

## Facets of Case:

# On the Nature of the Double-*o* Constraint\*

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### 1. The 'Double-*o* Constraint' Revisited

Since Harada's (1973) insightful paper and his subsequent work Harada (1975), there has been controversy, and sometimes even significant confusion, in the literature about the nature of the 'Double-*o* Constraint' (henceforth *DoC*) in Japanese (see Kuroda 2000 for a review on this point). There is still no agreement on the exact formulation of the *DoC* (cf. Harada 1973, Kuroda, 1965, 1978, 1988, Kuno 1973, Shibatani 1973, 1978, Saito 1982, 1985, Saito and Hoshi 2000, Watanabe 1996).<sup>1</sup> Harada's *DoC* is given in (1).

- (1) Harada's Double-*o* Constraint (Harada 1973: 55)  
A derivation is marked as ill-formed if it terminates in a surface structure which contains two occurrences of NPs marked with *o* both of which are immediately dominated by the same VP-node.

(1) basically prohibits multiple occurrences of accusative Case within VP. On the other hand, Shibatani (1978) proposes the definition of the Double-*o* Constraint (2) (translated by K.H.).

- (2) Shibatani's Double-*o* Constraint (Shibatani 1978)  
There cannot be more than one accusative Case in a sentence.

Shibatani's *DoC* crucially differs from Harada's in the domain to which the *DoC* applies; namely, whereas (1) takes a VP as its domain, (2) takes a CP (i.e. sentence/clause) as its domain. A part of the confusion has been around here;

some people, who cite Harada's *DoC*, state that it is a constraint on having multiple accusative in a single sentence/clause, even though Harada's (1) explicitly says that the *DoC* is a constraint on the elements under VP-node.<sup>2</sup>

Yet more serious confusion concerns the empirical scope of the *DoC*.<sup>3</sup> Harada (1973) first proposed the *DoC* as an explanation of the ungrammaticality of multiple accusative in the transitive causative construction in Japanese shown in (3b).

- (3) Causative (cf. Harada 1973)
- a. Taro-ga Hanako-**ni/wo** gakkoo-ni ik-ase-ta.  
Taro-NOM Hanako-DAT/ACC school-DAT go-CAUS-PST  
'Taro made Hanako go to school.'
- b. Taro-ga Hanako-**ni/\*wo** sono-hon-**wo** yom-ase-ta.  
Taro-NOM Hanako-DAT/ACC the-book-ACC read-CAUS-PST  
'Taro made Hanako read the book.'

Harada also argued that the same *DoC* is also at work in the ungrammaticality of multiple accusative in so-called *Tokoro* Relative Clause (4).<sup>4</sup>

- (4) *Tokoro* Relative Clause (cf. Harada 1973)  
??Taro-ga Hanako-**wo** nigeyootosi-ta tokoro-**wo** tsukamae-ta.  
Taro-NOM Hanako-ACC run-away-try-PST *tokoro*-ACC catch-PST  
'Taro caught Hanako as she ran away.'

As Harada (1975) acknowledged later, (we will see in more detail in Section 3), however, there is a derivation that his *DoC* cannot explain. Consider the cleft version of the *Tokoro* Relative Clause below.

- (5) Causative (cf. (3))  
[Taro-ga Hanako-**ni/\*wo** t<sub>i</sub> yom-ase-ta no]-wa  
Taro-NOM Hanako-DAT/ACC read-CAUS-PST C-TOP  
sono-hon-**wo**<sub>i</sub> da.  
the-book-ACC CPL  
'It is the book that Taro made Hanako read.'

- (6) *Tokoro* RC and Cleft (cf. (4))  
 [Taro-ga t<sub>i</sub> [nigeyootosi-ta tokoro]-wo tsukamae-ta no]-wa  
 Taro-NOM run-way-try-PST tokoro]-ACC catch-PST C-TOP  
 Hanako-wo<sub>i</sub> da.  
 Hanako-ACC CPL  
 ‘It is Hanako that Taro caught as she ran away.’

While the *DoC* violation in the transitive causative cannot be remedied by clefting as shown in (5), the one in the *Tokoro* RC is perfectly repaired by the same strategy as indicated in (6) (cf. also Kuroda 1978).

This asymmetry has led Harada (1975) to propose to account for the ungrammaticality of (5) by the *Functional Uniqueness Principle (FUP)* (7), independently of his original *DoC* (see also Freidin 1978 for a similar proposal).

- (7) *The Functional Uniqueness Principle (FUP)* (Harada 1975)  
 No term of grammatical relation may be represented by more than one constituent, and conversely, no single constituent may bear more than one term of grammatical relation.

In other words, Harada insightfully cautioned that his *DoC* should not be taken responsible for the illicit multiple accusative in causative constructions, despite his initial proposal in Harada (1973); (5) is ruled out by the FUP and (3) is ruled out by the FUP and the *DoC*, while (4) is explained purely by the *DoC*.<sup>5</sup>

Serious confusion in the field has stemmed out of this complicated situation, however; much subsequent work in the literature still attributes the ungrammaticality of multiple accusative in causative constructions to Harada’s *DoC*, citing Harada (1973) (cf. Miyagawa 1989, 1999, Tsujimura 1996 to list just a few), even though Harada himself correctly argued in Harada (1975) that the ungrammaticality is due to a principle like the FUP.<sup>6</sup> Thus confusion has been lingering in the field concerning the empirical scope of the so-called *DoC*.

This paper aims to elucidate the following three properties of the *DoC* and to clarify the locus of confusion for a better understanding of the nature of the *DoC* in Japanese.

- (8) a. Syntactic domain (CP, VP or something else?)  
 b. Empirical scope (causative vs. non-causative)  
 c. Level of application (‘surface’ vs. ‘deep’)

Specifically, I will demonstrate that a detailed investigation supports Harada’s (1975) view on the *DoC* that the *DoC* should not be invoked to explain the ungrammaticality of the multiple accusative transitive causative constructions and should reduce to a ‘deep’ yet ‘surface’ constraint, which derives from ‘facets’ of the mechanism of Case. Specifically, I will claim that both AGREE and SPELL-OUT (i.e. Case determination in narrow syntax and Case realization at the interface) play essential roles in the elucidation of the true nature of the *DoC*. Yet, I will show that neither Harada’s *DoC* nor Shibatani’s is empirically sufficient and propose a more refined theory of the *DoC*.

The organization of this paper is as follows. Section 2 reviews various multiple accusative constructions where the *DoC* effects are allegedly observed. Section 3, based on various salvation strategies, argues for the strict bifurcation between the *DoC* in non-causative constructions and the other type of constraint in causative constructions, whatever the latter turns out to be. Then Section 4 explores an explanation of the true nature of the *DoC*, based on Chomsky’s (2001) theory of phase and Multiple Spell-Out. Finally, Section 5 sees cross-linguistic evidence also support our conclusion.

## 2. Double-*o* Constraint and Various Multiple Accusative Constructions

The *DoC* is observed in various constructions in Japanese: Object Possessor-Raising construction (cf. (9)), Light-*v* construction (cf. (10)), Head-Internal Relative Clause (HIRC) (cf. (11)), *Tokoro* Relative Clause (*Tokoro* RC) (cf. (12)), and Wh-Adjunct construction (cf. (13)).

(9b) is an example of Object Possessor-Raising, in which an inalienable possessor DP is marked accusative and raises out of the host DP (cf. (9a)). Note that the sentence is degraded due to the multiple occurrences of accusative.

## (9) Object Possessor-Raising

a. Taro-ga [Hanako-**no** atama-**wo**] tatai-ta.  
 Taro-NOM Hanako-GEN head-ACC hit-PST  
 ‘Taro hit Hanako’s head.’

b.??Taro-ga Hanako-**wo**<sub>i</sub> [t<sub>i</sub> atama-**wo**] tatai-ta.  
 Taro-NOM Hanako-ACC head-ACC hit-PST  
 ‘Taro hit Hanako on the head.’

It has been claimed that Japanese lacks Object Possessor-Raising (i.e. multiple accusative construction), in contrast with Korean (Shibatani 1978, Ura 1996). The reason has been often attributed to the (mild) ungrammaticality of (9b) due to the DoC (see note 4).

The same situation is observed in the Light-*v* construction. In (10b), the object of the verbal noun (VN) as well as the host VN is marked accusative, and the sentence results in the DoC violation (Kageyama 1993, Hiraiwa 2000, Saito and Hoshi 2000).

(10) Light-*v* Construction

a. Taro-ga [Navajo-go-**no** kenkyuu]-**wo** si-ta.  
 Taro-NOM Navajo-language-GEN study-ACC Lv-PST  
 ‘Taro studied Navajo.’

b.??Taro-ga Navajo-go-**wo**<sub>i</sub> [t<sub>i</sub> kenkyuu]-**wo** si-ta.  
 Taro-NOM Navajo-language-ACC study-ACC Lv-PST

A third construction in which DoC effects show up is the Head-Internal Relative Clause (HIRC), as observed by Tsubomoto (1998). When a pronoun *sore-wo* ‘it-Acc’ is repeated after the HIRC as in (11b), the sentence shows DoC effects.

## (11) HIRC (cf. (25))

a. Sensei-ga [boku-ga ronbun-wo kai-ta no]-**wo**  
 teacher-NOM I-NOM paper-ACC write-PST NML-ACC  
 zassisyani suisen-site-kure-ta.  
 publisher-DAT recommend-Lv-benefactive-PST  
 ‘My teacher recommended the paper that I wrote to a publisher.’

b.??Sensei-ga [boku-ga ronbun-wo kai-ta no]-**wo**  
 teacher-NOM I-NOM paper-ACC write-PST NML-ACC  
 sore-**wo** zassisyani suisen-site-kure-ta.  
 it-ACC publisher-DAT recommend-Lv-benefactive-PST

A fourth case comes from *Tokoro* RC (TRC), first discussed in Harada (1973) as a case of Counter-Equi NP Deletion. Notice that in (12b) where the embedded subject *Hanako* is marked accusative, DoC effects emerge.

(12) *Tokoro* RC (cf. (4) and (6))

a. Taro-ga [Hanako-ga nigeyootosi-ta tokoro]-**wo**  
 Taro-NOM Hanako-NOM run-away-try-PST tokoro]-ACC  
 tsukamae-ta.  
 catch-PST  
 ‘Taro caught Hanako as she tried to run away.’

b.??Taro-ga Hanako-**wo** [nigeyootosi-ta tokoro]-**wo**  
 Taro-NOM Hanako-ACC run-away-try-PST tokoro]-ACC  
 tsukamae-ta.  
 catch-PST

Finally, Kurafuji (1997) remarks that Wh-adjuncts exhibit the same behavior with respect to the DoC. Consider (13).

## (13) Wh-Adjunct (Kurafuji 1997)

a. Taro-wa **nani-wo** naite-ir-u no?  
 Taro-TOP what-ACC cry-PROG-PRS Q  
 ‘Why is Taro crying?’

b.??Taro-wa **nani-wo** henna-uta-**wo** utatte-ir-u no?  
 Taro-TOP what-ACC funny song-ACC sing-PRG-PRS Q  
 ‘Why is Taro singing funny songs?’

Kurafuji (1997) observes that an accusative Wh-adjunct *nani-wo* ‘what-Acc’ can be interpreted as ‘why’ (cf. (13a)). Significantly, the wh-adjunct cannot co-occur with another accusative object of a transitive verb, due to the DoC, as shown in (13b).

### 3. Ways of Salvation

Crucial evidence for my claim that the prohibition against multiple Acc in causative and non-causative constructions should not be explained uniformly in terms of the DoC comes from the various ways of salvation available for the latter but not for the former. This section illustrates five strategies of salvation, explicating the difference in the nature of ‘Double-*o*’ effects between them.<sup>7</sup>

#### 3.1. Focus Particle/Case-drop

First, as observed by a number of people (Shibatani 1978, Kurafuji 1997 Hiraiwa 1999 etc.), the DoC effects can be obviated by replacing one of the accusative Case-particle with a focus particle, as shown in (14)-(15).

(14) Possessor-Raising (cf. (9))

- a. Taro-ga Hanako-**mo/dake/sae/wa**<sub>i</sub> [t<sub>i</sub> atama-**wo**] tatai-ta.  
Taro-NOM Hanako-also/only/even/TOP head-ACC hit-PST  
‘Taro hit also/only/even Hanako on the head.’
- b. Taro-ga Hanako-**wo**<sub>i</sub> [t<sub>i</sub> atama-**mo/dake/sae/wa**] tatai-ta.  
Taro-NOM Hanako-ACC head-also/only/evenTOP hit-PST  
‘Taro hit Hanako also/only/even on the head.’

(15) Light-*v* Construction<sup>8</sup> (cf. (10))

- a. Taro-ga Navajo-go-**dake** kisotekina  
Taro-NOM Navajo-language-only elementary  
tyoosa-wo si-ta.  
survey-ACC Lv-PST  
‘Taro made an elementary survey on only Navajo.’
- b. Taro-ga Navajo-go-**wo** kisotekina  
Taro-NOM Navajo-language-ACC elementary  
tyoosa-**dake** si-ta.  
survey-only Lv-PST  
‘Taro made only an elementary survey on Navajo.’

Kurafuji (1997) also notes that the DoC violation in the Wh-Adjunct is saved by the same strategy.

(16) Wh-Adjunct (cf. (13))

- a. ??Taro-wa **nani-wo** henna-uta-**wo** utatte-ir-u no?  
Taro-TOP what-ACC funny song-ACC sing-PRG-PRS Q  
‘Why is Taro singing funny songs?’
- b. Taro-wa **nani-wo** henna-uta-**bakari**(?-**wo**) utatte-ir-u no?  
Taro-TOP what-ACC funny-song-only-ACC sing-PRG-PRS Q  
‘Why is Taro singing only funny songs?’

It is well-known that colloquial Japanese often drops Case-markers. It should be noted that a simple Case-drop also saves the DoC violation, as shown in (17).

(17) Possessor Raising and Case-drop (cf. (14))

- (?)Hanako-**wo** doko- $\emptyset$  tatai-ta no?  
Hanako-ACC head- $\emptyset$  hit-PST Q  
‘Which part of Hanako’s body did you hit?’

On the other hand, the ungrammaticality of multiple accusative in the transitive causative construction cannot be saved by the focus particle strategy, as shown in (18).

(18) Causative and Focus Particle/Case-drop (cf. (3))

- \*Taro-ga Hanako-**wo** sono-hon-**mo/dake/sae/wa**/ $\emptyset$   
Taro-NOM Hanako-Acc the-book-also/only/even/TOP/ $\emptyset$   
yom-ase-ta.  
read-CAUS-PST  
‘Taro made Hanako read only/even the book (as well).’

#### 3.2. Cleft

As Harada (1973) observes (cf. also Kuroda 1988), DoC effects can also be perfectly suppressed under cleft. This is illustrated in (19) with Possessor-Raising (see Hiraiwa & Ishihara 2002 for extensive discussions on cleft and bifurcation between cleft and pseudo-cleft based on the presence/absence of Case particles).

- (19) Possessor-Raising and Cleft (cf. (9))  
 [Taro-ga t<sub>i</sub> amata-**wo** tatai-ta no]-wa Hanako-**wo**<sub>i</sub> da.  
 Taro-NOM head-ACC hit-PST C-TOP Hanako-ACC CPL  
 ‘It is Hanako that Taro hit on the head.’

The same is true in *Tokoro* RC, as Harada (1973) observes.

- (20) *Tokoro* RC (cf. (12))  
 [Taro-ga t<sub>i</sub> [nigeyootosi-ta tokoro]-**wo** tsukamae-ta no]-wa  
 Taro-NOM run-away-try-PST tokoro]-ACC catch-PST C-TOP  
 Hanako-**wo**<sub>i</sub> da.  
 Hanako-ACC CPL  
 ‘It is Hanako that Taro caught as she ran away.’

However, it is significant to point out that clefting of multiple accusative does not save the DoC violation.

- (21) Possessor-Raising and Multiple Cleft (cf. (19))  
 ??[Taro-ga t<sub>i</sub> (t<sub>j</sub>) t<sub>k</sub> tatai-ta no]-wa Hanako-**wo**<sub>i</sub> (sude-de)<sub>j</sub>  
 Taro-NOM hit-PST C-TOP Hanako-ACC bare-hand-INST  
 atama-**wo**<sub>k</sub> da.  
 head-ACC CPL  
 ‘It is Hanako, on the head that Taro hit (with a bare hand).’

As Harada (1975) acknowledges, however, the cleft strategy cannot save the multiple accusative in the causative construction (see also (28) in Section 3.4.).

- (22) Causative and Cleft (cf. (3))  
 a. \*[Taro-ga t<sub>i</sub> sono-hon-**wo** yom-ase-ta no]-wa  
 Taro-NOM the-book-ACC read-CAUS-PST C-TOP  
 Hanako(-**wo**)<sub>i</sub> da.  
 Hanako-ACC CPL  
 ‘It is Hanako that Taro made read the book.’  
 b. \*[Taro-ga Hanako-**wo** t<sub>i</sub> yom-ase-ta no]-wa  
 Taro-NOM Hanako-ACC read-CAUS-PST C-TOP  
 sono-hon(-**wo**)<sub>i</sub> da.  
 the-book-ACC CPL

‘It is the book that Taro made Hanako read.’

In fact it is this asymmetry that led Harada (1975) to abandon the DoC as an explanation for the illicit multiple accusative in causative constructions, in favor of his FUP (7) (cf. Section 1).

### 3.3. Scrambling

A third salvation strategy is scrambling. As shown in (23), scrambling of one of the accusative elements to the sentence-initial position (cf. (23b)) or to the position in front of various vP/VP adverbs (cf. (23c)) significantly improves the grammaticality.

- (23) Possessor-Raising (cf. (9))  
 a. ??Taro-ga omoikkiri sude-de Hanako-**wo**  
 Taro-NOM hard bare-hand-INST Hanako-ACC  
 atama-**wo** tatai-ta.  
 head-ACC hit-PST  
 ‘Taro hit Hanako hard on the head with a bare hand.’  
 b. Hanako-**wo**<sub>i</sub> Taro-ga omoikkiri sude-de t<sub>i</sub>  
 Hanako-ACC Taro-NOM hard bare-hand-INST  
 atama-**wo** tatai-ta.  
 head-ACC hit-PST  
 c. (?)Taro-ga Hanako-**wo**<sub>i</sub> omoikkiri sude-de t<sub>i</sub>  
 Taro-NOM Hanako-ACC hard bare-hand-INST  
 atama-**wo** tatai-ta.  
 head-ACC hit-PST

Significantly, however, multiple scrambling of both of the accusative elements does not save the DoC effects.

- (24) Possessor-Raising and Multiple Scrambling (cf. (23))  
 ??Hanako-**wo**<sub>i</sub> (sude-de)<sub>j</sub> atama-**wo**<sub>k</sub> Taro-ga omoikkiri  
 Hanako-ACC bare-hand-INST head-ACC Taro-NOM hard

t<sub>i</sub> t<sub>j</sub> t<sub>k</sub> tatai-ta.  
hit-PST

‘Taro hit Hanako hard on the head with a bare hand.’

The same is true with the DoC effects in HIRC. Tsubomoto (1998) observes that fronting of HIRC improves the grammaticality, as shown in (25).<sup>9</sup>

(25) HIRC (cf. (11))

a. ??Sensei-ga [boku-ga ronbun-wo kai-ta no]-wo  
teacher-NOM I-NOM paper-ACC write-PST NML-ACC  
sore-wo zassisyani suisen-site-kure-ta.  
it-ACC publisher-DAT recommend-L<sub>v</sub>-benefactive-PST  
‘My teacher recommended the paper that I wrote to a publisher.’

b. [Boku-ga ronbun-wo kai-ta no]-wo<sub>i</sub> sensei-ga t<sub>i</sub>  
I-NOM paper-ACC write-PST NML-ACC teacher-NOM  
sore-wo zassisyani suisen-site-kure-ta.  
it-ACC publisher-DAT recommend-L<sub>v</sub>-benefactive-PST

By contrast, in the multiple accusative causative construction, scrambling does not change the acceptability at all.

(26) Causative

\*Hanako-wo<sub>i</sub> Taro-ga kinoo muriyari t<sub>i</sub> sono-hon-wo  
Hanako-ACC Taro-NOM yesterday forcibly the-book-ACC  
yom-ase-ta.  
read-CAUS-PST  
‘Taro made Hanako read the book against her will.’

### 3.4. PF-Deletion

The DoC effects can also be suppressed by Deletion/Pro-drop of one of the two accusative DPs. This is illustrated in the Sluicing example (27).

(27) Possessor-Raising and Sluicing (cf. (9))

Taro-wa aruhito-mo atama-wo tatai-ta rasii-kedo,  
Taro-TOP someone-also head-ACC hit-PST I-hear-but,

boku-wa [dare-wo ka] sira-na-i.  
I-TOP who-ACC Q know-NEG-PRS

‘I heard that Taro hit someone on the head, too, but I don’t know who.’

The first sentence avoids the DoC effects by using the focus particle *-mo*. Notice, however, that the second sentence, which is Sluicing, is perfect even though the possessor Wh-DP is marked accusative, because the other accusative DP undergoes PF-deletion

‘Pro-’nominalization/Pro-drop works as a salvation strategy, as well.

(28) Pseudo-Cleft

[Taro-ga Hanako-wo pro<sub>i</sub> tatai-ta no]-wa atama da.  
Taro-NOM Hanako-ACC hit-PST C-TOP head CPL  
‘(Lit.) What Taro hit Hanako is her head.’

It is significant to note that the multiple accusative transitive causative construction cannot be saved by PF-deletion or ‘pro’-nominalization/pro-drop.

(29) Causative and Sluicing (cf. (3))

a. Taro-wa aruhito-ni sono-hon-wo yom-ase-ta  
Taro-TOP someone-DAT the-book-ACC read-CAUS-PST  
rasii-kedo, boku-wa [dare--ni/\*wo ka] sira-na-i.  
I-hear-but, I-TOP who-DAT/ACC Q know-NEG-PRS  
‘I heard that Taro made someone read the book, but I don’t know who.’

b. Taro-wa Hanako-ni/\*wo pro yom-ase-ta.  
Taro-TOP Hanako-DAT/ACC read-CAUS-PST  
‘Taro made Hanako read it/the book.’

### 3.5. Relativization/Topicalization

Finally, the fifth salvation strategy is relativization/topicalization (cf. Saito 1982 for the latter). (30) and (31) illustrate that relativization and topicalization of the possessor accusative DP suppress the DoC effects, respectively.<sup>10</sup>

(30) Possessor-Raising and Relativization (cf. (9))  
 [Taro-ga t<sub>i</sub> atama-**wo** tatai-ta] hito<sub>i</sub>  
 Taro-NOM head-ACC hit-PST person  
 ‘the person who Taro hit on the head.’

(31) Possessor-Raising and Topicalization (cf. (9))  
 Hanako-**wa**<sub>i</sub> Taro-ga t<sub>i</sub> atama-wo tatai-ta.  
 Hanako-TOP Taro-NOM head-ACC hit-PST  
 ‘Hanako, Taro hit on the head.’

The multiple accusative causative construction still remains ungrammatical even if the accusative object DP undergoes relativization or topicalization.

(32) Causative and Relativization (cf. (3))  
 [Taro-ga Hanako-**ni**/**\*wo** t<sub>i</sub> yom-ase-ta] hon<sub>i</sub>  
 Taro-NOM Hanako-DAT/ACC read-CAUS-PST book  
 ‘the book that Taro made Hanako read.’

(33) Causative and Topicalization (cf. (3))  
 Sono-hon-**wa**<sub>i</sub> Taro-ga Hanako-**ni**/**\*wo** t<sub>i</sub> yom-ase-ta.  
 the-book-TOP Taro-NOM Hanako-DAT/ACC read-CAUS-PST  
 ‘That book, Taro made Hanako read.’

### 3.6. Interim Summary

Summarizing this section, it has been demonstrated that there is a significant asymmetry in the nature of the ‘Double-*o*’ effects between causative and non-causative constructions. Crucially, the effects can be perfectly suppressed by various salvation strategies in the latter but not in the former structure.<sup>11</sup>

Based on the above consideration, I propose to reformulate the DoC as (34).

(34) DoC (a language-particular PF constraint; to be revised in (35))  
 More than one structural accusative Case cannot be morphologically spelled-out within a local domain.

Notice that (34) crucially differs from Harada’s DoC (1) and Shibatani’s (2); the scrambling data and cleft data demonstrate that their formulations of the DoC

are not empirically adequate. If the DoC were a ban on multiple accusative within a VP (cf. Harada 1973), multiple clefting (21) and multiple scrambling (24) should be wrongly expected to be uniformly grammatical, since as a result of those operations, VP no longer contains accusative element on the surface. If, on the other hand, the DoC is a ban on multiple accusative within a CP (cf. Shibatani 1978), then salvation-by-clefting/scrambling becomes a mystery. Rather, (34) states that more than one accusative cannot be realized at PF ‘too adjacent’ to each other.

Thus, the exact definition of ‘a local domain’ is the theoretical focus of the next section

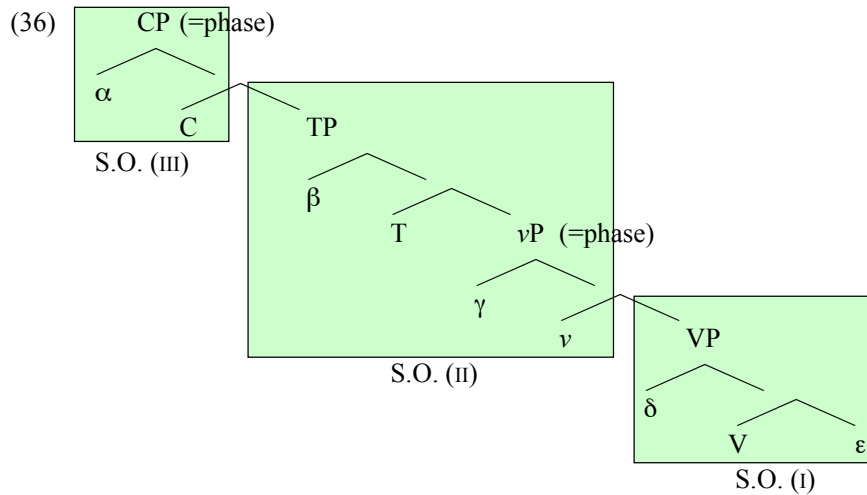
### 4. A Phase Theory of the Double-*o* Constraint: Multiple Spell-Out

Now, based on our new generalization of the DoC in (34), I propose the following theoretical analysis of the DoC, adopting Chomsky’s (2001) theory of Phase and Multiple Spell-Out.<sup>12</sup>

(35) The DoC as a ‘Deep Surface’ Constraint  
 More than one structural accusative Case cannot be morphologically ‘spelled-out’ via Spell-Out within *each phase*.

There are three important points to be noted in the formulation of DoC (35). First, under (35), the DoC is a condition on the PF/Morphological realization of structural Case, which has been determined via Agree in narrow syntax. In this respect, the DoC is ‘surface’ constraint imposed on the output of the ‘deep’ Case determination. Second, the DoC applies at Spell-Out (cf. Chomsky 2001), not in narrow syntax. Third, the local domain in which DoC applies corresponds to ‘phase’ units (i.e. *v*P and CP), or more precisely, each *Spell-Out domain* (henceforth S.-O.) of each phase, which consists of the sister of the head and the ‘edge’ of the lower phase (cf. Chomsky 2001).

(36) illustrates a basic clause architecture with the three Spell-Out domains, S.-O. (i), S.-O. (ii) and S.-O. (iii), respectively.



Theoretically, the various salvation strategies reviewed in the preceding section can be divided into two classes: PF/Morphological strategies such as Focus Particle, Case-drop, Sluicing, ‘Pro’-nominalization/Pro-drop, and Relativization the one hand, and Movement strategies such as Cleft, Scrambling, and Topicalization on the other.

- (37) a. *Salvation by PF/Morphological strategies:*  
 Focus Particle, Case-drop, Sluicing, Relativization,  
 ‘Pro-’ nominalization/Pro-drop, incorporation, Topicalization  
 b. *Salvation by Movement strategies:*  
 Cleft, Scrambling

Now these salvation effects all naturally fall within the architecture (36). Suppose that  $\delta$  and  $\epsilon$  are both morphologically accusative. Each of the PF/Morphological strategies above derives the effect that at the vP phase level, the number of morphological accusative Case spelled out in the Spell-Out domain (S.-O. (I)=VP) is limited to one by the PF/Morphological deletion of one of the other accusative element.

In the same vein, the movement strategies obviate DoC effects by dislocating one of the two accusative elements to another Spell-Out domain

(e.g. the positions  $\alpha$  in S.-O. (III) and  $\beta$ , or  $\gamma$  in the S.-O. (II)). Note that both Cleft and Scrambling dislocate one of the accusative elements to the edge of CP (cf. Section 3) and thus only the other accusative element undergoes Spell-Out at the vP phase level.<sup>13, 14</sup>

A note is in order here. It should be emphasized that our theory of DoC is a condition on PF/Morphological realization of (abstract/structural) Case within a single Spell-Out domain that has been valued via Agree in narrow syntax. Thus it correctly predicts the grammaticality of (38), where two elements with abstract accusative Case are adjacent to each other, but crucially in different ‘clauses’ (=phases) (cf. also Miyagwa 1999).

- (38) *Adjacent Multiple Acc in Different Phases*  
 Taro-ga [<sub>vP</sub> Hanako-**wo** [ <sub>$\alpha$ P</sub> eiga-**wo** mi-ni] sasot]-ta.  
 Taro-NOM Hanako-ACC movie-ACC watch-INF invite-PST  
 ‘Taro invited Hanako to watch the movie.’

Significantly, when both of the accusative elements are fronted by scrambling, the sentence shows DoC effects, as shown in (39). This is expected because they are now in the single Spell-Out domain.

- (39) *Multiple Scrambling out of Different Phases*  
 ??Hanako-**wo**<sub>i</sub> eigo-**wo**<sub>j</sub> Taro-ga [<sub>vP</sub> t<sub>i</sub> [ <sub>$\alpha$ P</sub> t<sub>j</sub> mi-ni] sasot]-ta.  
 Hanako-ACC movie-ACC Taro-NOM watch-INF invite-PST

Furthermore, it is predicted under (35) that the DoC is not just a linear PF-constraint on two adjacent accusative elements; thus an element with non-structural accusative Case does not trigger the DoC effects. This is again borne out. As shown in (40), the adverbial accusative does not incur the DoC effects.

- (40) *Adverbial Accusative*  
 Taro-ga ame-no-naka-**wo** Hanako-**wo** sagasi-ta.  
 Taro-NOM rain-GEN-in-ACC Hanako-ACC search-PST  
 ‘Taro looked for Hanako in the rain.’

## 5. A Cross-Linguistic Perspective on the Double-o Constraint

Finally, I would like to add a cross-linguistic evidence against applying the DoC to causative constructions (cf. Harada 1973, Shibatani 1973, 1978, Tsujimura 1996, Miyagawa 1999 etc.).

Shibatani (1978), based on a comparison of Japanese and Korean (and some other languages), implies that there is a cross-linguistic correlation between those languages that allow Acc-Acc Case-pattern in causative constructions and those that allow multiple accusative in non-causative constructions.

Prima facie, such a correlation seems to be true; for example, Turkish of the Altaic family, which does not allow Object Possessor-Raising, does not allow the Acc-Acc Case pattern in causative constructions, either. It should be noted that in the Possessor-Raising (41a), the host DP cannot be marked accusative; rather it is obligatorily marked ablative, whereas in the causative construction (41b), the causee argument must be assigned dative Case.

- (41) Turkish (Aissen 1979, Nigar Gulsat Aygen p.c.)
- a. Mehmet Hasan-**i** kafa-sin-**dan**/\*-**i** vur-du.  
Mehmet Hasan-ACC head-poss-ABL/ACC shoot-PST  
'Mehmet shot Hasan on the head.'
- b. Mehmet Hasan-**a**/\*-**i** bavul-**u** aç- tir-di.  
Mehmet Hasan-DAT/ACC suitcase-ACC open-CAUSE-PST  
'Mehmet made Hasan open the suitcase.'

By contrast, Choctaw of the Muskogean family (cf. Davies 1986) and (varieties of) Quechua of the Quechuan family (cf. Lefebvre and Muysken 1988), in addition to Korean, allow multiple accusative in both causative and non-causative constructions. (42a) and (43a) are a Possessor-Raising construction in Korean and a Quirky subject construction in Quechua, respectively. (42b) and (43b), on the other hand, are causative constructions in these languages. Note the multiple accusative Case-agreement in both of the sentences.

- (42) Korean (Youngjoo Lee p.c.)
- a. John-i Mary-**li** məri-**li** tsiess-ta.  
John-NOM Mary-ACC head-ACC hit-PST  
'John hit Mary on the head.'
- b. John-i ai-**li** pap-**il** məkke-haæss-ta.  
John-NOM child-ACC rice-ACC eat-CAUS-PST  
'John made the child eat the rice.'
- (43) Choctaw (Davies 1986)
- a. **Chi-** **si-** anokfohka -h.  
2ACC 1ACC understand PRED  
'I understand you.'
- b. Hattak-at **chi-** **sa-** bashli -chi -tok.  
man-NOM 2ACC 1ACC cut CAUS PST  
'The man made you cut me.'

Thus, again at first blush, Turkish and Choctaw support the claim that a single 'Double-o Constraint' is at work in both causative and non-causative constructions. (cf. Shibatani 1978 etc.)

However, the correlation breaks down at once on a closer cross-linguistic inspection; the DoC in the causative constructions and the DoC in non-causative constructions do not necessarily correlate, contrary to Shibatani's expectation.

Persian of the Indo-Iranian family, for example, allows multiple accusatives in object Possessor-Raising constructions (cf. (44)), but it crucially disallows Acc-Acc Case pattern in causative constructions and the causee argument is obligatorily marked dative (cf. (45)).

- (44) Persian (Browning and Karimi 1994)
- a. Hasan- $\emptyset$  madar-e Ali-**ra** dide.  
Hasan-NOM mather-Ez Ali-ACC see-3sg.  
'Hasan has seen Ali's mother.'
- b. Hasan- $\emptyset$  Ali-**ra** madar-ash-**ra** dide.  
Hasan-NOM Ali-ACC mother-his-ACC see-3sg.

- (45) Persian (Comrie 1976: 268)  
 Yeki az **anha** cay-**ra** be-pesar-am nus-an-id  
 one-NOM of them tea-ACC DAT-son-my drink-CAUS-PST  
 ‘One of them made my son drink the tea.’

Finally, Arabic is the forth type of language, which allows multiple accusative in the causative construction (cf. Comrie 1976) but disallows Acc-Acc possessor raising constructions (Abbas Benmamoun p.c.).

The results of our cross-linguistic investigation are summarized in (46).

- (46) Summary of the cross-linguistic variation

		Acc-Acc (Causative)	Acc-Acc (non-causative)
Type I	Turkish	*	*
Type II	Choctaw/Korean	√	√
Type III	Persian	*	√
Type IV	Arabic	√	*
cf.	Japanese	*	#

What emerges from (46) is the fact that there is no cross-linguistic correlation between the ban on multiple accusative in causative and the one in non-causative constructions. Thus our cross-linguistic investigation provides another evidence against the unified application of the DoC to both phenomena.

## 6. Concluding Remarks: Language-Particular Process and UG

In conclusion, I have demonstrated, building on the asymmetry in various salvation strategies and cross-linguistic data, that the illicit multiple accusative in causative and non-causative constructions, despite their ostensible similarity, should not be explained by the same mechanism of the ‘Double-*o* Constraint’. Every single piece of evidence indicates that only the prohibition of multiple accusative in non-causative structures shows ‘surface/interface’ and ‘language-particular’ properties. The end result of the paper is a further empirical support for Harada’s (1975) treatment of the DoC.

First, I have restricted the empirical scope of the DoC to the prohibition

against multiple accusative only in non-causative structures (cf. Harada 1973, Shibatani 1973, 1978, Tsujimura 1996, Miyagawa 1989, 1999). It has been, then, demonstrated that the DoC is just a surface PF/Morphological constraint that can be saved by various salvation strategies. Significantly, I have shown that the DoC is a constraint imposed on morphological realization (i.e. Spell-Out) of the abstract accusative Case that has been valued via Agree in the course of the derivation. On the other hand, the ban on multiple accusative in causative structures has been shown to be quite strong and deep (cf. Harada 1975) and it is observed widely in various languages with parametric variation (cf. Comrie 1976).

I have proposed a phase-based explanation of the DoC and its salvation effects. As long as our explanation is on the right track, this is a good case that indicates that such a peripheral/language-particular phenomenon as ‘Double-*o* Constraint’ can reveal something about UG, namely the existence of phase categories and Multiple Spell-Out.

Our investigation also has an important implication for the nature of Case in Japanese. In particular, the DoC reveals the importance of one facet of the nature of Case, namely its PF aspect. Nevertheless, this does not mean that Case in Japanese should be explained solely in terms of PF; rather I have claimed that the DoC is the surface constraint on the output of the narrow-syntactic Case. Only with the investigation of the two facets of the Case (PF and narrow syntax) will its nature be revealed.

There are issues, however, that I cannot deal with in this paper due to the limitation of space. Most important among them is the elucidation of the nature of the parameter that determines (un)availability of Acc-Acc in causative constructions, a theoretical investigation of which is left for future research (see Harada 1975, Freidin 1978, Kuroda 1978 and Watanabe 1996 among others).<sup>15</sup> It is predicted that variation in availability of multiple accusative in causative constructions correlates with their typological differences (cf. Section 6). The ultimate elucidation of the nature of the prohibition of multiple accusative in

causative constructions must wait for a detailed investigation of the mechanism of the causative constructions themselves.

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#### Notes

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<sup>1</sup> In this paper, I transcribe the accusative Case-marker as *wo* not as *o*. However, I will continue to use the term ‘Double-*o* Constraint’, following Harada (1973) and other subsequent works.

<sup>2</sup> See Kuroda (1978), Miyagawa (1989), Tsujimura (1996) for example.

<sup>3</sup> See Kuroda (2000) for a very good review on this point.

<sup>4</sup> On careful judgments, however, a significant, albeit subtle, contrast in grammaticality is detected between the ‘Double-*o*’ effect in the causative (3) and the one in the *Tokoro* Relative Clause construction (4) (judgments on multiple accusatives in non-causative constructions vary among native speakers, whereas those on multiple accusatives in transitive causatives are strictly ungrammatical uniformly). On this ground, in this paper, I indicate the strict ungrammaticality of (3) as ‘\*’, while relegating ‘??’ to the milder DoC effects of (4). The same contrast in grammaticality is also observed in other non-causative constructions. See Section 2.

<sup>5</sup> It is not clear from Harada (1975) whether (3) really needs to be explained by both the FUP and the DoC; if the FUP is a ‘deep’ condition that must be satisfied derivationally earlier (e.g. D-Structure), then the DoC does not need to be invoked for (3). Thanks to Naoki Fukui for discussions on this point.

<sup>6</sup> As Fukui (2000) points out, it has been unfortunate that Harada (1975) was published in a minor journal and hence didn’t attract much attention. Yet, given that Kuroda (1978) also noticed the same asymmetry between (5) and (6), the confusion should have been resolved earlier. Some confusion is found in Tsujimura (1996) and Miyagawa (1999), for example. See Kuroda (2000) for a criticism of Miyagawa (1989, 1999) and a detailed discussion on the proper treatment of Harada’s (1973) original DoC.

<sup>7</sup> Due to the limitation of space, I cannot show salvation effect for each of the

constructions discussed in Section 2. I note here, however, that the five salvation strategies work for all of the constructions.

<sup>8</sup> A caution is in order for the use of the adjective in (15). As Kageyama (1993) note, the DoC effects can also be suppressed by incorporation (cf. Baker 1988) of the verbal noun (VN) into the light-*v* (cf. also Saito and Hoshi 2000).

(i) Taro-ga Navajo-go-**wo** tyoosa(-dake)-si-ta.  
Taro-NOM Navajo-language-ACC survey-only-L<sub>v</sub>-PST  
‘Taro surveyed Navajo.’

It should be noted that a focus particle can be attached as shown in (i). Thus when a focus particle is attached, it is ambiguous between the incorporation derivation and the non-incorporated derivation. The incorporation is blocked, however, when the VN is modified by a prenominal adjective.

(ii)\*Taro-ga Navajo-go-**wo** kisotekina tyoosa-si-ta.  
Taro-NOM Navajo-language-ACC elementary survey-L<sub>v</sub>-PST  
‘Taro made an elementary survey on Navajo.’

Thus the use of the adjective in (16) makes it explicit that the derivation of (16) does not involve incorporation but rather it’s a multiple accusative construction.

<sup>9</sup> Tsubomoto (1998) gives a functional explanation for the improvement of grammaticality in (25b). See also Kuroda (1999).

<sup>10</sup> There is controversy in the literature as to whether the derivation of relativization and topicalization involves movement or base-generation. I assume that these constructions involve movement in this paper. Nothing in the discussions below hinges on this assumption, however.

<sup>11</sup> The facts that object Possessor-Raising is allowed under cleft (cf. (17)) and others (cf. (21)) indicate that Ura’s (1996) conclusion that *v* in Japanese does not allow multiple feature-checking is not empirically correct. Rather multiple feature-checking by *v* in Japanese is just masked by the surface DoC effects.

<sup>12</sup> See Hiraiwa (1999, 2001) for the importance of both morphological and abstract aspects of ‘Case’ in Japanese syntax. See also Section 6.

<sup>13</sup> See Hiraiwa and Ishihara (2002), where it is claimed, based Rizzi’s articulated Left Periphery, that the derivation of Cleft involves movement of a focused element to the edge of CP (i.e. Spec, FocP).

<sup>14</sup> The term ‘salvation-by-PF-deletion’ may not be an appropriate term here. Strictly speaking, there is an ordering possibility and we do not know whether the PF-deletion

process precedes or follows the morphological ‘spell-out’ of structural Case that has been valued via Agree in narrow syntax. Or these operations may be ‘simultaneous’ in effect. I will use the term, however, without going into details, leaving the issue for the future.

<sup>15</sup> Saito and Hoshi (2000) makes a distinction between weak and strong DoC, which roughly corresponds to the bifurcation proposed above (cf. also Hiraiwa 1999). There is a crucial difference between their proposal and ours, however; they argue that the ‘weak’ DoC is irrelevant to abstract Case, whereas our DoC is a condition on the morphological realization of abstract Case (See Section 4 for evidence and discussions). See also Section 6 for much argument against unifying both phenomena under the name of ‘Double-o Constraint’.

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