In this paper, the two following issues are reviewed with regard to the double object constructions: (1) Do all the double object constructions have the same structures? (2) How can the features of the two arguments in the double object construction be checked under the minimalist theory? Through the examples on the double object constructions in German, we can find two kinds of double object constructions. One is the dative–accusative argument structure and the other is double accusative argument structure. The latter is the same structure with English double object constructions. I will show each structure and its derivations based
on the minimalist theory. For the question (2), there is a DP unit in English double object constructions. I will assume this DP unit appears just in the double object constructions which do not have any inherent Dative Case. I will prove that a DP unit can appear in the double object constructions which just have structural accusative arguments. The features of the two arguments in the DP unit can be matched and agreed with a ditransitive verb containing [+multiple uCase], a multiple uninterpretable and valued Accusative Case feature, under the Multiple Agree by the One–Fell Swoop Principle. On the other hand, the double object construction that has the dative–accusative argument structure does not allow Multiple Agree. These differences lead to the different Case checking in the different structures of double object constructions.

II. Asymmetries Between the Two Arguments in Double Object Constructions

Barrs and Lasnik (1986) present the domain asymmetries between two DPs in the problematic double object construction.

(1) a. I gave every worker; his, paycheck.
    b.* I gave its, owner every paycheck.   (quantifier binding)

(2) a. Which man, did you send his, paycheck?
    b.* Whose, pay did you send his, mother? (weak crossover)

(3) a. Who did you give which paycheck?
    b.* Which paycheck did you give who?   (superiority)

(4) a. I showed each man the other's socks.
    b.* I showed the other's friend each man. (each . . . the other)

(5) a. I showed each child the other.

Barrs and Lasnik (1986)
b.* I showed the other each child.

(6) a. I gave no one anything.
b.* I gave anyone nothing. (polarity any)

Jackendoff (1990)

All the examples in (1)–(6) contain the domain asymmetries between two DPs in the double object constructions. The pronoun can be founded by quantifier in (1a) but not (1b), and in (2), a wh-phrase fronted from the first object can bind into the second object (2a) but not vice versa (2b). In (3), if both objects are wh-phrases, only the first may be moved. In (4)–(5) case, each in the first object can be related to the other in the second object, but not vice versa. And finally, in (6), polarity any is licensed in the scope of negation and various other elements. Negation in the first object licenses any in the second, but not vice versa.

In Larson (1988), the following sentences in (7) are analyzed as arising by a two-step process: dative shift applies to a dative structure (7a), yielding a double object construction (7b), then passive applies to the latter, yielding (7c):

(7) a. (Someone) sent a letter to Mary.
b. (Someone) sent Mary a letter.
c. Mary was sent a letter.

Larson (1988)

However, The sentence in (8) cannot be derived directly from (7b) by A-movement in contrast with the passive of dative structure in (7a).

(8) * A letter was sent Mary.

In double object constructions the derived direct object receives only
structural Case. Since this passive involves -en morphology, structure Case assignment is suppressed. Thus, *Mary is Caseless in (8) and the sentence is ruled out.

III. The Absence of Oblique Inherent Case in English

Kayne (1984) presents the several phenomena on the double object constructions especially between English and French. English exhibits the double object constructions in (9), but French doesn't in (10).

(9) a. John gave Mary a book.
    b. John has left his children a great deal of money.
    c. They sent John a registered letter.

(10) a. * Jean a donné Marie un livre.
    b. * Jean a laissé ses enfants beaucoup d'argent.
    c. * Ils ont envoyé Jean une lettre recommandée.

Kayne (1984)

On the other hand, both languages are similar in dative constructions as follows:

    b. John has left a great deal of money to his children.
    c. They sent a registered letter to John.

(12)a. Jean a donné un livre à Marie.
    b. Jean a laissé beaucoup d'argent à ses enfants.
    c. Ils ont envoyé une lettre recommandée à Jean.
The question that arises here is why there should be such a difference between two quite similar languages. According to Kayne’s (1984) argument, the absence of the double object construction in French is due to another grammatical property having to do with prepositions.

English
(13) They were laughed at by the children.
(14) Who did you buy that book for?

French
(15) * Ils ont été ri de par les enfants.
(16) * Qui avez-vous acheté ce livre pour?

Kayne proposes that both (13) and (14) depend on English prepositions having a special property, namely that of being able to govern in the same manner as verbs. Since French prepositions don’t have this property, neither construct is grammatical in (15) and (16) in French data. Thus he argues that the Case assignment of English prepositions is possible as a function of English verbs having the property of assigning object Case. This property for prepositions to govern in the manner of verbs is not shared by French prepositions, so that the sentences in (15) and (16) are ungrammatical.

As discussed above, English, but not French, allows preposition stranding in wh-constructions and in passives. According to Kayne (1984), Hornstein and Weinberg (1981), in French it seems that there must be some important difference between V and P at issue: P assigns (oblique) Case in the base, whereas V assigns (objective) Case elsewhere than in the base. The idea that V and P assign Case differently from one another might be expressed independently of the point of application of
Case Assignment. Thus, we can consider the possibility that P can assign oblique (inherent) Case only to a DP for which it is subcategorized, whereas V can assign objective (structural) Case somewhat more freely, in particular to any DP that it governs. If this were so, this could suggest the English–French contrast on double object constructions in terms of the V vs. P Case assignment difference. That is, in French, P and V do not govern in the same way, but in English they do. It means that English do not have the accusative–dative distinction.

Now let us consider the German examples.

(17) German
a. Hans hilft ihm.
Hans helps him(Dat)

b. *Er(Nom) wurde geholfen.
he was helped Haegeman (1991)

c. Es wurde ihm geholfen.
it was him(Dat) helped.

d. Ihm wurde geholfen.
him(Dat) was helped Larson (1988)

"He was helped"

In the above examples in (17), dative Case marking in DP cannot be suppressed under passive. The verb helfen in German imposes dative Case upon its object (17a). However, this cannot be absorbed under passive (17b), but rather, the dative argument must remain internal with having the passive surface as an impersonal construction (17c) or the dative argument can be moved to subject position with having dative Case still in (17d). Similar facts appear in Russian.

(18) a. Ivan citait knigu.
Ivan(Nom) reads book(Acc)
“Ivan is reading the book.”

b. Kniga citaesja (Ivanom).
   book(Nom) is-being-read (Ivan(Inst))
   “The book is being read by Ivan.”

(19) a. Rabotnik podrazaet inostrannym metodam.
   worker(Nom) copies foreign(Dat) methods(Dat)
   “The worker is copying foreign(Dat) methods(Dat).”

b. *Inostranye metody podrazajutsja rabotnikom.
   foreign(Nom) methods(Nom) are-copied worker(Inst)
   "Foreign methods are being copied by the worker."
   Larson (1988)

As shown in the above examples, although Russian permits passivization of accusative objects in (18b), it doesn't permit passivization of dative argument under the situation of dative Case absorbed by passive in (19b). This contrast in Russian is the same as that in German.

Therefore, in languages like German, French, and Russian, P or V can assign oblique (inherent dative) Case according to their subcategorization. On the other hand, English double object constructions don't involve suppression of oblique (inherent dative) Case, as in the ill-formed German and Russian examples in (17b) and (19b). Since the Case assigned by even preposition in English is only objective (structural accusative) Case, its absorption is fully parallel to absorption of the objective Case assigned by verbs. Thus, in English neither V nor P is able to assign dative Case structurally. It means that English doesn't have oblique (inherent dative) Case. It has only structural Cases.
IV. A DP unit in English Double Object Constructions

In the previous section, we have considered that both the first and second DPs in the double object construction in English are subject to the structural Case requirement. Johnson (1992), following Vikner (1990) who suggests that two DPs of double object construction move as a unit under object shift, adopts a “DP Hypothesis—type analysis of nominals. In Lee and Park (1995) and Hong (1997), it is argued that this DP unit exists in the languages like English which don’t have any Case marker to have a property assigning inherent dative Case to a DP. Now let us consider the configurations of double object constructions in English, German and French.

(20) English
   a. John gave Mary a book.
   b. John gave a book to Mary.
   c. Mary was given a book.
   d. * A book was given Mary.

(21) German
   a. Ich gab ihm ein Buch.
   b. *Ich gab ein Buch zu ihm.
   c. *Er wurde ein Buch gegeben.
   d. Ein Buch wurde ihm gegeben.

(22) French
   a. *Je donne Jean un livre.
   b. Je donne un livre à Jean.
   c. *Jean est donné un livre.
   d. Un livre est donné à Jean.

Kayne (1984)
In (22a) we can find the absence of double object constructions in French. Thus, if we adopt the DP unit hypothesis, French doesn't have a DP unit. In earlier section, as we treated it, in French V governs DP and assigns objective structural Case to the DP but normally P governs DP and assigns oblique (inherent dative) Case only in the sense of subcategorization. Thus we can find that there exists a oblique (inherent dative) Case in French owing to P. In German, the double object construction is possible in (21a) as we see it above. But the double object construction in (21a) doesn't have DP unit, because lexical verbs and prepositions can assign dative inherent Case as well as objective structural Case in the sense of subcategorization. Thus, there is no DP unit in German according to the above data. On the other hand, there is no oblique (inherent dative) Case in English, because English doesn't have any dative Case marker. Therefore in the double object construction (20a), two internal DPs can be organized as one DP unit like one argument, and they are assigned objective Case by a verb as behaving like a single argument. The developed DP unit structure suggested by Lee and Park (1995) can be as follows:

\[
\begin{array}{c}
\text{(23)} \\
\text{DP}_\text{unit} \\
\text{DP}_\text{unit} \\
\text{Mary} \\
\text{D'} \\
\text{D} \\
\text{a book}
\end{array}
\]

In German, we can find the following interesting data in (24).

\[
\begin{array}{c}
\text{(24) German} \\
\text{a. Er lehrt mich Deutsch.} \\
\text{he teach me(Acc) German(Acc)}
\end{array}
\]
b. Ich werde Deutsch von ihm gelehrt.
   I(Nom) be German(Acc) by him(Dat) taught

c. Deutsch wird mir von ihm gelehrt.
   German(Nom) be me(Dat) by him(Dat) taught

In the above data, two internal DPs are assigned only Accusative Cases like an English DP unit. There is no argument assigned dative Case in the double object construction (24a). In passivization, either of objects can be moved to subject position, and its Case also is changed to nominative Case. Through the above data, we can see that in German there are two kinds of double object constructions, one is dative–accusative argument structure in (21a) and the other is double accusative argument structure in (24a) which is the same structure with the English double object construction. Thus, the following DP unit assumption can be presented:

(25) Two internal arguments can be formed a DP unit only if two internal arguments have the same accusative Cases in the double object construction.

(26) DP unit

\[
\begin{array}{c}
\text{DP unit} \\
\text{mich} & \text{D'} \\
\text{D} & \text{Deutsch}
\end{array}
\]

V. The One-Fell Swoop Principle

Now, in this section, I consider how the feature checking relevant to the Case assignment is working under Match and Agree in the minimalist
theory. Since Chomsky (1999), the concept of probes and goals have been considered very important in the computational system in the narrow syntax. The nature of probes and goals has been discussed in Hong (2004, 2005, 2006). The features carried by items are not an unstructured list, but rather are grouped into subsets. For example, as for $\phi$-features which are related to A–Agree, person, number, and gender features can comprise a set. This full member set is called a complete $\phi$-set. This set can be a probe or a goal in A–Agree in the computational system. Based on this assumption, in general, we can have the following probes and goals in A–Agree. As for the Case assignment by A–Agree like TP and tP, it can

1) An essential step in fixing a lexicon of a language can be viewed as a two-stage process: The first is the selection of a set of features $[F]$ from the universal features $\{F\}$, and the second is the assembly of features from $[F]$ into lexical items. The collection of lexical items comprises the lexicon of the language. However, the notion of selection does not seem to compatible with the Uniformity Principle from Chomsky (1999, p2):

   (i) “In the absence of compelling evidence to the contrary, assume languages to be uniform, with variety restricted to easily detectable properties of utterances.”

The selection of $[F]$ from $\{F\}$ in fixing a language comprises a subset of the universal set. For the completeness of a $\phi$-set, we can consider it in two different views: absolute or relative views. Suppose that the set of $\phi$-features in $\{F\}$ are composed of $\{\text{Person, Number, Gender}\}$, it is possible to select a subset of this set in a language. If we consider the completeness of a $\phi$-set in absolute view, like some other languages, a complete $\phi$-set in English also contains $\{\text{Person, Number, Gender}\}$. Thus, although English verbs do not exhibit a gender agreement morphology, a gender feature should be considered to exist, but completely syncretised. On the other hand, in the relative view, it can be supposed that a complete $\phi$-set in English are composed of $\{\text{Person, Number}\}$ without a gender feature. This is possible, since the latter view admits that selection of $[F]$ from $\{F\}$ can be different depending on languages. In a conceptual point of view such as the reduction of computational complexity, we will accept the relative view. So, it will be maintained in this paper that $\{\text{Person, Number}\}$ comprises a complete $\phi$-set in English. See Chomsky (1998), Atkinson (2003), Radford (2004) and Hong (2005) for relevant discussion.
also be achieved in possessive DPs or PPs by A–Agree. This means that D and P should have a complete φ-set in order to assign a proper Case to a DP. Adger (2003) assumes that DP contains a little n, which is responsible for Case assignment of any Theme in the DP, while D containing Genitive Case feature enters into Agree with the Agent and triggers the Agent to move to spec D. In the case of PP, Radford (2004) suggests the possibility that there can be an abstract light preposition above PP. If it is true, this light preposition may have a φ-set to assign a Case feature to the corresponding matched DP. Thus, we can generalise the Case marking of DPs in functional items. The following functional items, T, D, v, n, and p can have φ-sets, which are related to Case assignment by A–Agree. Core functional items, T and v contain the following possible probes in A–Agree:2)

(27) Probes
a. A complete φ-set of T
b. An incomplete φ-set of T
c. A complete φ-set of v
d. An incomplete φ-set of v

Their relevant partners, lexical DPs, have the following possible goals:

(28) Goals
a. A complete φ-set of lexical items
b. An incomplete φ-set of lexical items

However, According to Chomsky’s (1998 and 1999) reasoning, not every matching pair seems to induce the operation Agree.

2) According to Chomsky (1998 and 1999), the incomplete φ-set of expletive there can be both a probe and a goal, but we will not discuss this further here.
(29) We take deletion to be a ‘one fell swoop’ operation, dealing with the φ-set as a unit. Its features cannot selectively delete: either all or none.

Chomsky (1998)

Based on this, Chomsky (1999) assumes the following condition:

(30) α must have a complete set of φ-features to delete uninterpretable features of the paired matching element β

Chomsky (1999, p.4)

According to (29) and (30), A-Agree is governed by the following condition:

(31) Only a complete φ-set can apply the operation Agree to the features of the corresponding matching sets by a one fell swoop operation.

Hong (2006)

Based on the assumptions that the nature of probes and goals are identical sets and the computational system abides by the One-Fell Swoop Principle in (31), we can assume the following feature composition of A-Agree in English:3)

(32) A-Agree

Probe: {{uPerson, uNumber} uCase}
Goal: {{iPerson, iNumber} uCase}

(uCase = an uninterpretable and valued feature)

Normally, φ-features such as person and number features of goals are interpretable features. However, unlike interpretable φ-features of goals,

3) See Hong (2005) for more related things about the feature paradigm for A-and A-bar Agree in English.
Case features are always uninterpretable features. So, they cannot reach LF. In addition, Case features seem to be related to their relevant sets rather than individual features, since these features make all the interpretable features of their relevant sets active in the computational system. Owing to them, these interpretable features of the set participate in Agree in the computational system. The interpretable features which are related to LF comprise a subset of the whole set. Thus, the groups of these semantic interpretable features ($\phi$-features) are members of the whole $A$-sets with a Case feature. That is, a $\phi$-set is a member of an $A$-set.

VI. Multiple Match and Agree

In Ura (2000), the multiple feature checking is related to the property of $F$, a functional category:

\begin{enumerate}
\item There are [+multiple] $F$s and [-multiple] $F$s. The [+multiple] $F$s can or must undergo more than one feature-checking operation, and, hence, they can or must enter into more than one checking relation.
\item The distinction between [+multiple] and [-multiple] $F$s is subject to parametric variation.
\end{enumerate}

According to his assumption, a feature with the property [+multiple] can enter into more than one checking relation, whereas a feature with the property [-multiple] can enter into only a single checking relation. Under the probe and goal matching theory, Hiraiwa (2000) assumes that if the probe is [+multiple], it can continue to probe for the next closest goal after matching the closest goal. He presents the following mechanism for
Multiple Agree.

(34) Multiple Agree
Multiple Agree with a single probe is a single simultaneous syntactic operation: Agree applies to all the matched goals at the same derivational points *derivationally simultaneously*.

Hiraiwa (2000)

(35) Multiple Match and Agree

\[\begin{array}{lll}
\text{a. Probe} & \text{Goal 1} & \text{Goal 2} \\
\text{b. Probe} & \text{Goal 1} & \text{Goal 2}
\end{array}\]

According to the Multiple Agree in (34), a probe, being [+multiple], searches for all matching goals continually until the matching is completed within a certain stage. Multiple Agree is a single syntactic operation as shown in (35b) rather than the distributed Agree in (35a).

Thus, if we adopt this Multiple Agree here, it can be applied to the DP unit in the double object construction in English, as follows:

(36) Multiple Match and Agree

\[\begin{array}{lll}
\text{[VP} & \text{V} & \text{[DP}_{\text{unit}} & \text{DP1} & \text{DP2}]}
\end{array}\]

The more detailed structure of DP unit in the double object construction in English can be shown as in (37).
In the above structure, the light \( v \) has a probe containing a \([+\text{multiple}]\) uninterpretable and valued Case feature and uninterpretable \( \phi \)-features. It can be matched and agreed with the interpretable \( \phi \)-features and uninterpretable and unvalued Case features of goals of lexical items, Mary and a book, in the DP unit. The uninterpretable \( \phi \)-features of the light \( v \) is deleted by the corresponding matching goals that are complete A-sets, \{i\( \varphi \)-features, uCase\}, of lexical items. The unvalued Case features of the lexical items are valued at Accusative Case simultaneously by the valued Case feature of the light \( v \) by Multiple Agree.

However, in the case of the dative and accusative argument structure in German, there is no DP unit unlike the double object construction in English. Multiple Agree can not be applied to the double objects in
German. The following separate Agree is applied to the objects.

(38) Separate Agree in DOC in German

Unlike (37), the probe of the light $v$ in (38) does not have a [+multiple] uninterpretable and valued Case feature. It has an uninterpretable and valued Accusative Case feature and uninterpretable $\phi$-features as an A-set, so it is matched and agreed with the interpretable $\phi$-features and an uninterpretable and unvalued Case feature of the goal of the lexical item, *ein Buch* in (38). The lexical verb, *gab*, has an interpretable dative Case feature in the sense of subcategorisation, so it assigns the inherent dative Case to the first object, *ihm*. Furthermore, since, in French there is no DP unit, the double object construction is not allowed.
Ⅶ. Conclusion

Through the examples on the double object constructions in German, two kinds of double object constructions are considered. One is the dative–accusative argument structure and the other is double accusative argument structure. The latter is the same structure with English double object constructions. In the case of double accusative argument structure there is a DP unit in English double object constructions. This DP unit appears just in the double object constructions which don't have any inherent Dative Case. The DP unit can appear in the double object constructions which just have structural accusative arguments. The features of the two arguments in the DP unit can be matched and agreed with a ditransitive verb containing [+multiple uCase], a multiple uninterpretable and valued Accusative Case feature, under the Multiple Agree by the One–Fell Swoop Principle. On the other hand, the double object construction that has the dative–accusative argument structure does not allow Multiple Agree. The indirect argument is assigned an inherent dative Case from the verb containing an inherent dative Case. That is the reason why that, in the passive sentence, the indirect object containing the inherent Case still keeps the dative Case in the subject position. However, in the same passivisation, the two arguments in the DP unit are assigned the structural nominal Cases from the functional category T under the Multiple Match and Agree. Based on the locality principle, the first argument, the indirect object in English, moves to the subject position. All these differences come from the different Case checking in the different structures of double object constructions.
Works Cited


Hornstein, Nobert. and Amy Weinberg. “Case theory and preposition


Abstract

**Multiple Agree to Double Objects in English**

Hong, Sun-Ho (Seoul National University of Education)

In this paper the structures of double object constructions are considered through the several data, especially English, French, and German. I will show differences among them and present the different Case assignment of them. The two following issues are reviewed with regard to the double object constructions: (1) Do all the double object constructions have the same structures? (2) How can the features of the two arguments in the double object construction can be checked under the minimalist theory? Question (1) has an answer. Through the examples on the double object constructions in German, we can find two kinds of double object constructions. One is the dative–accusative argument structure and the other is double accusative argument structure. The latter is the same structure with English double object constructions. I will show each structure and its derivations based on the minimalist theory. For the question (2), there is a DP unit in English double object constructions. I will assume this DP unit appears just in the double object constructions which don't have any inherent Dative Case. I will prove that a DP unit can appear in the double object constructions which just have structural accusative arguments. The features of the two arguments in the DP unit can be matched and agreed with a ditransitive verb containing [+multiple uCase], a multiple uninterpretable and valued Accusative Case feature, under the Multiple Agree by the Generalised One–Fell Swoop Principle. On the other hand, the double object construction that has the
The dative-accusative argument structure does not allow Multiple Agree. The indirect argument is assigned an inherent dative Case from the verb containing an inherent dative Case. That is the why that, in the passive sentence, the indirect object containing the inherent Case still keeps the dative Case in the subject position. However, in the same passivisation, the two arguments in the DP unit are assigned the structural nominal Cases from the functional category T under the Multiple Match and Agree. Based on the locality principle, the first argument, indirect object, moves to the subject position. All these differences come from the different Case checking in the different structures of double object constructions.

Key Words: Multiple Agree, probe, goal, structural Case, Inherent Case
다중 일치, 탐색자, 목표역, 구조격, 내재격

논문접수일: 2015.01.23
심사완료일: 2015.02.11
게재확정일: 2015.02.24

이름: 홍선호
소속: 서울교육대학교 영어교육과
주소: (137-742) 서울 서초구 서초중앙로 96 (서초동 1650번지)
이메일: shong@snue.ac.kr