

## A Note on Adnominal Modification

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### 1. Introduction

In the present paper I discuss adnominal attributes within NPs in Japanese, the focus being placed on their ordering variations. Japanese is regarded as a language with relative freedom in word order, that is, as a “scrambling language”. In the following discussion, I demonstrate that this freedom in constituent ordering is observed not only in VPs but also in NPs. I then go into the question of what kind of restrictions the ordering variations within NPs are subject to in Japanese.

### 2. Types of extraction

As is well known, Japanese is a so-called scrambling language, i.e. with “free” word order. First, it allows for a clause-internal scrambling. The same phenomenon is observed also in German:

- (1) a. John-ga [sono hon]-o katta.  
John-Nom [the book]-Acc bought  
'John bought the book.'
- b. [sono hon]-o John-ga *t* katta.
- (2) a. weil Peter [dieses Buch] gekauft hat  
because Peter<sub>Nom</sub> [the book]<sub>Acc</sub> bought has  
'because Peter bought the book'
- b. weil [dieses Buch] Peter *t* gekauft hat

Let us turn to the theoretical aspect of this phenomenon shortly: Concerning the directionality of government (i.e. head parameter) and of movement, Fukui (2006: 70) proposes the following:

- (3) The parameter value preservation (PVP) measure:  
A grammatical operation (Move  $\alpha$ , in particular) that creates a structure which is

inconsistent with the value of a given parameter in a language is costly in the language, whereas one which produces a structure consistent with the parameter value is costless.

In both Japanese and German, verbs govern to the left. The movement operation in question here, i.e. scrambling of an argument of the verb, preserves the canonical directionality and is thus regarded as “costless” or “optional”, i.e. need not be triggered by some syntactic feature as in the case of, say, *wh*-movement.<sup>1</sup>

Specifically for scrambling, Haider & Rosengren (2003) and Haider (2010: Ch.4) claim that scrambling is permitted only in head-final projections. Haider tries to derive this generalization based on the universal premises which he calls “basic branching constraint” and “canonical directionality”, respectively. For details, see the works cited.

From an intuitive perspective, it seems well motivated to assume that these languages allow scrambling because the semantic role of the argument to be scrambled is overtly marked, here by means of Case. Although it remains to be examined carefully whether and in what extent the variability of word order and the richness of Case marking correspond to each other, there may well be some correlation between them (cf. Fujinawa 2003 and the literature cited therein for discussion). More generally speaking, one could also maintain the null hypothesis that an element can be more easily dislocated if it is endowed with a grammatical or semantic marking, which helps identify its “base” position.

### **3. Word order variation within NPs**

In this section I go into the word order variation within NPs in Japanese. I first introduce previous studies dealing with the ordering of adnominal modifiers. I then take up the clausal attributes to nouns, referring to the classification based on the head noun as well as on the property of the attributes. Finally, I consider what restrictions underlie the ordering variation within NPs in Japanese.

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<sup>1</sup> It should be noted that the “costless” or “optional” operations in the sense used here are not necessarily semantically vacuous. Both extraposition in English and scrambling in Japanese (as well as in German), typical examples of such “optional” operations, include cases that do bring about LF-relevant semantic effects (cf. Inaba 2007: Ch.3 and the literature cited there).

### 3.1. The order of adnominal modifiers

In this subsection I will focus on the word order variation among adnominal modifiers. It is well-known that there are, at least in some cases, ordering restrictions among attributive modifiers. The examples below are from Japanese (Watanabe 2012: 507) and Mandarin (Sproat & Shih 1991: 571):

- (4) a. *chiisana ki-no hashi*  
small wood-Gen bridge  
b. *ki-no chiisana hashi*  
wood-Gen small bridge
- (5) a. *hēi-de xiǎo shū*  
black-DE small book  
b. *\*xiǎo hēi-de shū*  
small black-DE book

As for the ordering among adnominal adjectives, some proposals have been made to capture the general tendencies that seem to apply cross-linguistically. Taking data from Mandarin as a starting point, Sproat & Shih (1991: 567) argue that “adjectival modification cross-linguistically breaks down into two kinds”. They call the one “direct modification” and the other “indirect modification”. In the former case, “the adjective assigns its  $\theta$ -role(s) directly to its sister, which will be a projection of N”. In the second case, “the adjective is not assigning its  $\theta$ -role(s) directly to the N<sup>x</sup> which it modifies”. One of the most important empirical consequences of this proposal is that the adjectives of direct modification obey ordering restrictions (“restrictions on the ordering of multiple adjectival modifiers”)<sup>2</sup> while those of indirect modification need not. The former class of adjectives is namely subject to “universal” (p.569) hierarchy as follows (p.565):

- (6) Size > Color > Provenance; e.g. small green Chinese vase  
(7) Quality > Shape; e.g. nice round plate

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<sup>2</sup> Actually, Sproat & Shih (1991: 567) subclassify the direct modification into hierarchical modification, available in English and Mandarin, and parallel modification, exhibited by French. The restriction in question should apply only in the former type of direct modification.

(8) Size > Shape; e.g. small square table

(9) Size > Shape:

a. xiǎo lǜ heaping

small green vase

b. \*lǜ xiǎo heaping

(10) Quality > Shape:

a. hǎo yuán pánzi

good round plate

b. \*yuán hǎo pánzi

The indirect modification, where the  $\theta$ -assignment is mediated by an empty variable bound by an operator, is manifested by *de*-modifiers in Mandarin. Here, no restriction is imposed on the ordering among modifiers:

(11) Size > Shape, Shape > Size (cf. (9)):

a. xiǎo-de lǜ-de heaping

small-DE green-DE vase

b. lǜ-DE xiǎo-DE heaping

(12) Quality > Shape, Shape > Quality (cf. (10)):

a. hǎo-de yuán-de pánzi

good-DE round-DE plate

b. yuán-de hǎo-de pánzi

In the face of the data like (9/10), there is no denying the existence of a semantically based hierarchy restricting the ordering of the adnominal adjectives. Scott (2002: 114) proposes the elaborate “universal hierarchy” as follows:<sup>3</sup>

(13) Determiner > Ordinal number > Cardinal number > Subjective comment

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<sup>3</sup> What Scott (2002: 114) proposes is actually a “universal hierarchy of AP-related functional projections for noncomplex and result nominals”. Just as Cinque (1999) postulates a functional projection for each adverbial, Scott assumes that the adjectives are located in the designated Spec positions of the functional projections that are layered according to the given hierarchy.

The question marks in (13) indicate that the projection in question might eventually be incorporated into one of the other projections (cf. Scott 2002: 109f, 116).

> ?Evidential > Size > Length > Height > Speed > ?Depth > Width > Weight >  
Temperature > ?Wetness > Age > Shape > Color > Nationality/Origin > Material >  
Compound element > NP

Sproat & Shih (1991: 581f) now maintain that Japanese adnominal adjectives represent cases of indirect modification and are thus not subject to ordering restrictions, giving the following data:

- (14) a. *ookina akai inu*  
large red dog  
b. *akai ookina inu*
- (15) a. *chiisana shikakui ie*  
small square house  
b. *shikakui chiisana ie*

Watanabe (2012) argues against this claim and maintains that direct modification structure, in which ordering restrictions apply, is found also in Japanese. He shows examples that exhibit rigid ordering of modifiers (p.507):<sup>4</sup>

- (16) a. *chiisana ki-no hashi*  
small wood-Gen bridge  
b. *??ki-no chiisana hashi*
- (17) a. *chiisana chuugoku-no kabin*  
small China-Gen vase  
b. *??chuugoku-no chiisana kabin*

Watanabe (2012) assumes that, in the above examples, *chiisana* ('small') represents indirect modification, while the *no*-marked modifiers are cases of direct modification. He further maintains that, for direct modification, Japanese adnominal modifiers are also subject to some kind of semantically based hierarchy, in the face of the data like the

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<sup>4</sup> (16b) and (17b) become "perfectly acceptable" (Watanabe 2012: 507) if there is a pause after the *no*-marked modifier. In this case, the *no*-marked modifier is focused, the reading which does not concern us here further.

following where morphosyntactic properties of the modifiers are not crucial for the ordering restrictions (p.508):

- (18) a. chiri-no kin-no kubikazari  
Chile-Gen gold-Gen necklace  
b. \*kin-no chiri-no kubikazari

In the present paper, I do not go into the question of what kind of semantic categories are to be postulated for the correct description of the observed data or how they are ordered in the hierarchy of the sort discussed above. I rather focus on the ordering variation among constituents of different grammatical status.

### 3.2. “Scrambling” within NPs

As already mentioned above, Haider & Rosengren (2003) and Haider (2010: Ch.4) claim that scrambling is allowed only in head-final projections.<sup>5</sup> It is true that Japanese allows a certain kind of word order variation within the NP, a head-final projection, as partly observed in the previous subsection. In this subsection, I present constituents of a different grammatical status appearing within NPs in Japanese. While Watanabe (2012) deals only with “simple” modifiers, namely those that do not constitute a clause, I will take “complex”, i.e. clausal modifiers also into account.

- (19) a. [boku-ga kinoo totta] Mary-no shashin  
[I-Nom yesterday took] Mary-Gen photo  
'Mary's photo that I took yesterday'  
b. (?)Mary-no [boku-ga kinoo totta] shasin

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<sup>5</sup> For German, Haider (2010: 142) points out that scrambling is found within VPs and APs, but not in NPs and PPs. As a “demonstration of scrambling within an AP”, Haider (2010: 143) gives the following examples:

- i) a. der [<sub>AP</sub> [dem Briefträger] [in vielen Merkmalen] ähnliche] Sohn der Nachbarin  
the [<sub>AP</sub> [the postman]-Dat [in many features] similar] son of-the neighbor  
'the son of the neighbor resembling the postman in many features'  
b. der [<sub>AP</sub> [in vielen Merkmalen] [dem Briefträger] ähnliche] Sohn der Nachbarin

It is, however, not self-evident whether the PP here can be regarded as an argument of the adjective *ähnlich* ('similar') and, consequently, whether the data above represent a case of scrambling within the AP, so long as Haider (2010: 152) regards scrambling as reserialization of *arguments*.

- (20) a. [boku-ga guuzen kiita] [Taro-ga hanzai-o okashita to-*iu*] jijitsu<sup>6</sup>  
 [I-Nom by-chance heard] [Taro-Nom crime-Acc committed Comp] fact  
 ‘the fact that I happened to hear that Taro committed a crime’
- b. [Taro-ga hanzai-o okashita to-*iu*] [boku-ga guuzen kiita] jijitsu

Let us assume that the genitive *no*-phrase of the head noun *shashin* ‘photo’ (19) and the clause expressing the content of *jijitsu* ‘fact’ (20) are complements of the head noun, respectively: A picture is usually of someone or something, and some propositional content is inherent to every fact. Now, in the above examples, a complement and an adjunct are appearing within a nominal phrase, and the (a) variants are assumed to be the base order. In (19), which contains a relative clause and a genitive complement, both orders are acceptable, although the variant representing the “base” order, (19a), appears to be more natural. In (20), a clausal complement accompanied by the subordination marker *to-*iu** cooccurs with a relative clause. Here, both orders seem to be perfectly grammatical.

I would like to claim that “scrambling” within NPs is an option permitted in Japanese, in line with Haider (2010), and furthermore that it is subject to various constraints as proposed for scrambling in German by Müller (1999). The underlying idea is namely that optional movement operations should better be regulated not by a rigorous “all-or-nothing” mechanism like feature-checking, but rather by optimality-theoretic constraints, the violation of one of which does not necessarily lead to ungrammaticality.

Before going into the discussion, let us turn to the classification of the prenominal clausal modifiers in Japanese shortly. Teramura (1999) groups them into two types, the “inner relation” and the “outer relation”. The former represents the pattern of relativization whereby a “gap” which semantically corresponds to the head noun can be detected in the modifying clause. In the latter case, no such gap is found, and the clause supplements the content of the head noun. This “outer relation” roughly corresponds to the “complementation” in the generative sense, in that (the content of) the clause is, even if implicitly, required by the head noun. Masuoka (1997: Part 1, Ch.3) further

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<sup>6</sup> It deserves a thorough investigation whether the subordination marker *to-*iu** (as well as *to* in the relevant sense) is to be regarded as a complementizer (cf. Fukui 1995, Inaba 2007). In the glosses I use the prevalent term “Comp” for *to-*iu** just for the sake of simplicity and without any theoretical implication.

subclassifies the prenominal modification of “outer relation” according to the type of the head noun (semantically), on the one hand, and on the subordination marker (morphosyntactically), on the other (cf. Teramura 1999). In the present work, I concentrate on the type of clausal attributes where the appearance of the subordination marker *to-iu* is optional. This is the case with such head nouns as *jijitsu* ‘fact’, *seishitsu* (or *seikaku*) ‘property, character’, *shoobai* ‘business’, etc. (cf. Masuoka 1997: 29). I list some simplified examples:

- (21) [Taroo-to Hanako-ga deatta (to-iu)] jijitsu  
 [Taro-and Hanako-Nom met (Comp)] fact  
 ‘the fact that Taro and Hanako met’
- (22) [matigatta koto ga yurusenai (to-iu)] seikaku  
 [incorrect thing Nom inadmissible (Comp)] character  
 ‘(one’s) character that cannot put up with incorrect things’
- (23) [sakana-o uru (to-iu)] shoobai  
 [fish-Acc sell (Comp)] business  
 ‘(one’s) business to sell fish’

There are other types of head nouns, among which some require a subordination marker, and others forbid the presence of such elements altogether (cf. Masuoka 1997: 29):

- (24) [rainen doitu ni ikou \*(to-iu)] kangae  
 [next-year Germany to go \*(Comp)] idea  
 ‘the idea of going to Germany next year’
- (25) [dareka-ga sotto haitte-kita (\*to-iu)] kehai  
 [someone-Nom quietly entered (\*Comp)] sign  
 ‘the sign that someone quietly came in’

The exact analysis including these kinds of nouns will not be taken up in this preliminary study and be left to future research.

Let us now investigate the constituent ordering variations of different grammatical status within NPs. As observed in (19) and (20) above, “scrambling” is in principle an option in Japanese. There are, however, cases in which some variants are judged as less



acceptable. As demonstrated in (21), the head noun *jijitsu* ‘fact’ does not require the subordination marker *to-iu* to be realized overtly. When this subordination marker is deleted in (20), however, there arises a difference in the acceptability of the data:

- (26) a. (?)[boku-ga guuzen kiita] [Taro-ga hanzai-o okashita] jijitsu  
 [I-Nom by-chance heard] [Taro-Nom crime-Acc committed] fact  
 ‘the fact that I happened to hear that Taro committed a crime’  
 b. ??[Taro-ga hanzai-o okashita] [boku-ga guuzen kiita] jijitsu

The “scrambling” of the clausal complement of the noun leads to less acceptability when the subordination marker is not overtly realized.

One may notice that this strong preference for the overt presence of the subordination marker does not apply for some types of head nouns:

- (27) a. [toki-ni-wa yakkai-na] [matigatta koto ga yurusenai to-iu] seikaku  
 [sometimes troublesome] [incorrect thing Nom inadmissible Comp] character  
 ‘(one’s) character, being sometimes troublesome, that cannot put up with incorrect things’  
 b. [matigatta koto ga yurusenai to-iu] [toki-ni-wa yakkai-na] seikaku  
 (28) a. [toki-ni-wa yakkai-na] [matigatta koto ga yurusenai] seikaku  
 [sometimes troublesome] [incorrect thing Nom inadmissible] character  
 ‘(one’s) character, being sometimes troublesome, that cannot put up with incorrect things’  
 b. (?) [matigatta koto ga yurusenai] [toki-ni-wa yakkai-na] seikaku

(28b), which is so good as perfectly acceptable, contrasts with (26b), which is not completely unacceptable, but sounds awkward at least to some extent. It should be remarked, however, that the “clausal complement” in (27/28), governed by the head noun *seikaku* ‘character’, does not constitute a full clause in the sense of (20/21). The *to-iu*-clause in (20/21) represents the content of the “fact” to be reported, and as such corresponds to a full proposition including tense. The clausal complement governed by the head noun *jijitsu* ‘fact’ as in (20/21) is thus to be regarded as at least a TP. The relevant subordinate clause in (27/28), in contrast, represents not a proposition, but

rather just a property. Turning the clause-final predicate into the past tense renders the expression less natural in the intended meaning:

- (29) ??/#[matigatta koto ga yurusena-katta (to-iu)] seikaku  
[incorrect thing Nom inadmissible-Pst (Comp)] character

Furthermore, adding the subject of the subordinate predicate makes the expression almost unacceptable with this type of head nouns:

- (30) [(\*?Taro-ga) jibun-no kangae-o hakkiri i-e-nai (to-iu)] seikaku  
[(Taro-Nom) self-Gen idea-Acc clearly say-can-not (Comp)] character  
'(Taro's) character that he cannot express his opinions frankly'

Although the dependent clause here can be introduced by the alleged complementizer *to-iu*, it semantically seems to share the property comparing to the infinitive clause rather than the finite clauses introduced by *that* in English.

Masuoka (1997: 4ff) admits that subordinate clauses are to be subclassified according to their sentencehood. Among the four types that he lists up, the subordinate clause in (27/28) corresponds to his first group, representing the *type* of the event, while that in (20/21) expresses the concrete event that has actually taken place. Although Masuoka (1997) does not make it explicit, the former seems to correspond to VP or vP, and the latter to TP. Specifically for the prenominal attributive clauses, he also subclassifies them into three types, depending on the governing head noun (p.30):

- (31) [Akiko-wa osoraku kaisha-o yameta daroo to-iu] kangae  
[Akiko-Top probably company-Acc quitted presumably Comp] idea  
'the opinion that Akiko probably has quitted her job'
- (32) [Akiko-ga kaisha-o yameta] jijitsu  
[Akiko-Nom company-Acc quitted] fact  
'the fact that Akiko quitted her job'
- (33) [eki-mae-de chirashi-o kubaru] shigoto  
[station-front-Loc flier-Acc distribute] job  
'(one's) job of distributing fliers in front of the station'

Masuoka shows that, among the three types of head nouns here, the one as in (31) takes the “largest” category as its complement, which can include a topic and modal elements (*osoraku, daroo*). These items are excluded in the clauses of the type (32), which, however, allows for the past tense. The complement clause such as in (33) disallows all of these elements. Extending the discussion by Masuoka further, we could find a correspondence to the syntactic structure also here: The above three types of attributive clauses can be regarded as CP, TP, and vP/VP, respectively.

If the “complement clause” in (28) is a VP/vP, it is rather surprising that it can be combined with a “complementizer”. It actually deserves a precise investigation whether the subordination marker *to-*iu** in Japanese can be regarded as a complementizer in the same sense as in languages such as English (cf. footnote 6). While Masuoka (1997: 28ff) subsumes the noun-dependent clauses such as (21)-(23) under one group, namely as those that represent the content of the event and optionally realize the subordination marker *to-*iu**, the unacceptability of (29) and (30) seems to call for a different characterization for the cases such as (21), on the one hand, and those like (22) (and (23)), on the other. As for the Japanese clausal subordination, Masuoka (1997: 30ff) claims that the “zero form”, i.e. the variant without an overt subordination marker, is the “basic form” of prenominal clausal subordination as compared to *to-*iu** (and *to-*no**). Partly in line with him, I assume as a null hypothesis that, in the case of the subordination by a category smaller than a full clause, the variant without the subordination marker *to-*iu**, (28), counts as the unmarked one, whereas the one with *to-*iu**, (27), is rather a marked option.<sup>7</sup> This leads to the acceptability of the case like (28b), where the subordinate clause without *to-*iu** is dislocated from the head noun, in contrast to (26b). In the discussion that follows, I take the clausal subordination to the noun of the type (26) as a canonical case.

### 3.3. Ordering restrictions

For the sake of the proper description of the core data concerning the prenominal modification in Japanese, I propose the following constraints:

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<sup>7</sup> I am implying here, from a cross-linguistic perspective, that the presence of a subordination marker is the unmarked option with full clauses (cf. Inaba 2009). This reasoning is compatible with the observation that the absence of the complementizer like *that* in English (or *dass* in German) is permitted only in the subset of the environments in which the complementizer shows up.

(34) Do not move. [Base]

(35) Mark the grammatical relationship when possible. [Mark]

(34) hardly calls for a detailed explication: It requires that optional movement not take place (unless especially motivated). That is, the base order is the most unmarked and the “best” one (cf. Lenerz 1977). (35) counts also as a natural constraint in that the grammatical (dependency) relation should be marked explicitly.<sup>8</sup> For example, as mentioned in footnote 7, certain syntactic conditions necessitate the overt presence of the complementizer, and thus the overt marking of the relevant dependency relationship, in English (and German).

With these constraints in mind, let us now turn to concrete examples. I repeat (19) and (26) in the previous subsection below:

(36) a. [boku-ga kinoo totta] Mary-no shashin

[I-Nom yesterday took] Mary-Gen photo

‘Mary’s photo that I took yesterday’

b. (?)Mary-no [boku-ga kinoo totta] shashin

(37) a. (?) [boku-ga guuzen kiita] [Taro-ga hanzai-o okashita] jijitsu

[I-Nom by-chance heard] [Taro-Nom crime-Acc committed] fact

‘the fact that I happened to hear that Taro committed a crime’

b. ??[Taro-ga hanzai-o okashita] [boku-ga guuzen kiita] jijitsu

In (36), both orders are acceptable. Although (36b) is a derived order and thus violate the restriction in (34), this is not detrimental as far as the other constraint, (35), is not violated. The degraded status of (37b) is attributed to the twofold violation of the constraints, namely Base (34) and Mark (35). The same mechanism should go through also in the following data:

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<sup>8</sup> A possible objection to this constraint is that it might contradict the concept of economy, which would require the representations in both interface levels as small as possible. See the following discussion in the text.

- (38) a. [dare-mo shinji-na-katta] [Taroo-ga kita to-iu] jijitsu  
 [anyone believe-not-Pst] [Taro-Nom came Comp] fact  
 ‘the fact that Taro came which no one believed’  
 b. [Taroo-ga kita to-iu] [dare-mo shinji-na-katta] jijitsu
- (39) a. (?) [dare-mo shinji-na-katta] [Taroo-ga kita] jijitsu  
 [anyone believe-not-Pst] [Taro-Nom came] fact  
 ‘the fact that Taro came which no one believed’  
 b. ?? [Taroo-ga kita] [dare-mo shinji-na-katta] jijitsu

It is easy to see that the phenomenon we are dealing with here is sensitive to parsing. The modification of a noun through two (or more) clausal attributes itself may cause difficulty in sentence processing. One reflex of this fact is the observation that the acceptability of data is in part influenced by the presence of the subordination marker, as we have seen above. A more direct consequence of this reasoning is brought about by the examples in which the “heaviness” of the constituent plays a role in the acceptability judgment:

- (40) a. (?) [boku-ga mitsuketa] [Hanako-ga senshuu Kagamiyama-kooen-de tasuketa inu no] shashin  
 [I-Nom found] [Hanako-Nom last-week Kagamiyama-park-Loc rescued dog Gen]  
 photo  
 ‘the photo of the dog that Mary rescued in the Kagamiyama Park last week which I found’  
 b. ? [Hanako-ga senshuu Kagamiyama-kooen-Loc tasuketa inu no] [boku-ga mitsuketa] shashin
- (41) a. [boku-ga Taroo-no heya-no hikidashi-no naka de guuzen mituketa] [AKB no] shashin  
 [I-Nom Taro-Gen room-Gen drawer-Gen inside Loc by-chance found] [AKB Gen]  
 photo  
 ‘the picture of the ABK that I happened to find in the drawer of Taro’s room’  
 b. ?? [AKB no] [boku-ga Taroo-no heya-no hikidashi-no naka de guuzen mituketa] shashin

Let us assume, in line with Hawkins (1994), the following constraint that should apply in head-final languages such as Japanese:

(42) “Heavier” constituents should precede “lighter” ones. [HL]

In the above examples, (40b) and (41b) violate the constraint Base, and (41b) furthermore violates HL, leading to a degraded acceptability. Because (42) is a constraint of a purely perceptual nature, it should be placed, speaking in optimality-theoretic terms, below the other two constraints already introduced, namely Base and Mark.

#### 4. Concluding remarks

In this paper, I discussed some cases of prenominal attributes in Japanese, the focus being placed mainly on the ordering variation among different types of attributes. I demonstrated that “scrambling” within the Japanese NP is in principle permitted, thus providing support to the thesis put forward by Haider (2010) that scrambling is possible (only) in head-final projections. I then proposed constraints, rather in the spirit of the optimality theory, that regulate the constituent ordering variations within the NPs.

I admit that what I presented in this paper deals with just a small subset of the larger area on the adnominal attributes. As for Japanese, it is necessary to classify head nouns according to both their semantics and the types of the complement clauses that they govern (cf. Masuoka 1997, etc.). Furthermore, the research should be located in a wider perspective so that the adnominal structures are subjected to cross-linguistic scrutiny. In a nutshell, the present research has raised more problems as topics for further investigation than it has provided solutions. I hope, however, that it serves as a good starting point for the ensuing discussion in this area.

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