The Double-O Constraints in Japanese*

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Abstract

The Double-O Constraint (Harada 1973), is intended to account for the ungrammaticality of clauses containing two accusative Noun Phrases. It has been discussed by numerous authors in various formulations. This paper attempts to clarify the phenomena involved and to reduce the class of possible analyses. Five main points are made: (a) that there are actually two constraints, the Deep Double-O Constraint, violation of which produces gross ungrammaticality, which is not subject to variation among speakers, and does not require the presence of two surface accusatives, and the Surface Double-O Constraint, violation of which frequently fails to produce outright ungrammaticality, which is subject to considerable variation among speakers, and which arises only when two accusatives are present on the surface. (b) Several formulations of the DDOC are untenable, namely those based on: (i) valency; (ii) surface case; and (iii) thematic roles. (c) The DDOC must be stated on argument structure. (d) there are four classes of accusatives that do not count for the DDOC: (i) path accusatives; (ii) body-part accusatives; (iii) *tokoro* complements; and (iv) ablatival accusatives. The last are exempt only for a minority of speakers, reflecting a nearly complete historical change. (e) The status of the accusatives that do not trigger the DDOC is unclear. They pass certain putative tests for object status. That is, they may be passivized, and they may float quantifiers. However, neither of these now appears to be a clear test for object status. It is thus possible to treat these accusatives as oblique.

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1. Introduction

Consider the French sentences in (1) through (4). In (1), the causee *Jean* is the direct object of the causative complex *fait partir*. As (2) shows, when the verb is intransitive, the causee may not be an indirect object. In contrast, when the verb is transitive, as in (3) and (4), the causee may not be a direct object, as in (3) but must be an indirect object, as in (4). In sum, when the verb is intransitive the causee must be a direct object, but when the verb is transitive it must be an indirect object.

(1)   J'ai   fait   partir   Jean.
          I-have   made   leave   Jean
          I made Jean leave

(2)   *J'ai   fait   partir   à   Jean.
          I-have   made   leave   to   Jean.
          I made Jean leave

(3)   *J'ai   fait   manger   le   gateau   Jean.
          I-have   made   eat   the   cake   Jean
          I made Jean eat the cake.

(4)   J'ai   fait   manger   le   gateau   à   Jean.
          I-have   made   eat   the   cake   to   Jean
          I made Jean eat the cake.

This fact about French is well known, and is paralleled by similar generalizations in a wide range of other languages. In general, what seems to be going on is that a causee may be a direct object when the verb is intransitive, that is to say, has no direct object of its own, but that when the verb is transitive, and therefore has its own object, that object pre-empts the object position that the causee would otherwise occupy and forces the causee to take on some other role.

Generalizations of this type are most frequently stated in terms of grammatical relations but occasionally in terms of case-marking. What is striking about them is that although such generalizations hold in many languages, and play a significant role in arguments about hierarchies of grammatical relations, constraints on relation-changing rules, and other aspects of syntactic theory, the nature of these alternations has rarely been studied in depth, and the various competing proposals have not been contrasted.

The purpose of this paper is to arrive at an empirically adequate description of the Japanese version of the constraint. This constraint, generally regarded as a constraint on case-marking, is known as the Double-O Constraint (*o* being the accusative case marker), and to a first approximation may be stated as prohibiting two Noun Phrases within the same clause from bearing accusative case. The basic facts that motivate this constraint are well known, both to specialists in Japanese and to syntacticians concerned with relation-changing rules. Statements of the constraint, which has figured in many analyses and theoretical arguments, differ greatly, ranging from constraints on surface case to constraints on thematic roles. Nonetheless,

little attention has been given to the precise formulation of the constraint, and as I show here, no empirically accurate statement of the constraint has been given.

The structure of the paper is as follows. Section I presents the basic facts about case-marking in Japanese causative constructions that motivate the constraint. Section II reviews the variety of statements that have appeared in the literature and presents evidence against these various proposals. Section III shows how adequate statements may be arrived at in certain syntactic theories, and makes some generalizations about the properties of those theories in which this is possible. Finally, Section IV discusses implications of the non-universality of the constraint.

2. The Phenomena

In Japanese, causative verbs may take either an accusative causee, as in (5), or, unlike French, a dative causee, as in (6).[1] The dative is used when the causation is relatively non-coercive, or when the meaning is permission rather than causation.

(5)   Taroo-wa   Hanako-o   ikaseta.
        Taro-T   Hanako-A   caused-to-go
         Taro made Hanako go.

(6)   Taroo-wa   Hanako-ni   ikaseta.
        Taro-T   Hanako-D   caused-to-go
         Taro had/let Hanako go.

If the verb is transitive and takes an accusative object, the causee may be dative, as in (7), but may not be accusative, as illustrated by (8).

(7)   Taroo-wa   Hanako-ni   kusuri-o   nomaseta.
        Taro-T   Hanako-D   medecine-A   caused-to-drink
         Taro had/made/let Hanako drink the medecine.

(8)   *Taroo-wa   Hanako-o   kusuri-o   nomaseta.
        Taro-T   Hanako-A   medecine-A   caused-to-drink
        Taro had/made/let Hanako drink the medecine.

This constraint on accusative causees does not apply if the verb takes a dative object, as seen in (9) and (10).

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[1] The following abbreviations are used in examples in this paper.

A	Accusative	L	Locative
AB	Ablative	N	Nominative
AD	Adessive	NOM	Nominalizer
D	Dative	P	Postposition
G	Genitive	Q	Quantifier
I	Instrumental	T	Topic

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(9)   Sensei-wa   Hanako-ni   Ziroo-ni   kisusaseta.
        Teacher-T   Hanako-D   Jiro-D   caused-to-kiss
           The teacher had/let Hanako kiss Jiro.

(10)   Sensei-wa   Hanako-o   Ziroo-ni   kisusaseta.
        Teacher-T   Hanako-A   Jiro-D   caused-to-kiss
           The teacher made Hanako kiss Jiro.

   What is presumably the same constraint is observed in multiple causatives of
intransitive verbs. In a multiple causative sentence, at most one causee may be
accusative. All double causatives are less than perfect, but whereas (11), (12), and
(13), which contain at most one accusative, are only a bit awkward, (14), which
contains two accusatives, is completely unacceptable.

(11)   ??Taroo-wa   Ziroo-ni   Saburoo-o   ikasesaseta.
        Taro-T   Jiro-D   Saburo-A   caused-to-cause-to-go
        Taro caused Jiro to cause Saburo to go.

(12)   ??Taroo-wa   Ziroo-ni   Saburoo-ni   ikasesaseta.
        Taro-T   Jiro-D   Saburo-D   caused-to-cause-to-go
        Taro caused Jiro to cause Saburo to go.

(13)   ??Taroo-wa   Ziroo-o   Saburoo-ni   ikasesaseta.
        Taro-T   Jiro-A   Saburo-D   caused-to-cause-to-go
        Taro caused Jiro to cause Saburo to go.

(14)   *Taroo-wa   Ziroo-o   Saburoo-o   ikasesaseta.
        Taro-T   Jiro-A   Saburo-A   caused-to-cause-to-go
        Taro caused Jiro to cause Saburo to go.

   Still another situation in which the effects of this constraint are observed is in
Subject-to-Object Raising sentences. A few verbs that take sentential ($\bar{S}$) comple-
ments, such as *omou* "think", as in (15), have the property that the subject of
their complement may become accusative, as in (16). The possibility of inserting
an adverb modifying the matrix verb between the accusative NP and the embedded
predicate is evidence that the accusative NP belongs to the matrix clause (Kuno
197x). Contrast (17), with a nominative embedded subject, in which the only pos-
sible interpretation is the anomalous one in which the adverb *baka-ni* "stupidly"
modifies the embedded predicate.

(15)   Taroo-wa   Hanako-ga   tensai   da   to   omou
        Taroo-T   hanako-N   genius   be   that   thinks
        Taroo thinks that Hanako is a genius.

(16)   Taroo-wa   Hanako-o   orokanimo   tensai   da   to   omou
        Taroo-T   hanako-A   stupidly   genius   be   that   thinks
        Taroo stupidly thinks that Hanako is a genius.

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(17)   Taroo-wa Hanako-ga orokanimo tensai da   to   omou
        Taroo-T   hanako-N   stupidly   genius be   that   thinks
        Taroo thinks that Hanako is stupidly a genius.
        *Taroo stupidly thinks that Hanako is a genius.

Raising is incompatible with the presence of an accusative causee.[2] Thus, it is possible to have an accusative causee if there is no Raising (18), or a dative causee with Raising (19), but not not both (20).

(18)   Miki-wa Taroo-o   Hanako-ga tensai da   to   sinzisaseta.
        Miki-T   Taroo-A   Hanako-N   genius be   that   cause-to-believe-past
        Miki made Taroo believe that Hanako was a genius.

(19)   Miki-wa Taroo-ni Hanako-o   tensai da   to   sinzisaseta.
        Miki-T   Taroo-D   Hanako-A   genius be   that   cause-to-believe-past
        Miki made Taroo believe that Hanako was a genius.

(20)   *Miki-wa Taroo-mo Hanako-o   tensai da   to   sinzisaseta.
        Miki-T   Taroo-too Hanako-A   genius be   that   cause-to-believe-past
        Miki made Taroo believe that Hanako was a genius.

The constraint that bars the double accusative sequences in causative sentences is known as the *Double-O Constraint*. The Double-O Constraint was stated by Harada as follows:

(21) The Double-O Constraint (Harada 1973:138)

> 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.

The clause "both of which are immediately dominated by the same VP" is intended to prevent the constraint from applying when the *o*-marked NPs are in different clauses. We will return to the precise formulation of the domain of the constraint in section (X) below.

3. The Two Double-O Constraints

A source of considerable confusion in the literature is that the Double-O Contraint is not a unitary phenomenon. Two different constraints are actually involved, which I will call the Deep Double-O Constraint and the Surface Double-O Constraint.

If it were necessary for two accusative NPs to appear on the surface, we should find that versions of a sentence in which one of the NPs is not accusative on the surface would be grammatical. This is not the case.

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[2] I have a note to myself attributing this observation to a paper written by Masayo Iida in the 1980s, but I cannot now identify it, and she informs me that she has no memory of this.

One way to eliminate surface occurences of accusatives is by topicalization of an accusative NP, which causes the accusative marker to be replaced by the topic marker. As (22) and (23) show, Double-O violations are not improved by topicalization.

(22) *Isao-ga   Kiyoko-o   kusuri-o   nomaseta.
       Isao-T   Kiyoko-A   medicine-A   caused-to-drink
       Isao made Kiyoko drink the medecine.

(23) *Kusuri-wa   Isao-ga   Kiyoko-o   nomaseta.
       Medecine-T   Isao-N   Kiyoko-A   caused-to-drink
       As for the medecine, Isao made Kiyoko drink it.

This same phenomenon, which we may call Particle Cluster Reduction, is observed in other cases as well. The accusative particle *o* is obligatorily deleted before the topic particle *wa* and is usually, though not obligatorily, deleted before the particle *mo* "even, also". As (24) and (25) show, deletion of the accusative particle before *mo* does not improve Double-O violations.

(24) *Hiroko-ga   sono   imooto-mo   okasi-o   tabesaseta.
       Hiroko-N   her   younger-sister-too cake-A   caused-to-eat
       Hiroko made her younger sister too eat cake.

(25) *Hiroko-ga   sono   imooto-o   okasi- mo   tabesaseta.
       Hiroko-N   her   younger-sister-A   cake-too   caused-to-eat
       Hiroko made her younger sister eat cake too.

Surface occurences of the accusative also disappear in pseudoclefts. (27) is the result of pseudoclefting the direct object of (26). Like other predicate nominals, it is caseless, so the resulting sentence has only one surface accusative. Nonetheless, the Double-O violation remains.

(26) *Taroo-wa   Hanako-o   mesi-o   takaseta.
       Taro-T   Hanako-o   rice-A   caused-to-cook
        Taro made Hanako cook rice.

(27) *Taroo-ga Hanako-o   takaseta   no-wa   mesi   da.
       Taro-N   Hanako-A   caused-to-cook   NOM-T   rice   be
       What Taro made Hanako cook was rice.

Relative clauses are similar, in that the head NP is case-marked in accordance with its role in the matrix sentence, not in accordance with its role in the relative clause. When the matrix verb does not assign accusative case, this reduces the number of surface accusatives. Nonetheless, as (29) shows, relativization does not improve the Double-O violation of (28).

(28) *Hiroko-ga   sono   imooto-o   okasi-o   tabesaseta.
       Hiroko-N   her   younger-sister-A   cake-A   caused-to-eat
       Hiroko made her younger sister eat cake.

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(29)   *Kore-wa   Hiroko-ga   sono   imooto-o   tabesaseta
       This-T   Hiroko-N   her   younger-sister-A caused-to-eat

       okasi   da.
       cake   be

       This is the cake that Hiroko made her younger
       sister eat.

Perhaps most striking is the fact that the accusative NP need not be present at all for a Double-O violation to occur. Consider (30), in which *butaseru*, the causative of the transitive verb *butu* "beat", has only one non-subject argument on the surface. If not for the Double-O Constraint we would expect this sentence to be ambiguous, the interpretation depending on whether we take the missing NP to be the direct object of "beat" or the causee. But in fact, only one interpretation is possible, that on which the missing NP is the causee. This is because the missing NP can be taken to be dative, which is a possible case for the causee. For the missing NP to be the direct object of "beat", it would have to be accusative, in which case, at the appropriate level of abstraction, there would be two accusative NPs, since the object of "beat" can only be accusative. That this is indeed an effect of the Double-O Constraint and not of some other principle constraining Discourse Deletion is demonstrated by the fact that causatives of verbs that take dative objects admit both interpretations, as seen in (31). In such cases the missing NP may be taken to be either dative or accusative without violating the Double-O Constraint.[3]

(30)   Taroo-ga   Ziroo-o   butaseta.
       Taro-N   Jiro-A   caused-to-beat
       Taro had PRO beat Jiro.
      *Taro made Jiro beat PRO.

(31)   Taroo-ga   Hanako-ni   kisususaseta.
       Taro-N   Hanako-D   caused-to-kiss
       Taro had Hanako kiss PRO.
       Taro had/made PRO kiss Hanako.

The evidence given so far demonstrates that the presence of two accusative arguments of a verb is not necessary for a Double-O violation to occur. It is not sufficient either, since it is possible for a single verb to have two accusative arguments on the surface. One situation in which this occurs is when one NP is a translative accusative, in which the accusative indicates motion along a path. For example, "walk along a road" is *miti-o aruku*, where the "intransitive" verb *aruku* "walk" takes "road" in the accusative case. Such translative accusatives may co-occur with direct object accusatives. In (32), for example, the non-causative transitive verb *ugokasu* "move" takes the accusative direct object *kuruma* "car" as well as the translative *miti* "road".

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[3] Note that the applicability of the constraint even to NPs not present on the surface shows that such NPs cannot be the result of lexical detransitivization, nor can they be instances of PRO.

(32) Gonin-wa   ugokanakunatta   kuruma-o   issyoo-ni
      5 men-T   broken down   car-A   together
      sono   miti-o   ugokasite   ita.
      that   road-A   moving   were

      Five men together were pushing a car along that road.

Similar examples are (33), in which the non-causative verb *mawasu* has two accusative arguments: the direct object *tegami* "letter" and the translative *saakuru-no naka* "center of the circle", and (34), in which the verb *watasu* "cross (transitive)" has both the direct object *nimotu* "baggage" and the accusative NP *kawa* "river", indicating the path of the motion.

(33) Karera-wa   tegami-o   saakuru-no   naka-o
      They-T   letter-A   circle-G   center-A
      mawasite   yonda.
      passing   read

      They passed the letter around the circle and read it.

(34) Sono   nimotu-o   kawa-o   watasita.
      That   baggage-A river-A   crossed
      He moved that baggage across the river.

Such translative accusatives may also co-occur with accusative causees, as in (35) and (36).

(35) Yoru-no   haiwee-o   kare-wa   kuruma-o   hasiraseta.
      Night-G   highway-A   he-T   car-A   caused-to-run
      He sped his car down the night highway.

(36) Isao-wa   Yooko-o   hamabe-o   arukaseta.
      Isao-T   Yoko-A   beach-A   caused-to-walk
      Isao made Yoko walk along the beach.

Such double accusative sequences are not fully acceptable for all speakers, especially when the two accusative NPs are adjacent. However, such sentences can be improved by separating the two accusative NPs, so that speakers who do not like (36) very much will find (37) much better.

(37) Isao-wa   Yooko-o   isogiaside   hamabe-o   arukaseta.
      Isao-T   Yoko-A   at-double-time   beach-A   caused-to-walk
       Isao made Yoko walk along the beach at double-time.

This contrasts with true Double-O violations, which cannot be repaired by separating the two accusative NPs as in (38).

(38)　　*Taroo-wa　Ziroo-o　tikarazukude　kusuri-o　　　nomaseta.
　　　　Taro-T　　Jiro-A　forcibly　　　　medecine-A　caused-to-drink
　　　　Taro forcibly made Jiro drink the medicine.

Sentences containing both an accusative causee and a translative accusative are fully acceptable to all speakers if one of the accusatives is hidden on the surface, unlike sentences with an accusative causee and an accusative direct object. For example, the pseudocleft (39) and the relative clause (40) are perfect.

(39)　　Isao-ga　Yooko-o　arukaseta　　　　no-wa　　sono　hamabe　da.
　　　　Isao-N　Yoko-A　caused-to-walk　NOM-T　that　beach　　be
　　　　What Isao made Yoko walk along is that beach.

(40)　　Koko-wa　Taroo-ga　Hanako-o　arukaseta　　　　hamabe　da.
　　　　Here-T　　Taro-N　　Hanako-A　caused-to-walk　beach　　be
　　　　This is the beach along which Taro made Hanako walk.

Similarly, deletion of the accusative particle due to topicalization ((41) and (42)) or Particle Cluster Reduction (43) results in perfect sentences.

(41)　　Hanako-wa　Taroo-ga　sono　hamabe-o　arukaseta.
　　　　Hanako-T　Taro-N　　that　beach-A　　caused-to-walk
　　　　As for Hanako, Taro made her walk along that beach.

(42)　　Sono　hamabe-wa　Taroo-ga　Hanako-o　arukaseta.
　　　　That　beach-T　　Taro-N　　Hanako-A　caused-to-walk
　　　　As for that beach, Taro made Hanako walk along it.

(43)　　Taroo-wa　Hanako-mo　sono　hamabe-o　arukaseta.
　　　　Taro-T　　Hanako-too　that　beach-A　　caused-to-walk
　　　　Taro made Hanako too walk along that beach.

As (44) shows, the interpretation of causatives of verbs taking a translative accusative is unconstrained — the missing NP may be taken to be either the causee or the path of motion.

(44)　　Oosama-ga　Gariba-o　　arukaseta.
　　　　King-N　　　Gulliver-A　caused-to-walk
　　　　The king made/had/let PRO walk along Gulliver.
　　　　The king made Gulliver walk along PRO.

4. Some Inadequate Formulations of the Deep Double-O Constraint

Several different formulations of the Double-O Constraint are found in the literature. I here review several that are clearly inadequate, before turning in the following section to approaches with more hope of success.

4.1. Valency

A simple but incorrect hypothesis is that the Double-O Constraint is statable in terms of the valency of the predicate to which -*sase* attaches, that is, that the causee must be dative if the predicate has more than one argument. If this were the case, we would expect the causee to be obligatorily dative with all transitive verbs, even those that take dative objects. This is not the case. As examples like (10) show, when the object is dative the causee may be accusative.

4.2. Surface Case

Many authors (Dubinsky 1989, Farmer 1980, 1984 Grimshaw & Mester 198?, Gunji 1987, Harada 1973, Kuroda 197?, McCawley 1963, Ostler 1979, Shibatani 197?, Ueda 1982) consider the Double-O Constraint to be a constraint on surface case.[4] This cannot be correct, for the appearance on the surface of two accusative NP arguments of a single verb is neither necessary nor sufficient to trigger a Double-O violation. Consider first the evidence that it is not necessary for both accusatives to appear on the surface for the constraint to be violated.

We have seen that it is neither necessary nor sufficent that two accusative NP arguments of the same verb be present on the surface in order for the Double-O Constraint to be violated. Consequently, it cannot be a constraint on surface case. There is, however, a weaker surface constraint, one sensitive to the distance between the two accusative NPs, whose strength varies from speaker to speaker.

4.3. Thematic Roles

Williams (1981) puts forward the interesting proposal that the Double-O constraint is actually a constraint on thematic roles. He assumes that verbs have an argument structure containing at most one external argument and some number of internal arguments. Morphological rules are derived by two functors, *E(X)* and *I(X)*, where *X* is a thematic role. *E(X)* is a rule that externalizes the internal argument bearing the thematic role *X*; *I(X)* is a rule that internalizes the external argument and assigns it the thematic role *X*. Williams' theory also provides for a set of *realization rules*, which associate thematic roles with cases and/or adpositions. A typical realization rule would associate the Goal role with dative case.

Williams' proposal is that the suffixation of *sase* triggers application of either I(Theme) or I(Goal), the former when the causee is marked accusative, the latter when the causee is marked dative. Williams associates the Theme role with coercive causation and the Goal role with non-coercive causation and permission. The

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[4] It may seem incongruous that I cite McCawley (1963) as entertaining any view of the Double-O Constraint since the constraint was first formulated by Harada in 1973. Indeed, McCawley did not state a version of the Double-O Constraint as such, but he observed the central phenomenon for which it is intended to account, the ungrammaticality of causatives of transitive verbs in which both the direct object and the causee are accusative, and proposed a rule converting *o* to *ni* before *o*, which is equivalent to a surface constraint.

four cases that result from applying these two rules to argument structures for intransitive and transitive verbs are shown in (45). The notation $X=Y$ is Williams' representation of an argument bearing the X thematic role that formerly bore the Y thematic role.

(45)   Williams' Derivations of Causatives

I(Th)	V(A)	V-cause(A,Th=A)	Intransitive–Accusative Causee
I(G)	V(A)	V-cause(A,G=A)	Intransitive–Dative Causee
I(Th)	V(A,Th)	V-cause(A,Th,Th=A)	Transitive–Accusative Causee
I(G)	V(A,Th)	V-cause(A,Th,G=A)	Transitive–Dative Causee

The ungrammatical case is the one in which the argument structure contains two Themes, whence Williams proposes that it is forbidden for a single predicate to contain two instances of the same thematic role.[5]

What distinguishes this proposal from similar approaches based on grammatical relations and case is the claim that the constraint is fundamentally semantic in character. I offer three arguments against this proposal.[6]

4.3.1. The Semantics of Causation

Williams' proposal makes an incorrect claim about the semantics of causatives of transitive verbs. Recall that when the verb is intransitive, an accusative causee is associated with coercive causation, a dative causee with less coercive causation or permission. On Williams' account, the causative of a transitive verb can result only from application of I(Goal) and therefore must always have a permissive or non-coercive causative interpretation. This is false.

The distinction between coercive and non-coercive causation is subtle and difficult to characterize, but there are a number of tests that we can apply to show that causatives of transitive verbs have a semantic range that is the union of the semantic ranges of dative and accusative causatives of intransitive verbs. Consider, for example, sentences containing the adverb *tikarazukude* 'forcibly'. With an intransitive verb like *kaeru* 'return', this adverb is natural with an accusative causee

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[5] Aware that it is possible for a sentence to have both a dative causee and another dative, both of which he considers to be Goals, Williams recognizes that there is a problem for his unique thematic role constraint and suggests that it may be necessary to abandon it and account for the Double-O facts in terms of a constraint on surface case, which as we have seen will not work. Were there no other difficulties with the thematic uniqueness approach, we would have several possibilities for saving it from the double dative sentences. One is to abandon the general thematic uniqueness constraint and impose it only on Themes or perhaps some more general subset of the thematic roles. Another is to abandon Williams' assumption of a bijective relation between thematic roles and case — it is very likely that the two datives will turn out to bear different thematic roles.

[6] An additional problem for Williams' analysis is the fact that, for him, both types of causative internalize an external argument. Insofar as unaccusative verbs have no external argument, this predicts, falsely, that it should be impossible to causativize an unaccusative verb at all.

(46) but is very odd with a dative causee (47). With a transitive verb, however, no oddness results from the combination with the dative causee (48).

(46)   Taroo-wa Ziroo-o tikarazukude kaeraseta.
        Taro-T   Jiro-A   forcibly   caused-to-go-home
        Taro forcibly made Jiro go home.

(47) ?*Taroo-wa Ziroo-ni tikarazukude kaeraseta.
        Taro-T   Jiro-D   forcibly   caused-to-go-home
        Taro forcibly had Jiro go home.

(48)   Taroo-wa Ziroo-ni tikarazukude kusuri-o   nomaseta.
        Taro-T   Jiro-D   forcibly   medicine-A caused-to-drink
        Taro forcibly made Jiro drink the medicine.

Another way of getting at the semantics of transitive causatives is via a constraint that rules out the use of non-coercive causatives with non-humans/inanimates, depending on the individual speaker.[7]

Consider first data from speakers who distinguish human causees from non-human causees. For such speakers, if the causee is non-human and the verb is intransitive, the causee may be accusative (49) but not dative (50). For speakers who distinguish animate causees from inanimate causees, the same contrast exists when the causee is inanimate, as (51) and (52) illustrate.

(49)   Noohu-wa   usi-o   koya-ni hairaseta.
        Farmhand-T cow-A   barn-D   caused-to-enter
        The farmhand drove the cows into the barn.

(50) *Noohu-wa   usi-ni   koya-ni hairaseta.
        Farmhand-T cow-D   barn-D   caused-to-enter
        The farmhand drove the cows into the barn.

(51)   Keizi-wa yasai-o   kusaraseta.
        Keiji-T   vegetables-A caused-to-rot
        Keiji let the vegetables rot.

(52) *Keizi-wa yasai-ni   kusaraseta.
        Keiji-T   vegetables-D caused-to-rot
        Keiji let the vegetables rot.

If the thematic account were correct, we would expect this constraint to continue to hold when the verb is transitive, since transitive causatives have only the non-coercive semantics. This is not the case. As (53) and (54) illustrate for the two classes of speakers, the constraint disappears when the verb is transitive, indicating that the causative form may have the coercive interpretation.

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[7] The difference is presumably a matter of whether the speaker accords non-human animals sufficient volition to accede to an order.

(53) Noohu-wa   usi-ni   hosigusa-o tabesaseta.
      Farmhand-T cow-D   hay-A   caused-to-eat
      The farmhand fed the cattle hay.

(54) Keizi-wa suponzi-ni mizu-o   suikomaseta.
      Keizi-T   sponge-D   water-A   caused-to-absorb
      Keiji caused the sponge to absorb the water.

Finally, the interpretations of passives of causatives shed light on the interpretation. A simple causative like (55) has a permissive reading as well as both coercive and non-coercive causative readings. But the passive of such a causative, as illustrated by (56), can have **only** the coercive reading, never the permissive reading.

(55) Hanako-wa Masako-ni syuukanzassi-o   yomaseru.
      Hanako-T   Masako-D   weekly-magazines-A read-cause-pres
      Hanako makes/has/lets Masako read weekly magazines.

(56) Masako-wa Hanako-ni syuukanzassi-o   yomaserareru
      Masako-T   Hanako-D   weekly-magazines-A read-cause-pass-pres
      Masako is made by Hanako to read weekly magazines.
      *Masako is permitted by Hanako to read weekly magazines.

4.3.2. Dependence on Case Rather than Thematic Role

A second argument against the semantic account is based on the existence of minimal and near-minimal pairs of verbs differing only in the case that they assign to their object. Several such pairs are listed in (57).[8]

(57) Synonymous and Near Synonymous Verbs with Different Case Frames

Dative	Object	Accusative	Object
au	meet	mukaeru	greet
kisu suru	kiss	aibu suru	caress
katu	defeat	makasu	defeat
gookan suru	gang rape	rinkan suru	rape

It is exceedingly difficult to imagine what differences between the members of these pairs might justify treating the object of one as a Theme and the other as a Goal, yet the verbs that take dative objects permit accusative causees, while those that take accusative causees do not. Contrast the ungrammatical (58) with the grammatical (10).

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[8] *gookan suru* can take either an accusative or dative object.

(58) *Sensei-wa   Hanako-o   Ziroo-o   aibusaseta.
       Teacher-T   Hanako-A   Jiro-D   caused-to-caress
       The teacher made Hanako caress Jiro.

4.3.3. VP Idioms

Fortunately, showing that the constraint is not semantic in nature does not depend on the characterization either of the semantics of causatives or of verbs taking dative objects, for we can show that semantics cannot be relevant at all by examining VP idioms. In a VP idiom the NP bears accusative case, but, by virtue of being an idiom, either it bears no thematic role, or the thematic role it bears is inaccessible in that it plays no part in the interpretation of the sentence. Hence, we may ask whether the Double-O Constraint holds in VP idioms with accusative NPs. If the thematic account is correct, VP idioms should behave like intransitive verbs and permit an accusative causee.

One VP idiom is *abura-o siboru* 'take to task' (lit. 'wring the fat'). As (59) shows, this idiom permits a dative causee. But as (60) shows, an accusative causee is ungrammatical. (61), in which the addition of *mo* causes deletion of the accusative suffix, shows that this is a deep Double-O violation.

(59) Tanaka-san-wa   Ziroo-ni   Hanako-no   abura-o   siboraseta.
       Tanaka-Mr-T   Jiro-D   Hanako-G   fat-A   wring-cause-past
       Mr. Tanaka made Jiro take Hanako to task.

(60) *Tanaka-san-wa   Ziroo-o   Hanako-no   abura-o   siboraseta.
       Tanaka-Mr-T   Jiro-A   Hanako-G   fat-A   wring-cause-past
       Mr. Tanaka made Jiro take Hanako to task.

(61) *Tanaka-san-wa   Ziroo-mo   Hanako-no   abura-o   siboraseta.
       Tanaka-Mr.-T   Jiro-too   Hanako-G   fat-A   wring-cause-past
       Mr. Tanaka made Jiro too take Hanako to task.

Another VP idiom is *boketu-o horu* 'bring about one's own ruin' (lit. 'dig a grave'). Here again a dative causee is permitted (62), but an accusative causee is ungrammatical (63), even when masked by *mo* (64).

(62) Yooko-wa   Ziroo-ni   boketu-o   horaseta.
       Yoko-T   Jiro-D   grave-A   dig-cause-past
       Yoko made Jiro bring about his own ruin.

(63) *Yooko-wa   Ziroo-o   boketu-o   horaseta.
       Yoko-T   Jiro-A   grave-A   dig-cause-past
       Yoko made Jiro bring about his own ruin.

(64) *Yooko-wa   Ziroo-mo   boketu-o   horaseta.
       Yoko-T   Jiro-too   grave-A   dig-cause-past
       Yoko made Jiro too bring about his own ruin.

Since the Double-O Constraint holds even for VP idioms, it cannot be semantic in character.

5. The Domain of the Deep Double-O Constraint

In his original formulation of the Double-O Constraint (quoted in (21) above), Harada required that that the two accusative NPs be *immediately* dominated by the same VP in order for a violation to occur. The motivation for this is two-fold. First, we do not want to rule out conjoined sentences in which multiple conjuncts contain accusative NPs. More subtly, accusative NPs at different levels of embedding do not interfere with each other, even though, they may are both contained within a single VP and may, indeed, be adjacent. For example, in (65) Here there are two accusative NPs, each the object of a different verb.

(65) Nyuuton-rahuson-hoo-o   siyoo site   heihookansuu-o
      Newton-Raphson method-A   using   square-root-function-A

      keisan suru
      compute

      (It) computes the square root function using the
      Newton-Raphson method.

That the two NPs may belong to a single clause is demonstrated by the acceptability of (66), in which the subordinate clause "using the Newton-Raphsoon method" appears between the main verb "compute" and its direct object, "the square root function".

(66) heihookansuu-o   Nyuuton-rahuson-hoo-o   siyoo site
      square-root-function-A   Newton-Raphson-method-A   using

      keisan suru
      compute

      (It) computes the square root function using the
      Newton-Raphson method.

Both (65) and (66)[9] are grammatical, in spite of the fact that the matrix clause ultimately dominates two accusative NPs. The Double-O constraint must be formulated so as not to apply to these cases. This may be done by requiring that the two NPs be immediately dominated by the same VP as proposed by Harada, or by stating the constraint on argument structures.

Other data, however, allow us to be more precise. Japanese has three constructions in which a noun combines with the verb *suru* "do" to create a periphrastic

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[9] Although it may look to the non-Japanese-speaaking reader like the sort of artificial sentence that only a linguist would construct, this example is a real sentence from a computer manual and is both natural and easily interpreted.

verb. One of these is lexicalized. The other two constructions are illustrated in (67) and (68):

(67) Eigo-o   benkyoo   site-iru.
      English-A   study   doing-be
      He is studying English.

(68) Eigo-no   benkyoo-o site-iru.
      English-G   study-A   doing-be
      He is studying English.

The construction illustrated in (67) is the so-called "incorporated" periphrastic construction, in which only the object is case-marked. The construction illustrated in (68) is the so-called "unincorporated" periphrastic construction, in which the verbal noun acts like a full NP and, in particular, is case marked. In this case, normally, the object cannot receive the otherwise expected accusative casemarking, as in (69).

(69) *Eigo-o   benkyoo-o site-iru.
       English-A   study-A   doing-be
       He is studying English.

The ungrammaticality of (69) is apparently due to the fact that it violates the Double-O Constraint, and since both accusatives appear to be structural accusatives, we might assume that it is the Deep Double-O Constraint that is violated. However, Grimshaw and Mester (1988:216-217) observe that the ungrammaticality of examples like (69) can be eliminated by topicalizing the object. The cite the following contrast:

(70) *Sono hookokusyo-wa Meri-ni kaiketsu-no hookoo-o   sisa-o   site iru.
       that report-T   Mary-D solution-G direction-A suggestion-A is-doing
       That report suggests to Mary the direction of the solution.

(71) Kaiketu-no hookoo-wa sono hookokusyo-ga Meri-ni sisa-o   site iru.
      solution-G direction-T that report-N   Mary-D   suggestion-A is-doing
      That report suggests to Mary the direction of the solution.

As we know, the Deep Double-O Constraint cannot be circumvented by topicalization of one of the accusative NPs. The ungrammaticality of (69) and (70) must therefore be due to a violation of the Surface Double-O Constraint.

But, why are these not Deep Double-O violations? Neither of the accusative NPs is an adjunct or otherwise a good candidate for being oblique. Rather, it appears that the failure to trigger a Deep Double-O violation is a consequence of the fact that the domain of the constraint is the argument structure of a single predicate, and that there is no argument structure in these examples linked to more than one accusative NP. Although there is only one clause here, there are two argument structures, one associated with the verbal noun, the other (thematically empty on Grimshaw and Mester's account), with *suru*. The verbal noun is a formal argument of *suru*, while

the object is an argument of the verbal noun. In other words, although there is only one verb and hence only one clause, it is as if there were two. We conclude that the Deep Double-O Constraint has as its domain not the clause but argument structure.

6. Oblique Accusatives

As we have already seen, some accusatives do not trigger the Deep Double-O Constraint. The examples that we have already discussed are path accusatives. There are in fact several other types of accusative that do not trigger the Deep Double-O Constraint.

6.1. Ablatival Accusatives

Another type of accusative which has been claimed not to count for the Double-O Constraint is the ablatival accusative. Martin (1975) cites examples of sentences with two surface accusative arguments of a single verb, such as (72) and (73), in which one accusative is ablatival.

(72)   Watasitati-wa   kodomo-o   benti-o   tataseta.
        We-T   child-A   bench-A   caused-to-stand-up
        We made the child get up from the bench.

(73)   Hikooki-o   anzen-ni   Haneda-o   tataseru   tame-ni
        Airplane-A   safely   Haneda-A   cause-to-take-off sake-D

        ranwee-o   nagaku   sita.
        runway-A   long   made

        In order to allow airplanes to take off safely from Haneda (airport)
        (they) made the runway longer.

Only two of my informants accept such sentences or others like them. For the great majority, the accusative case-marking of the source is acceptable, but the causee must be dative. In other words, although it may be the case that these NPs have semantics appropriate to ablatives, they behave like ordinary direct objects and count for the Double-O Constraint.

This appears to be a recent innovation. The examples that Martin cites are not figments of his imagination — they are taken from sources published in the earlier part of the twentieth century. Moreover, such examples were clearly acceptable several hundred years ago. Rodriguez (1604:202) observes:

Entre os verbos activos, ha alguns que regem dous accusativos, um da pessoa, ou cousa paciente, que comummente tem a particula Voba, & algũnas vezes, Vo; outro do lugar, ou parte.

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Among the transitive verbs, there are some that govern two accusatives, one of the patient person or thing, which commonly takes the particle *woba*,[10] and in other cases *wo*, the other of place or region.

He cites examples like the following, some of them already dated in his time, such as (77), which is one of several examples from the *Heike Monogatari*, composed in the thirteenth century, others clearly contemporary, such as (76), which is from the Japanese translation of Genesis.[11]

(74) kono fito-woba iye, machi, kuni, chiguiô,
this person-A-T house town province fief
tokoro-wo farôta.
place-A drove-out

As for this man, they drove him out of his house, the town, the province, the fief, the whole place.

(75) warui monodomo-wo chô-wo woidaita.
bad people-A town-A expelled
They expelled the bad people from the town.

(76) Deus-wa Adam, Ewa-wo to-ga yuye Paraiso
God-T Adam Eve-A justice-G sake Paradise
terrea-wo woidasaxerareta.
terrestrial-A expelled

God expelled Adam and Eve from the terrestrial paradise for the sake of justice

(77) Tsuguisama-no monodomo-wo tachi nagwinata-nite
Lord Tugui-G men-A sword pike-I
funabata-wo nagaxeta
gunwales-A banished

They swept Lord Tugui's men from the gunwales with swords and pikes.

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[10] *woba* is a form no longer in use consisting of the accusative case marker *wo* plus the topic marker *wa*. In modern Standard Japanese the accusative particle is deleted before the topic particle.

[11] In the following examples I preserve the Portuguese orthography, which unlike the transcription used for the modern Japanese examples is sub-phonemic. <x> represents [š], which at this point in history was the allophone of /s/ before all front vowels and glides. <u> after <g> before /i/ merely serves to indicate that the velar is a velar stop, not the palatal affricate that <gi> would represent in Portuguese or Italian. The transcription also reflects the fact that [w] had not yet been lost before /o/ and after /k/ and /g/, and that [φ] (written <f> had not yet become [h] before vowels other than /u/. ô represents long [o]. For the interpretation of Rodriguez' orthography see Hashimoto (1927). In (75) I have corrected the long /i/ of *woiidaita* that appears in the original text as it is almost certainly a typographical error. This verb is written with the short /i/ expected on morphophonological grounds elsewhere, including the same page of Rodriguez' grammar.

It thus appears that until quite recently ablatival accusatives behaved like translative accusatives in being exempt from the Double-O Constraint[12] but that within the past few decades, for most speakers, they have come to be treated as ordinary direct objects. We are evidently near the end of gradual historical change.[13]

6.1.1. *tokoro* **Complements**

INSERT HERE BRIEF DISCUSSION BASED ON HARADA'S ORIGINAL PAPER

6.1.2. The Body Part Construction

Another construction in which two accusative NPs are permitted is what I will call the Body Part Construction, in which one of the NPs designates a part of the body of the other NP. Examples are (78) and (80), the latter, interestingly, involving an idiom.[14] Like the translatives, speakers vary in how acceptable they find such sentences, in which the two accusative NPs are adjacent, but many speakers find even (78) acceptable, and those that do not find (79), in which the two accusative NPs are separated by an adverb, acceptable.

(78)   Taroo-ga   Hanako-o   hara-o   sasita.
       Taroo-N   Hanako-A   belly-A   stabbed
       Taroo stabbed Hanako in the belly.

(79)   Taroo-ga   Hanako-o   kesa   hara-o   sasita.
       Taroo-N   Hanako-A   this-morning belly-A   stabbed
       Taroo stabbed Hanako in the belly this morning.

(80)   Syatyoo-wa   go-nin   no   syain-o   kubi-o   kitta
       company=head-T   five=people copula   employee-A   neck-A   cut-past
       The president fired five employees.

The question that immediately arises is what the structure of such examples is. We might entertain the hypothesis that they really contain only a single accusative NP, of the form "X's body part", that is, that (78) is a variant of (81) in which the accusative case of the larger NP has percolated down inside. One piece of evidence

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[12] The constraint did hold in Classical Japanese. See Sansom (1928;171-172) and Komai (1979).

[13] The shift from oblique to direct object status of accusatives with ablatival semantics was accompanied by two other changes. In Classical Japanese, the principal ablatival postposition was *yori*, which is now restricted to marking the pivot of comparison. The current ablatival postposition, *kara*, was rare. What seems to have happened is that *kara* replaced *yori* in most contexts, and that it also replaced *o* in most cases. Those *o* with ablatival semantics that were not replaced by *kara* became true direct objects. This deserves further investigation.

[14] This example was brought to my attention by Ken Matsuda.

that would favor this hypothesis is the fact that the two NPs may not be scrambled — the possessor must precede the body part, as seen in (82).

(81)   Taroo-ga   Hanako-no   hara-o   sasita.
          Taroo-N   Hanako-G   belly-A   stabbed
          Taroo stabbed Hanako's belly.

(82)   *Taroo-ga   hara-o   Hanako-o   sasita.
          Taroo-N   belly-A   Hanako-A   stabbed
          Taroo stabbed Hanako in the belly.

However, we have already seen evidence that the possessor and the body part do not form a constituent, namely the fact that an adverb can separate them, as in (79). A variety of categories may separate the two NPs. In (83) we have a locative PP, in (84) a temporal PP, in (85) an instrumental PP, and in (86) an adverbial phrase.[15]

(83)   Taroo-wa   Hanako-dake-o   gakkoo-de   hara-o   sasita
          Taro-T   Hanako-only-A   school-L   belly-A   stabbed
          Taroo stabbed only Hanako in the belly at school.

(84)   Taroo-wa   Hanako-dake-o   sanzi-ni   hara-o   sasita
          Taro-T   Hanako-only-A   three=o'clock-D   belly-A   stabbed
          Taroo stabbed only Hanako in the belly at three o'clock.

(85)   Taroo-wa   Hanako-dake-o   wakizasi-de   hara-o   sasita
          Taro-T   Hanako-only-A   short=sword-I   belly-A   stabbed
          Taroo stabbed only Hanako in the belly with a short sword.

(86)   Taroo-wa   Hanako-dake-o   dekiru dake tuyoku   hara-o   sasita
          Taro-T   Hanako-only-A   as hard as he could   belly-A   stabbed
          Taroo stabbed only Hanako in the belly as hard as he could.

Moreover, the two accusative NPs behave like independent arguments of the verb in other ways. As (87), (88), and (89) show, it is possible to float a quantifier off of the possessor, which should not be possible if it is not a term.

(87)   Taroo-ga   tomodati-o   futari   hara-o   sasita.
          Taroo-N   friend-A   two-people   belly-A   stabbed
          Taroo stabbed two friends in the belly.

(88)   Taroo-ga   tomodati-o   mina   hara-o   sasita.
          Taroo-N   friend-A   all   belly-A   stabbed
          Taroo stabbed all of his friends in the belly.

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[15] For many speakers *dake* "only" could be omitted, but for some, for reasons that I do not understand, it blocks the SDOC and greatly improves the sentence.

(89)   Taroo-no   tomodati-wa   mina   hara-o   sasita.
        Taroo-G   friend-T   all   belly-A   stabbed
        As for Taroo's friends, he stabbed all of them in the belly.

Both NPs may be relativized. In (90), it is the possessor that is relativized, in (91) the body part.

(90)   Taroo-ga   te-o   sasita   (tokoro-no)
        Taroo-N   hand-A   stabbed   (place-G)

        Hanako-ga   nakidasita.
        Hanako-N   broke-out-in-tears

        Hanako, whom Taroo had stabbed in the hand,
        broke out in tears.

(91)   Taroo-ga   Hanako-o   sasita   te-kara
        Taroo-N   Hanako-A   stabbed   hand-AB

        ti-ga   dete   ita.
        blood-N   coming-out   was

        Hanako's hand, in which Taroo had stabbed her, bled

Similarly, both NPs may be pseudoclefted. (92) shows pseudoclefting of the possessor, (93) of the body part.

(92)   Taroo-ga   hara-o   sasita   no-wa   Hanako   da.
        Taroo-N   belly-A   stabbed   NOM-T   Hanako   be
        The one that Taroo stabbed in the belly is Hanako.

(93)   Taroo-ga   Hanako-o   sasita   no-wa   hara   da.
        Taroo-N   Hanako-A   stabbed   NOM-T   belly   be
        Where Taroo stabbed Hanako is in the belly.

A fact that requires explanation is the impossibility of topicalizing the body part. As (94) shows, the possessor may be topicalized, but as (95) shows, the body part may not be.

(94)   Hanako-wa   Taroo-ga   hara-o   sasita.
        Hanako-T   Taroo-N   belly-A   stabbed
        As for Hanako, Taroo stabbed her in the belly.

(95)   *Hara-wa   Taroo-ga   Hanako-o   sasita.
        Belly-T   Taroo-N   Hanako-A   stabbed
        As for the belly, Taroo stabbed Hanako in it.

In contrast, both the possessor (96) and the body part (97) may be questioned.

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(96)   Hara-wa   Taroo-ga naifu-de dare-o   sasimasita ka?
belly-T   Taro-N   knife-I   who-A   stabbed   ?
Who did Taro stab in the belly with a knife?

(97)   Hanako-wa Taroo-ga naifu-de doko-o   sasimasita ka?
Hanako-T   Taro-N   knife-I   where-A stabbed   ?
Where did Taro stab Hanako with a knife?

7. The Status of Oblique Accusatives

A complete account of the Double-O Constraint must explain not only why certain double accusative sequences are impermissible but also why other double accusative sequences are acceptable.

Evidence that at some level oblique accusatives and structural accusatives are the same case comes from a variety of ways in which they behave similarly. Consider first the possibilities for case marking in NPs. Most case markers can appear before the genitive *no* when they modify another noun. (98), (99), (100), (101) and (102) illustrate this for the ablative, the instrumental, the adessive, the approximative and the comitative respectively.

(98)   titi   kara no tegami
father AB   G   letter
a letter from my father

(99)   basu de no ryookoo
bus   I   G   trip
a trip by bus

(100)   Kyootoo e   no ryookoo
Kyoto   AD G   trip
a trip to Kyoto

(101)   go-zi   made no hanasi
five-o'clock APP G   talk
a talk (that will last) until five o'clock

(102)   Hanako to   no sanpo
Hanako COM G   walk
a walk with Hanako

However, the nominative *ga*, the accusative *o*, and the dative *ni* may not appear before *no*, as illustrated by (103), (104), and (105).

(103) *Supein ga no seihuku
Spain   N   G   conquest
Spain's conquest

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(104) *Mekusiko o   no seihuku
        Mexico   A   G   conquest
        the conquest of Mexico

(105) *tomodati ni no okurimono
        friend   D   G   gift
        a gift to a friend

Instead, with *ga* and *o* the noun appears caseless before *no*, as in (106) and (107). With the dative, deletion is not very good; instead, the postposition *e* replaces *ni*, as in (108).

(106) Supein no   seihuku
        Spain   G   conquest
        Spain's conquest

(107) Mekusiko no   seihuku
        Mexico   G   conquest
        the conquest of Mexico

(108) tomodati e   no okurimono
        friend   AD   G   gift
        a gift to a friend

Oblique accusatives behave just like other accusatives. As (109) shows, the accusative suffix may not appear before *no*, but must be deleted, as in (110).

(109) *hamabe o   no sanpo
        beach   A   G   walk
        a walk along the beach

(110) hamabe no   sanpo
        beach   G   walk
        a walk along the beach

Particle Cluster Reduction illustrates another similarity. When an NP is topicalized or is contrastive, the suffix *wa* is attached to it. Most case-markers remain in place before *wa*, so that we have for the dative *ni wa*, the adessive *e wa*, the ablative *kara wa* and so forth. The nominative *ga* and the accusative *o*, however, must be deleted when *wa* is added. This is true of oblique accusatives as well as structural accusatives. Contrast (111), in which the topic NP retains *o* before *wa*, with the grammatical (42) in which the accusative has been deleted.

(111) *Sono hamabe-o-wa Taroo-ga Hanako-o   arukaseta.
        That   beach-A-T   Taro-N   Hanako-A   caused-to-walk
        As for that beach, Taro made Hanako walk along it.

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Still another way in which the two types of accusative behave similarly is with regard to nominative object marking. Most stative verbs, such as *wakaru* "understand", and all of the derived desideratives, take nominative direct objects, when the direct object would otherwise be accusative. For example, if we take an ordinary transitive sentence like (112) and make the verb desiderative, the object becomes nominative as in (113).

(112)　Boku-wa　Hanako-o　ketta.
　　　　I-T　　　　Hanako-A　kicked
　　　　I kicked Hanako.

(113)　Boku-wa　Hanako-ga　keritai.
　　　　I-T　　　　Hanako-N　want-to-kick
　　　　I want to kick Hanako.

If the verb takes a dative object, as in (114), the object remains dative in the desiderative (115); it may not become nominative (116).

(114)　Boku-wa　Hanako-ni　kisusita.
　　　　I-T　　　　Hanako-D　kissed
　　　　I kissed Hanako.

(115)　Boku-wa　Hanako-ni　kisusitai.
　　　　I-T　　　　Hanako-D　want-to-kiss
　　　　I want to kiss Hanako.

(116)　*Boku-wa　Hanako-ga　kisusitai.
　　　　I-T　　　　Hanako-N　want-to-kiss
　　　　I want to kiss Hanako.

Like structural accusatives, and unlike all other cases, oblique accusatives become nominative when the verb is stative, as illustrated by (117) and (118).

(117)　Boku-wa　Asahidake-ga　noboritai.
　　　　I-T　　　　Asahi-peak-N　want-to-climb
　　　　I want to climb Mt. Asahi.

(118)　Konban　　　hamabe-ga　sanpositai.
　　　　this-evening　beach-N　　　want-to-take-a-walk
　　　　This evening I want to take a walk along the beach.

Note also that the Surface Double-O Constraint treats all accusatives alike.

One approach is to say that some instances of accusative case are actually oblique, that is, that these NPs are not terms, and that they therefore do not count for a constraint formulated in terms of grammatical relations or abstract case. However, there is evidence that "oblique" accusatives are not really oblique, for they can passivize and they allow Quantifier Float.

7.0.3. Passive

Although it is difficult to find good examples, no doubt because of the strong tendency in Japanese to interpret passive subjects as affected by the action, it is possible for oblique accusatives to passivize, as in (120) (personal communication, Susumu Kuno, 1980) and (121).[16]

(120) Kono   yamamiti-wa   amari   hito-ni   arukarete
       This   mountain-path-T   many   people-D   walk-pass-ing

       inai   yoo   da.
       be-not-pres   seem

       This mountain path seems not to have been walked along
       by many people.

(121) Kono   hasi-wa   ima-made-ni   teki-ni   watarareta   koto-ga   nai.
       this   bridge-T   until now   enemy-D   cross-passive-past NOM-N   not-exist
       Up to now this bridge has not been crossed by the enemy.

7.0.4. Quantifier Float

A second piece of evidence that oblique accusatives are terms comes from Quantifier Float (QF), which may be formulated as a transformation roughly as in (122). A floated quantifier appears outside of the NP with which it is associated, possibly separated from it by other words. An example is (124), in which the numeral classifier phrase *sannin* "three persons" appears outside of the NP *kodomo* "children" and separated from it by the adverb *kinoo* "yesterday". This contrasts with (123), on the transformational point of view taken to be the basic structure, in which the quantifer is part of the NP.

(122) Quantifier Float

       $QNPPX \Rightarrow NPPXQ$

(123) Sannin-no   kodomo-ga   kita.
       Three-G   child-N   came
       Three children came.

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[16] Another example suggested by Prof. Kuno is (119):

(119)   dare-ni-mo   mada   noborareta   koto-ga   nai   yama
        who-D-even   yet   climb-pass-past   NOM-N   not-exist   mountain
        a mountain that has not yet been climbed by anyone

However, this example, and others like it using verbs with the same range of case frames, do not clearly establish the passivizability of path accusatives because such verbs may take either an accusative or a dative, with slightly different semantics. I know of no way of telling whether the passive corresponds to the active with dative or accusative.

(124) Kodomo-ga kinoo   sannin   kita.
       Child-N   yesterday three-people came
       Three children came.

For our purposes it does not matter whether floated quantifiers are base-generated or the result of movement. What is important are the conditions on the occurence of floated quantifiers, that is, quantifiers demonstrably outside of the NP with which they are associated.

There are two approaches to the constraints on Quantifier Float, one based on grammatical relations, according to which it is Subjects and Direct Objects from which quantifiers may float, the other based on case, according to which it is nominative and accusative NPs from which quantifiers may float.[17]

Example (124) illustrates QF from a nominative subject. QF is also possible from accusative direct objects, as illustrated by (126), which is the floated version of (125).

(125) Boku-wa sannin-no   kodomo-o kinoo   sikatta.
       I-T   three-people-G child-A   yesterday scolded
       I scolded three children yesterday

(126) Boku-wa kodomo-o sannin kinoo   sikatta.
       I-T   child-A   three   yesterday scolded
       I scolded three children yesterday

QF is not possible from oblique NPs. The contrast between (127) and (128) shows that QF is not possible from instrumental NPs; that between (129) and (130) shows that QF is not possible from dative NPs.

(127) Godai-no   zidoosya-de mizuumi-o issyuusita.
       five-vehicles-G cars-I   lake-A   went-around
       We drove around the lake in five cars.

(128) *zidoosya-de godai   mizuumi-o issyuusita.
       car-I   five-vehicles lake-A   went-around
       We drove around the lake in five cars.

(129) Sono hon-wa futari-no   tomodati-ni ageta.
       That book-T two-people-G   friend-D   gave
       I gave that book to two friends.

(130) *Sono hon-wa tomodati-ni futari   ageta.
       That   book-T friend-D   two-people gave
       I gave that book to two friends.

The examples that we have considered thus far are the canonical examples, which both approaches account for. What distinguishes the two approaches are the cases

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[17] Okutsu 1969 first proposed the grammatical relations based account, which has been defended by Kuno xx. Shibatani xxx is the principal proponent of the case-based approach.

in which the usual correspondence between grammatical relations and case does not obtain. When we examine these cases, the case-based generalization breaks down.

One situation in which non-canonical case-marking is found occurs when the subject of a relative clause is marked genitive rather than nominative, as it may be. Kuno (197x) has pointed out that in such cases QF is possible, as in (131).

(131) Kuruma-no suudai   tomatte iru   miti.
       car-G   several-vehicles parked   be   street
       The street on which were parked several cars.

Similarly, NPs with subject properties are in some cases marked dative, for example, as causees. As (133), the floated counterpart of (132), shows, such dative NPs allow QF.

(132) Kantoku-wa   zen'in-no sensyu-ni akai herumeto-o
       Head-coach-T   all-G   player-D   red   helmet-A
       kaburaseta.
       caused-to-wear

       The head coach had all the players put on red helmets.

(133) Kantoku-wa   sensyu-ni zen'in akai herumetto-o
       Head-coach-T   player-D   all   red   helmet-A
       kaburaseta.
       caused-to-wear

       The head coach had all the players put on
       red helmets.

The dative-marked agent of adversative passives also permits QF, as illustrated by (135), the floated counterpart of (134).

(134) Sono otoko-wa minna-no kodomo-ni sinareta.
       That man-T   all-G   child-D   die-passive-past
       That man had all of his children die on him.

(135) Sono otoko-wa kodomo-ni minna sinareta.
       That man-T   child-D   all   die-passive-past
       That man had all of his children die on him.

The precise conditions under which QF is possible are complex, but it seems clear that the case-based restriction is wrong. Genitives and datives permit QF when they mark subjects, but not otherwise. The generalization that QF is possible only from subjects and direct objects on the other hand is quite good.

Having established the validity of Quantifier Float as a test for termhood, the question remains of whether it is possible to float a quantifier off a translative accusative. The answer is that it is, as examples (136) and (137), provided by Nobuko Hasegawa (personal communication 1980) demonstrate. In (136) *zenbu* is floated out of *hamabe*; in (137) *sanbon* is floated out of *hasi*.

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(136) Tanaka-san-wa nihonzyuu-no   hamabe-o zenbu aruita.
      Tanaka-Mr-T   throughout-Japan-G beach-A   all   walked

      Mr. Tanaka walked along all the beaches in Japan.

(137) Boku-no ie-wa   koko-kara hasi-o   sanbon watatta
      I-G   house-T here-AB   bridge-A three   crossed

      tokoro-ni arimasu.
      place-D   is-located

      My house is three bridges away from here.

A possibility that we must discount is that verbs that take translative accusatives
have double subcategorization frames, one in which the path is a term, the other in
which it is oblique. Quantifier Float would be possible in one frame, causativization
with an accusative causee in the other.[18] However, this cannot be the case. The
double subcategorization proposal predicts that it should not be possible to float a
quantifier off a translative NP in a sentence containing an accusative causee. For
the causative to be accusative, the translative NP must be oblique, but for the
translative NP to float a quantifier, it must be a term, which is a contradiction.
This prediction is false — it is possible to float a quantifier off a translative NP even
with an accusative causee.

Consider example (138), in which the quantifier *zenbu* is internal to the transla-
tive NP. (139), in which *zenbu* has floated out of the translative NP is acceptable,
even though the causee is accusative.

(138) Nakamura-san-wa Tanaka-san-o nihonzyuu-no zenbu-no
      Nakamura-Mr.-T   Tanaka-Mr.-A all-Japan-G   all-G

      hamabe-o arukaseta.
      beach-A   caused-to-walk

      Mr. Nakamura made Mr. Tanaka walk along all the
      beaches in Japan.

(139) Nakamura-san-wa Tanaka-san-o nihonzyuu-no hamabe-o
      Nakamura-Mr.-T   Tanaka-Mr.-A all-Japan-G   beach-A

      zenbu arukaseta.
      all   caused-to-walk

      Mr. Nakamura made Mr. Tanaka walk along all the
      beaches in Japan.

It is difficult to find evidence for the termhood of *tokoro* complements. Their
semantics is such that I have been unable to find sentences in which they might
be quantified and so tested for Quantifier Float. Similarly, I cannot find suitable
contexts for Passivization.

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[18] This possibility was raised by Alec Marantz (personal communication 1980).

(140) Sensei-ga   oborete iru   tokoro-ga   bideo-ni   torareta.
       Teacher-NOM   he-is-drowning *tokoro*-NOM   video-D   take-passive-past
       The teadher's drowning was videotaped.

Harada (1977;152) points out that Object Honorification applies to *tokoro*-complements, citing the example (141), in which the verb "save" is in the Object Honorific form and "drown" is Subject Honorific.

(141) Taroo-wa   sensei-ga   oboresoo-ni-natta tokoro-o   o-tasuke si-ta.
       Taroo-T   professor-N drown   *tokoro*-A   saved
       Taroo saved the professor when he was about to be drowned.

This might be taken to constitute evidence for the termhood of *tokoro*-complements. However, it is now clear that the term Object Honorification is a misnomer and that these forms are more properly described as humilific, expressing the deference of the subject towards a discourse entity that need not be a term.

8. Conclusion

The Double-O Constraint is not a single constraint, but rather the conflation of two constraints, the Deep Double-O Constraint and the Surface Double-O Constraint. The Deep Double-O Constraint forbids two accusative arguments in a single argument structure. DDOC violations are unaffected by surface case and invariably yield grossly ungrammatical sentences. There is no variation among speakers. The Surface Double-O Constraint forbids two overt accusatives in the same clause. It is triggered by surface case. SDOC violations are eliminated by anything that eliminates the surface occurrence of two accusatives. SDOC violations often do not produce full ungrammaticality. Furthermore, they are gradient, with greater distance between the two accusative NPs reducing the degree of ungrammaticality. Speakers vary considerably in their reaction to SDOC violations.

Several types of accusatives fail to trigger the Deep Double-O Constraint. These include translatives, *tokoro* complements, and body parts in the possessor ascension construction. Historical evidence shows that ablatival accusatives used to be non-triggers, but today, for most but not all speakers, they do trigger the Deep Double-O Constraint. The status of the various accusatives that do not trigger the Double-O Constraint is not entirely clear. They are identical to structural accusatives in their morphological behaviour. They can be passivized, and can float quantifiers, which might indicate that they are arguments. However, these are probably not valid tests for argument status. It therefore appears that the accusatives that do not trigger the DDOC can be regarded as oblique.

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