~~coat~~$_i$ pink]$_j$ [$_{D}$ no [$_{CP}$ coat$_i$ [C^0 t_j]]]]



The IP consists of the subject-predicate structure [*coat pink*], and the subject 'coat' raises to the A'-landing site, Spec,CP. Subsequently, the remnant IP moves to the specifier of *no*, yielding a prenominal relative. This movement is motivated by the edge (or epp) property of *no*, which attracts an XP with nominal features to its specifier. Although Kayne (1994) uses D/PP rather than

CP for French possessives and qualitatives as shown in (4), I keep the label CP and the [D CP] structure, just to highlight the parallelism between full and reduced relative clauses. The details of the proposal will be presented in section 3.

Secondly, similar to the full relative clause in Japanese, the modification construction can carry a non-restrictive reading, as in (11a), which straightforwardly falls out from the proposed structure given in (10) and concomitantly supports the relative clause analysis.

(11) a. {tomodati / inu} no Naomi
friend / dog NO Naomi
'Naomi, who is (my) {friend/dog}'

b. Naomi no {tomodati / inu}
Naomi NO friend / dog
'Naomi's {friend/dog}'

Reversing the order of the two NPs gives rise to a different interpretation, as indicated in (11b). This may not be surprising since the head is a relational or common N in (11b) but a proper name in (11a). What is interesting is that (11a), even in context, cannot mean 'Naomi, who has {friends/dogs}.' Likewise, (11b) does not mean 'a friend (who is) Naomi.' This suggests that (11a) and (11b) involve different underlying structures. I will come back to this point in section 2.2.

Thirdly, there is another well-known characteristic of *no* in favor of a relative clause analysis, that is, its seemingly unrestricted recursivity. Recursivity or stackability is a well-known property of relative clauses.

(12) a. kyonen no Yamada-sensei no so-no koogi
last.year NO Yamada-teacher NO DEM lecture
Lit. 'last year's Prof. Yamada's {that/the} lecture' (Fukui 1986:202)

b. yabanzin no Rooma no hakai
barbarian NO Rome NO destruction
'the barbarian's destruction of Rome' (Saito et al. 2008:257)

c. [NY no hakubutukan] no [Pikaso no syoozyo no e]
NY NO museum NO Picasso NO girl NO picture
'the picture of a girl (created by) Picasso in NY museum'[6]

This property of *no*-phrases has been taken as an argument in favor of the idea that Japanese lacks functional categories (e.g, Fukui 1986) and as evidence against *no* being D or determiner (Den Dikken and Singhapreecha 2004:24, Saito et al. 2008:257). However, if *no* is an instantiation of a functional category necessary for a relative clause formation (which I assume to be a special type of D), then the recursion fact is no longer a problem but rather a favorable and expected outcome.

Fourthly, another motivation for the relative clause analysis comes from examples like (8c) and (8d). Compare the modification construction (8d), repeated below as (13a), with the full relative counterpart (13b).

(13) a. [$_{IP}$ ~~syoonen~~ (no) titioya-ga daitooryoo] **no** syoonen
father-NOM president NO boy
'the boy whose father (is) the president'

b. [$_{IP}$ ~~syoonen~~ (no) titioya-ga daitooryoo-**dat-ta**] syoonen
father-NOM president-COP-PST boy
'the boy whose father was the president'

Japanese allows possessor-raising (Tateishi 1991, Fukuda 1991, Ura 1996, Kuno 1973, Hiraiwa 2002, Akiyama 2004, Vermulen 2005, Ishizuka 2009, 2010, among others), and when the external possessor undergoes relativization, examples like (13b) are generated. The similarities between (13a) and (13b) suggest the involvement of the same operations−possessor-raising and A'-movement (also in (8c)). The parallelism between relative clauses and *no*-phrases is even clearer in (14), where the subject and the nominal predicate in the underlying structure has undergone inversion.[7]

(14) a. [$_{IP}$ daitooryoo-ga ~~syoonen-no~~ titioya] **no** syoonen
president-NOM father NO boy
'the boy whose father (is) the president'

[6](12c) is ambiguous. Alternatively, *Picasso* can be interpreted as a possessor and *a girl* as a painter or theme of the picture.

[7]Here I abstract away from the details of the derivation for ease of exposition. See Ishizuka (2010) for arguments that the *no* between parenthesis is not merged/present when possessor-raising takes place, and that a possessor-raising operation is always fed by A-movement.

b. [$_{IP}$ daitooryoo-ga ~~syoonen-no~~ titioya-**dat-ta**] syoonen
president-NOM father-COP-PST boy
'the boy whose father was the president'

In (14b), presumably, the possessor has raised out of the possessive nominal before the predicate inversion takes place. Remarkably, (14a) shows that a predicate inversion can take place inside the reduced relative IP despite the absence of an overt copula. Therefore, a predicate inversion alone is not sufficient to show that *no* is a copula.

Fifthly, modification constructions show sensitivity to the island constraints on movement (Ross 1967) even though interpretations of *no*-phrases are quite flexible (see (8e, f)). Examples (15a) and (15b) show that relativization out of an adjunct island is not possible. Now consider example (15c), which is prepared to show that the adjunct condition is valid in the reduced relative counterpart.

(15) a. Ken-ga [seito-ga tikoku-o sita node] okot-ta.
Ken-NOM student-NOM tardy-ACC did because be.angry-PST
'Ken got angry because his student was late.'

b. *[Ken-ga [seito-ga t_i sita node] okot-ta] tikoku$_i$
Ken-NOM student-NOM did because be.angry-PST tardy
Lit. 'the tardy which Ken was angry because his student did'

c. *[seito-no tikoku] no ikari
student-NO tardy NO anger
Int. 'anger because of the student's being tardy'

Although an association between the emotion 'anger' and the cause 'being tardy' is straightforward, a cause interpretation of the *no*-phrase in (15c) is unavailable, which suggests that the relation between the two nouns in the [NP no NP] frame is not necessarily free, and cannot be licensed by an 'aboutness' relation (e.g, Fukuda 1991), a notion which is said to license the first *ga*-marked NP (or the major subject) in the multiple nominative construction (ex, *John-ga se-ga takai.* 'As for John, his hight is tall.')

The last piece of evidence supporting the relative clause status of *no*-phrases comes from a new and important finding. Some color terms in Japanese can be expressed either as an adjective or as a noun, but the use of a noun, which requires *no* when modifying another noun, is restricted to cases where alternative color choices are available, as illustrated in (16) and (17):

(16) a. aoi {umi / seetaa}
blue$_{ADJ}$ {sea / sweater}
'the blue {sea/sweater}'

b. ao no {*umi / seetaa}
blue$_{N}$ NO {sea / sweater}
int. 'the {sea/sweater} which is blue'

(17) a. siroi {yuki / kooto}
white$_{ADJ}$ {snow / coat}
'the white {snow/coat}'

b. siro no {*yuki / kooto}
white$_{N}$ NO {snow / coat}
int. '{snow/ the coat} which is white'

Examples (16a) and (17a) show that color adjectives can equally modify all the nouns—'sea', 'sweater,' 'snow', and 'coat', while the nominal counterparts followed by *no* are selective in terms of what they modify. What makes *ao-no umi* '*blue$_{N}$-no sea' and *siro-no yuki* '*white$_{N}$-no snow' deviant? Unlike *sweaters* or *coats*, the *sea* is prototypically *blue* and *snow* is prototypically *white*, thus alternative colors are usually unavailable. I take this property as strong evidence of *no* being a type of D, which is responsible for introducing a relative clause, assuming that focus alternatives can be introduced inside relative clauses.

From the properties reviewed so far, I conclude that the possessive and modification constructions in Japanese involve relativization. Now we are ready to investigate the underlying structure of the reduced relative clause.

2.2 Underlying structures

Setting aside the possessive construction for a moment, it is probably safe to conclude that modification constructions in (1b) and (8) have the subject-predicate small clause as the underlying structure (see (10)). The availability of nominative Case in the constituent preceding *no* might give a false impression that the construction is also compatible with object relativization or an accusatively-marked object. Although Japanese allows relativization from a wide variety of sources in the full relative construction (e.g, subject (18b), object (18b), possessor (13b), source, instrument, location, reason), this is not the case with reduced relative clauses with *no*, as shown in (19).

(18) a. [~~seinen-ga~~ daitooryoo-o ansatu.si-ta] seinen
president-ACC assassination.do-PST young.man
'the young man who assassinated the president' [finite RC]

b. [seinen-ga ~~daitooryoo-o~~ ansatu.si-ta] daitooryoo
young.man-nom assassination.do-PST president
'the president a young man assassinated'

(19) a. *[~~seinen-ga~~ daitooryoo-o ansatu] no seinen
president-ACC assassination NO young.man
Int. 'the young man who assassinated the president.'

b. *[seinen-ga ~~daitooryoo-o~~ ansatu] no daitooryoo
young.man-NOM assassination NO president
Int. 'the president who a young man assassinated'

The examples in (19) contain a verbal N counterpart of the verb *ansatu-suru* 'assassination-do.' However, the ill-formedness of (19a) and (19b) shows that *ga*- and *o*-markings are impossible in the constituent preceding *no*. This guarantees that the transitive construction cannot serve as an underlying structure. Then why can (13a) contain a *ga*-marked NP? This is because (13a), unlike (19b), consists of the underlying subject-predicate structure. Let me elucidate this point with the verbal N *ansatu* 'assassination.' Example (20a) consists of a 'subject-predicate' structure, and (20b) is a modification construction derived from (20a) (without *seinen-no*). If (20a) feeds into possessor-raising, and then relativization, (20c) with a *ga*-marked NP is yielded.

(20) a. (seinen-no) yoogi-ga [daitooryo-(no/*o) ansatu](-da).[8]
young.man-NO suspicion-NOM president-NO/ACC assassination-COP
'The (young man's) suspicion is the assassination of the president.'

b. [daitooryo-(no/*o) ansatu] no yoogi
president-NO/ACC assassination no suspicion
a suspicion of the assassination of the president

c. [yoogi-ga daitooryo-(no/*?o) ansatu] no seinen
suspicion-GA president-NO/ACC assassination NO young.man
Lit. 'the young man whose suspicion is the assassination of the president'

I conclude from the examples given in (19) and (20) that the modification construction involves subject relativization from the underlying [subject-predicate] structure (see also (10)).

Let us now turn to the structure of the possessive construction. The subject relativization analysis of the modification construction can be easily extended to time possessives like (7d) or location possessives like (7e). The proposed structures for (7d) and (7e) are presented below:[9]

(21) a. *kinoo-no sinbun* 'yesterday's newspaper'
$[_{DP}\ [t_i$ FROM yesterday$]_j$ NO $[_{CP}$ newspaper$_i$ C^0 $t_j]]$

b. *NY no hakubutukan* 'a museum in NY'
$[_{DP}\ [t_i$ IN NY$]_j$ NO $[_{CP}$ museum$_i$ C^0 $t_j]]$

The silent Ps FROM and IN in (21) correspond to what den Dikken (2006) calls 'relator'-heads, which are responsible for establishing the relationship between the predicate and its subject in the syntactic structure (den Dikken 2006:2). Before investigating the underlying structure of alienable and inalienable possessive constructions (see (7a)), recall the two proposals reviewed in section 1.1 regarding French possessives (e.g, (4ai) *la voiture de Jean*). One is a small clause encoding a HAVE relation, with the structure of $[_{IP}$ Jean [I^0 voiture]] (Kayne 1994); and the other is a locative structure with the possessed NP *voiture* being the subject and the possessor *Jean* being a locative or dative P (i.e, a prepositional predicate) (e.g, H&T 2000, den Dikken 2006). My proposal is

[8]Compounding–*daitooryoo.ansatu* 'president assacination'– is also possible.
[9]Silent materials are represented in small caps.

that at least in Japanese, a possessor is originated as a locative P and formation of the possessive construction involves subject relativization (i.e, [car [AT Ken]])—consistent with the proposals I have made for (21a) and (21b) and modification construction examples in (8). This is supported by the way the typical clausal possession is expressed in Japanese. It uses the locational verbs *aru* (inanimate) and *iru* (animate) 'exist' and the possessor is marked with dative *ni*, followed by the nominative case-marked possessum, as shown below (e.g, Kuno 1973, Kishimoto 2000):[10]

(22) a. Ken-ni(-wa) kuruma-ga aru.
Ken-DAT-TOP car-NOM exist
Lit. 'A car is at Ken.' (Ken has a car.)

b. Naomi-ni(-wa) musume-ga iru.
Naomi-DAT-TOP daughter-NOM exist
Lit. 'A daughter is at Naomi.' (Naomi has a daughter.)

This proposal is also consistent with the generalization drawn from the examples in (19), which show that the modification construction is incompatible with object relativization or transitive nominal predicates.

Let us now turn to more difficult cases involving deverbal Ns, exemplified in (7b) and (7c), An intuitive small clause structure for (7b) is probably [Mary dance], but this requires a relativization of the predicative NP in order to generate the desired surface word order, as demonstrated below:

(23) $[_{DP}\ [_{IP}$ Mary I^0 ~~dance~~$_i$ $]_j$ no $[_{CP}$ dance$_i$ C^0 $t_j]]$

However, Japanese is unlikely to allow relativization of both the subject and the predicative NP. Recall the examples given in (11), repeated below as (24).

(24) a. {tomodati / inu} no Naomi
friend / dog NO Naomi
'Naomi, who is (my) {friend/dog}'

[10]The locational verbs *aru* and *iru* alternate based on the animacy feature of the nominative-marked possessed object. It is also possible to mark the possessor with the nominative or topic marker instead of *ni* (see Kishimoto 2000 for more information on locational verbs).

b. Naomi no {tomodati / inu}
Naomi NO friend / dog
'Naomi's {friend/dog}'

If relativizations of the subject and the predicative NP are both possible, we should be able to derive (24a) and (24b) from the same small clause, for instance, 'a {friend/dog} AT Naomi'. However, the reading 'Naomi, who has a friend or a dog' is unavailable in (24a). Likewise, (24b) does not mean 'a friend/dog, (who is) Naomi,' as mentioned in section 2.1. These readings, if not impossible, are very difficult to access, despite the fact that interpretations of modification constructions are generally quite flexible (see (8e, f)). This observation has led me to conclude that Japanese possessive and modification constructions always involve subject relativization out of the subject-predicate small clause. Naturally, this conclusion forces us to assume the following underlying structures for deverbal N possessives like (7b) and (7c) (cf. see also den Dikken's (2006) proposal of 'canonical predication' and ''reverse-predication' structures).

(25) a. $[_{DP}\ [\text{~~dance~~}_i$ BY Mary $]_j$ no $[_{CP}$ dance$_i$ C^0 $t_j]]$

b. $[_{DP}\ [\text{~~destruction~~}_i$ AT forest $]_j$ no $[_{CP}$ destruction$_i$ C^0 $t_j]]$

Having motivated a subject relativization analysis of possessive and modification constructions, I now lay out the current proposal in detail in the next section.[11]

3. Proposal

I propose that *no* is unrelated to Case (because the NP preceding *no* is a predicate), but rather a type of D that generates a prenominal (reduced) subject relatives and that possessive and modifi-

[11] A challenge might be cases that give rise to non-intersective (often adverbial) interpretations (see also Yamakido (2000) for similar cases with attributive adjectives in Japanese). For example, 'Ken is a true friend,' is well-formed, but the string 'Ken is true' is incomprehensible, as illustrated in (i):

(i) Ken-wa hontoo-no tomodati-da. → Ken-wa hontoo-da. & Ken-wa tomodati-da.
Ken-TOP true-NO friend-COP Ken-TOP true-COP Ken-TOP friend-COP
'Ken is a true friend.' → '#Ken is true & Ken is a friend.'

While *hontoo* 'true' cannot be predicated of 'Ken', the subject relative analysis is still tenable, if we assume an extra step before the merger of *no*. From BE [true friend], relativizing the nominal predicate derives [friend BE [true *t*]]. Then *no* is merged, followed by the subject relativization and the remnant movement to Spec,*no* yields: $[_{DP}$ [true $t_i]_j$ [no $[_{CP}$ friend$_i$ [C t_j]]]].

cation nominals in Japanese are derived from the universal [$_{DP}$ D^0 CP] structure, where C selects a tenseless subject-predicate small clause as its complement.[12] Since a demonstrative can appear to the left of these complex nominals (e.g, *sono Ken-no pen*, 'that pen of Ken's') I assume in agreement with Kayne (1994:163) that there should be at least two levels of D-like projection above CP. My proposal is consistent not only with Kayne's (1994) proposal that French *de* possessive and qualitative constructions involve relativisation but also with Koopman's (2003, 2005) idea that all DPs are essentially relative clauses with the [$_{DP}$ D^0 CP] structure. The next section lays out my proposal in more detail.

3.1 Relative Clause Analysis of Possessive Nominals

My proposal consists of the following ideas:

(26) a. The particle *no* is a type of D that selects for C$_{(nominal)}$ as its complement.

b. C$_{(nominal)}$ merges with a complement varying in size, but restricted to the subject-predicate small clause structure, (i.e, IP with nominal features in Kayne's terms) and provides an A'-landing site for subject relativization.

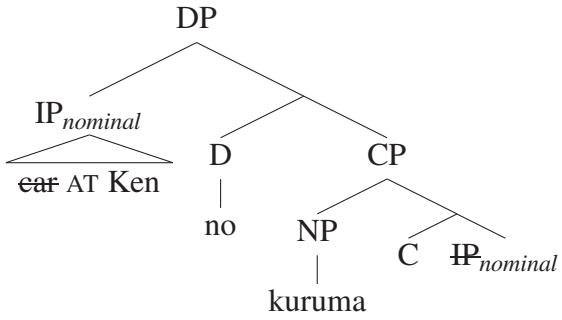
c. The particle *no* has an edge feature requiring its Spec to be filled with an IP with nominal features (i.e., epp of *no*), which generates 'prenominal' relatives.

d. Semantics and syntax of possessive and modification nominals depend on the complement structure of C$_{(nominal)}$ (i.e., small clause, whose predicate can contain a silent elementary P predicate from a restricted set, such as AT, FROM, IN, TO, FOR).

Applying these ideas to *Ken-no kuruma* 'Ken's car', the following derived surface constituency arises:

[12]The idea of *no* being D is not new: it is also proposed by linguists, such as Koike (1999) and Whitman (2001). Nevertheless, the details of their analyses differ from mine, since they involve A-movement. For example, extending the analysis of possessive *'s* as the head of DP in English to Japanese *no*, Whitman (2001:85) analyzes the occurrence of multiple genitive structures as a mechanism of DP-iteration, involving the movement of the small clause subject to Spec,*no*: [$_{DP}$ *tosi*$_i$ [$_{D^0}$ *no* [$_{NP}$ *t*$_i$ *hakai*]]] 'destruction of the city.' Note that Whitman's analysis is difficult to extend to modification nominals.

(27) $[_{DP}\ [\ \sout{car}_i$ AT Ken$]_j$ [no $[_{CP}$ kuruma$_i$ [C^0 t_j]]]]



The IP consists of the subject predicate structure [car AT Ken], and the subject 'car' raises to the A'-landing site, Spec,CP. Subsequently, the remnant IP moves to the specifier of *no*, yielding a prenominal relative.

The derivational steps in (27) which I did not discuss earlier are i) the remnant IP movement to Spec of *no* and ii) the availability of silent elementary prepositions in the small clause. Let me discuss them in turn. First, in my proposal, the IP movement to Spec of *no* is triggered by an epp feature of D^0 *no*, which requires its Spec to be filled with a constituent with [+nominal feature]. This proposal is basically an extension of what Kayne (2000) has proposed for French *de*. French *de* shows sensitivity to infinitival XP in both prepositional determiner (e.g, *la voiture de Jean*) and prepositional complementizer contexts (e.g, *Jean a essayé de chanter.* 'John has tried DE sing-inf.'), and Kayne (2000:282) captures this property as 'selectional relation between *de* and infinitives via (phrasal) movement.' He assumes that infinitival phrases differ from finite verbs in terms of having an infinitival functional head with a nominal feature, and attraction of the infinitive phrase to Spec,*de* comes from the sensitivity to this nominal feature. I assume that the same kind of selectional relation holds between Japanese *no* and the infinitival IP in its Spec. This sensitivity to a nominal feature of *no* can be confirmed by comparing (28a) with (28b).

(28) a. [~~seinen-ga~~ daitooryoo-o ansatu.si-ta] (*no) seinen
president-ACC assassination.do-PST young.man
'the young man who assassinated the president'

b. [[(seinen-ga) daitooryoo-o ansatu.si-ta] toki] no hanasi
young.man president-ACC assassination.do-PST time NO story
'the story about the time when the young man assassinated the president'

Example (28b) shows that *no* is required once a tensed VP or AP is embedded under a nominal element such as *toki* 'time,' *dake* 'only,' *bakari* 'just now/only' (note that the adverbial particles *dake* and *bakari* were originally a noun). Significantly, the contrast shown in (28) also suggests that what matters to *no* is not the size of the IP in its Spec, but solely the nominal feature. The reason *no* looks like a genitive-case marker is simply due to this requirement of nominal specifier. Furthermore, the proposed epp property of *no* falls directly out from the fact that Japanese is a so-called head-final language. Under Kayne's Antisymmetry theory, the superficial head-final property must involve extra preposing of the complement XP across its head, and the epp property of *no*, which attracts $IP_{nominal}$ to its Sepc, is also consistent with the idea that the nominative marker *ga* and the topic marker *wa* in Japanese are clausal heads that attract the complements to their left (cf. Kayne 1994:53, Whitman 2001).

Let us now turn to the proposal that the predicate in the small clause can contain silent elementary Ps, which determine the interpretation of the complex nominal in Japanese. Cross-linguistically, availability of silent Ps in the grammar is often discussed (e.g., Caponigro & Pearl 2008, Emonds 1987, McCawley 1988), and I also assume that a restricted set of elementary (silent) predicates are available in the grammar. As shown in (29), many P heads in Japanese are in fact optional, especially in the modification construction.

(29) a. Ken-(ni)-wa ane -ga iru.
Ken-(LOC)-TOP older.sister -NOM exist
'There is an older sister (at) Ken. (cf, Ken has an older sister)'

b. Tokyo-(de)-no kooen
Tokyo-(LOC)-NO performance
'the performance which is (at) Tokyo'

c. Osaka-(e)-no syuttyo
Osaka-(TO)-NO business.trip
'a business trip which is (to) Osaka'

d. Naomi-(kara)-no tegami
Naomi-(FROM)-NO letter
'a letter which is (from) Naomi'

e. Naomi-(to)-no yakusoku-wa mamot-ta.
Naomi-(WITH)-NO promise-TOP keep-PST
'(I) kept the promise which is (with) Naomi.'

f. Kurisumasu-(yoo)-no keeki
Christmas-FOR-NO cake
'a cake which is (for) Christmas'

Further, utilization of silent Ps or deletion of Ps are a general property of Japanese. Not only in the context of reduced relative *no*-phrases, but also under other movement operations, such as (non-reduced) relativization and passivization, postpositions frequently disappear (see Kameshima 1989, Ishizuka 2012:54-59) yet their presence is reflected in the interpretations.

(30) a. [$_{CP}$ Mari-ga ~~naihu-de~~ niku-o kit-ta] naihu-(*de)-wa togat-tei-ta.
Mary-NOM meat-ACC cut-PST knife-INSTR-TOP sharp-ASP-PST
Lit. 'The knife which Mary cut meat (with) was sharp.' [Relativization]

b. Kodomo-(*ni)-ga inu-ni hoe-rare-ta.
child-AT-NOM dog-by bark-PASS-PST
Lit. 'A child was barked (at) by a dog.' [Passivization]

The above examples show that Japanese in general has high tolerance to silent postpositions, thus our proposal that *no*-phrases contain silent predicates is quite reasonable. This proposed elementary Ps in the small clause predicate, either overt or covert, corresponds to what den Dikken (2006) calls 'Relator,' which mediates all subject predicate relations with the structure of [$_{RP}$ [$_{XP}$ Subject][$_{R'}$ Relator [$_{YP}$ Predicate]]].

The analysis presented in this section takes a minimalist approach, assuming that all possessive and modification nominals where *no* appears before the head noun (i.e, [IP$_{nominal}$ no NP]) have a common substructure involving 'subject relativization' out of the subject-predicate small clause. Consequently, my proposal takes a step towards a unified analysis of Japanese *no*.

4. Against the traditional dichotic approach to *no*

As mentioned in section 1, the Japanese literature generally distinguishes the particle *no* in the possessive and modification constructions in spite of their surface similarities, and call them the

genitive case marker and the modification marker (adopted from Kitagawa & Ross 1982), respectively.

An exception to this standard dichotomic approach is Kitagawa and Ross 1982, which has pursued a unified treatment of all instances of *no* particles by subsuming the genitive case marker under the modification marker. The fact that *no* always appears in the same syntactic configuration leads them to propose the following modification marker insertion rule. (31) is its modified version given in Saito et al.(1982:n. 1) and Watanabe (2010:62).

(31) $[_{NP} \ldots \text{XP(-tense) } N^{\alpha}] \rightarrow [_{NP} \ldots \text{XP(-tense) Mod } N^{\alpha}]$
where Mod = *no*

An analytical question is what this modification marker *no* is? The prevailing view is that it is 'a matter of morphology and is not represented structurally…It is inserted after the derivation is handed over to the PF branch' (Watanabe 2006:256). However, examples containing color nominals like (16) and (17) already falsify this standard assumption. We have seen that the presence of *no* in these cases requires a contrastive focus interpretation, which I assume is a reflex of *no*-phrases being (reduced) relative clauses.

Although Kitagawa and Ross's (1982) unified treatment of *no* is preferable from a minimalist point of view, their proposal has not been widely accepted. This is so, presumably because the presence of genitive Case in Japanese has been taken for granted by many researchers, including Kuno (1973), Murasugi (1991), Saito, et al. (2008), Hiraiwa (2010), Watanabe (2010). For instance, Watanabe (2010:68) claims that having nominative and accusative case particles, Japanese is unlikely to lack a genuine genitive case particle. At the same time, the necessity of the modification marker *no* has never been doubted because of examples like (8a) and (8b), which contain a PP before *no*. As Watanabe (2010) notes, PPs do not require Case, thus these *no* particles cannot be genitive Case. Besides, there is a distributional difference between the two types of *no* which has been taken as a major piece of evidence for the dichotomy: asymmetry in terms of NP-ellipsis, which I discuss in the next section.

4.1 The NP-Ellipsis Paradigm

The difference in ellipsis patterns has been taken to confirm the validity of the dichotomy. NP-ellipsis is not always possible, as illustrated by examples in (32) and (33) (adapted from Saito, et al. 2008:253).

(32) a. [Taroo no taido]-wa yoi ga [Hanako no ~~taido~~] -wa yoku-nai.
Taro NO attitude-TOP good though Hanako NO -TOP good-NEG
'Taro's attitude is good, but Hanako's isn't.'

b. [Rooma no hakai] -wa [Kyooto no ~~hakai~~] -yorimo hisan datta.
Rome NO destruction -TOP Kyoto NO -than miserable was
'Rome's destruction was more miserable than Kyoto's.'

(33) *[Hare no hi]-wa yoi ga [ame no ~~hi~~] -wa otikom-u.
clear NO day-TOP good though rain NO -TOP feel.depressed-PRS
'Although clear days are fine, (I feel) depressed on rainy ones.'

According to Saito & Murasugi (1990) and Lobeck (1990, 1995), NP deletion (or N'-deletion) is licensed under Spec-head agreement between D and its specifier. Applying this idea to NP-ellipsis in Japanese possessive and modification nominals, Saito, Lin & Murasugi (2008) propose that NP-ellipsis is possible only when Sepc,DP is occupied (i.e, $[_{DP}$ XP $[$~~NP~~ D]]), and attribute the contrast to the argument-adjunct status of the possessor NP-*no*. Namely, NP-ellipsis is restricted to cases where the possessor remnant is an argument since only arguments, including location and time (as assumed in Saito et al. 2008:255, Hiraiwa 2012b:13), but not adjunct modifiers, can raise to Spec,DP, and license NP-ellipsis. On the other hand, linguists like Watanabe (2010) attributes the contrast to the nature of *no*: the genitive Case *no* is retained under ellipsis, while the modification marker *no* is simply not inserted when ellipsis takes place.[13]

Consideration of a wider range of ellipsis data, however, reveals that neither of these proposals actually captures the empirical data (see also M. Takahashi 2011).[14]

[13] Watanabe's proposal is motivated by the fact that deleting *no* altogether with 'day' significantly improves the sentence.

[14] As mentioned in n.3, Japanese has another *no*, which is comparable to the English indefinite pronoun *one*. In order to ensure the involvement of ellipsis, the examples here are modelled after examples given by Saito, et al (2008:253).

(34) a. [Pinku no T-syatu] -wa atarasii ga [midori no ~~T-syatu~~] -wa hurui.
pink NO T-shirt -TOP new though green NO -TOP old
'Although the pink T-shirt is new, the green one is old.'

b. [garasu-no kabin] -wa mot-tei-ru ga [tooki-no ~~kabin~~] -wa
glass-NO vase -TOP have-ASP-PRS though ceramics- NO -TOP
mot-tei-nai.
have-ASP-NEG
'Although (I) have a vase made of glass, (I) don't have one made of ceramics.'

c. [Ken-to no yakusoku] -wa mamot-ta ga [Jyon-to no ~~yakusoku~~] -wa
Ken-with NO promise -TOP keep-PST though John-with NO -TOP
mamor-anakat-ta.
keep-NEG-PST
Lit. 'Although (I) kept the promise with Ken, (I) didn't keep the one with John.'

d. [Kyooto-kara no kozutumi] -wa todoi-ta ga [Tookyo-kara no ~~kozutumi~~]
Kyoto-from NO package -TOP arrive-PST though Tokyo-from NO
-wa mada todok-anai.
-TOP yet arrive-NEG
'Although the package from Kyoto has arrived, the one from Tokyo has not yet.'

The well-formedness of the examples in (34), where the possessor remnants are so-called adjuncts, is unexpected to Saito et al. (2008). In addition, the *no* particles in (34c) and (34d) must be modification markers, since the possessor remnants are PPs. Consequently, Watanabe's (2010) argument does not go through either. Furthermore, the following 'time' example shows an unavailability of ellipsis regardless of the genitive case marker status of *no*.

(35) [Haru no hi] -wa suki-da ga [aki no *(hi)] -wa kirai-da.
spring NO day -TOP like-COP though autumn NO day -TOP hate-COP
'Although (I) like spring days, (I) hate autumn *(days).' (cf. Hiraiwa 2012b:13)

The possessive nominal *aki no hi* 'autumn days' is provided in Hiraiwa (2012b:13) as an example of genitive Case *no* appearing with a 'time' possessor. However, the possessor remnant does not survive under ellipsis. These examples discussed above cast serious doubt on dividing *no* particles into two types. Without a reliable defining property, the motivation for the dichotomy is clearly weakened. Nevertheless, we still need to understand why NP-ellipsis is not always possible. How can we account for the ellipsis asymmetry under the current unified analysis of *no*?

My proposal is that the availability of NP-ellipsis depends on the region or hight where *no* merges with its complement CP. Specifically, in order to license NP-ellipsis, *no* in the complex nominal needs to be merged higher than the inflectional & compound regions. This idea is in line with Tsai's (2013) multiple-layered analysis of nominal and verbal projections. Recall the modification nominal example in (33) repeated below as (36), which does not license NP-ellipsis.

(36) *[Hare no hi]-wa yoi ga [ame no ~~hi~~] wa otikom-u
clear no day-top good though rain no top feel.depressed-PRS
' Clear days are fine, but (I feel) depressed on rainy ones.'

Interestingly, the Chinese counterpart of '*ame-no hi* 'rainy day' in (37) does not contain the linking element *de*, but is realized in the compound-like form [N N], which supports my proposal above.

(37) yu -tian
rain -day
'a rainy day' (Saito et al. 2008:251)

The reason possessive nominals must be larger than a certain size, containing compound and inflectional regions might relate to the availability of a focus region, which gives rise to a contrastive focus interpretation discussed in section 2.1. I will leave this issue, as well as crosslinguistic variations of compound formation, for future research.[15]

5. Against *no* as a nominal copula

Den Dikken & Singhapreecha (2004; D&S) have proposed that Japanese *no*, just like French *de*, Thai *tʰîi*, and English *of*, is a nominal copula, inducing predicate inversion, a focus-related A-movement operation. Specifically, *no* inverts the underlying order of subject and predicate by raising the latter across the former.

Although I very much agree with den Dikken (2006) in terms of the underlying structure of these complex nominals, consisting of the small clause subject and predicate, mediated by what he calls a relator (which I simply call a (silent) P), there are several reasons for proposing that the possessive and modification constructions involve A'-movement or relativization. For example, as

discussed in section 2.1, these complex nominals show unrestricted stackability (see (12)). Furthermore, as we have seen in (14), an overt copulative element is not a prerequisite of predicate inversion.

Here I add two more reasons for not analyzing *no* as a nominal copula. Firstly, there is another morpheme which is clearly an attributive form of the copula *da*, that is *na*. Consider the following pair.

(38) a. Ken-wa isya-da.
Ken-TOP doctor-COP
'Ken is a doctor.' [Nominal]

b. Ken-wa syooziki-da.
Ken-TOP honest-COP
'Ken is honest.' [Nominal Adjective]

Although (38a) and (38b) both contain the copula *da*, the categories of the two predicates differ: *isya* is a noun while *syooziki* is a nominal adjective. Nominal adjectives are adjectival in meaning, but they do not inflect. They share some characteristics with nouns, but they are not true nouns, such that they cannot be used as a subject and an object of sentences and cannot be modified by adjectives (see Kuno 1973: 28-29). The difference becomes apparent when they modify a noun.

(39) a. isya **no** Ken
doctor NO Ken
'Ken, who is a doctor.'

b. syooziki **na** Ken
honest NA Ken
'Ken, who is honest'

If *no* is a D-like element introducing a prenominal relative clause, what is *na*? As a matter of fact, *na* turns out to be an attributive form of the copula. This can be confirmed once the two predicates are embedded under a *that*-like complementizer, as shown in (40).

(40) a. Ken-wa isya-na no-ka?
Ken-TOP doctor-NA C-Q
'Is it (the case) that Ken is a doctor?'

b. Ken-wa syooziki-na no-ka?
Ken-TOP honest-NA C-Q
'Is it (the case) that Ken is honest?'

The morpheme *no* before the question particle *ka* is a complementizer/nominalizer. When embedded under *no-ka* 'is it that ∼' (or *no-da* 'it is that ∼') both examples contain *na*, and *na* in (40a) cannot be omitted or replaced with *no* (i.e, *Ken-wa *isya-(no)-no-ka*). Since the common morpheme that appears after the two predicates is the copula *da*, as shown (38a) and (38b), I conclude that *na*, not *no*, is the attributive form of the copula.[16]

Secondly, as we have seen in section 2.1, the presence of *no* imposes a contrastive focus interpretation, as shown in (16b) and (17b), repeated below as (41a) and (41b), respectively.

(41) a. ao no {*umi / seetaa}
blue$_N$ no {sea / sweater}
int. 'the {sea/sweater} which is blue'

b. siro no {*yuki / kooto}
white$_N$ no {snow / coat}
int. '{snow/ the coat} which is white'

The difference between my analysis and D&S's proposal is that in their analysis the inverted predicate serves as a topic (i.e, old information). However, these examples show that the nominal predicate in Japanese, is neither a topic nor old information, because it is evident that the *sea* being *blue* and *snow* being *white* are old information. On the basis of the properties of the possessive and modification constructions reviewed in this section, I conclude that den Dikken's linker analysis of *no* cannot be maintained.

[16] See also Hiraiwa (2012a), who has independently come to the same conclusion based on cases where *no* cannot be replaced with another adnominal form of the copula *de-aru*. However, Hiraiwa's test (irreplaceability of the morpheme with *de-aru*) is not always reliable, especially for *no* in possessive and modification constructions. This is so because if you add *de-aru* to a nominal predicate, *no* must disappear due to the epp property of *no* (i.e, *no* and *de-aru* are in complementary distribution). Therefore, '*isya* {*de-aru/no*} *Ken* 'Ken, who is a doctor' are equally well-formed, which might give a false impression that *no* is a copula.

6. Conclusion

This paper has developed a minimalist analysis of the particle *no* in possessive and modification (and qualitative) constructions in Japanese, where the properties follow from merge, lexical properties of *no* and the elements contained in the IP, the complement of $C_{(nominal)}$. The conclusion this paper reaches is that *no*-phrases are prenominal reduced relative clauses: neither is *no* related to Case nor a post-syntactic phenomenon, but it is a type of D that selects a reduced subject relative CP and attracts the remnant IP with a nominal feature to its left. The reason *no* looks like a genitive case marker is because of its requirement of a specifier with a nominal feature (i.e, epp), which the predicate in the remnant IP provides. The current proposal builds on Kayne's insights regarding French *de*, and shares many ideas with den Dikken (1998) and den Dikken & Singhapreecha's (2004) predicate inversion analysis (e.g, the underlying subject-predicate structure, the presence of 'Relator' that establishes the relation between the subject and the predicate in the small structure).

Traditionally, the pattern of NP-ellipsis has been taken as support for positing two types of *no* particles in Japanese−the genitive case marker and the modification marker inserted post-syntactically (e.g, Watanabe 2010). However, once a wider range of data on ellipsis is reviewed, it becomes clear that the ellipsis paradigm no longer supports the dichotomy. Further, I introduce new data involving contrastive focus, in support of the relative clause analysis of possessive and modification nominals. I hope that my analysis of treating possessive and modification nominals as subject relatives with (silent) elementary predicates sheds new light on the nature of DP-internal linkers and the structure of DPs crosslinguistically.

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