

# Properties of Coordination of Distinct Types of Interrogatives in English

Mija Kim

(Kangwon National University, Lecturer)

Sae–Youn Cho\*

(Kangwon National University, Professor)

## ❖ Abstract

The paper presents the distributional and discourse properties of the coordination of distinct types of interrogatives in English. Ross (1967) claims that sentences joined by *and* with different types of questions as conjuncts are considered questionable, whereas sentences coordinated with *or* are deemed ungrammatical. To determine whether there is a grammaticality distinction between sentences joined by *and* and *or* with dissimilar types of interrogatives as conjuncts, we thoroughly analyze the pertinent data from corpora. As a result, we find that, contra Ross (1967), the coordination of all types of interrogatives is possible for both *and* and *or*, unless the events of the conjuncts involved are disconnected. To implement the idea into a constraint-based construction grammar, we propose a pragmatic constraint on discourse coherence relations based on Kehler (1995), which can be a part of a revised version of the Coordination Rule by Sag et al. (2003). The analysis we propose here, hence, allows us to give a simple explanation on how to generate a proper set of coordinated sentences and to predict the acceptability of sentences containing the coordination of distinct types of interrogatives in English.

Keywords: coordinate structure rule (constraint); coordination of distinct types of interrogatives (questions); discourse coherence relations; constraint-based construction grammar

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\* Corresponding author

## I . Introduction

It is well-known that sentences whose conjuncts contain the same type of interrogatives can be allowed for the conjunctions *and* and *or* (hereinafter, the conjunctions), as shown in (1) (Ross 1967; Quirk et al. 1985; Sag et al. 1985; Kehler 1995; Pullum & Huddleston 2002, and others).

- (1) **[Wh-interrogative] and/or [Wh-interrogative]**  
 a. When did you get back **and/or** what did you bring me?  
**[Yes/no-interrogative] and/or [Yes/no-interrogative]**  
 b. Did Merv show up **and/or** did you play chess? (Ross 1967:114)

However, Ross (1967:114-115) was “not sure of the grammaticality of sentences conjoined with *and* whose conjuncts contain both *yes/no*-questions and *wh*-questions,” though he considered sentences conjoined with *or* whose conjuncts involve different types of interrogatives to be ungrammatical, as in (2):

- (2) **[Wh-interrogative] or [Yes/no-interrogative]**  
 a. \*What are you eating **or** did you play chess? (Ross 1967:114)  
**[Yes/No-interrogative] and [Wh-interrogative]**  
 b. ?Did you have a good time **and** what did you bring me?  
**[Wh-interrogative] and [Yes/No-interrogative] &**  
 c. ?What’s for supper **and** is the cat back yet? (Ross 1967:115)

The difference in grammaticality between (2a) and (2b-c) appears to be due to the distinctive conjunctions. More specifically, coordination of distinct types of interrogatives with the conjunction *and* can be allowed, while that with *or* can not.

The asymmetry in grammaticality mentioned above leads directly to the following empirical and theoretical questions: Empirically, it is questionable whether the coordination of distinct types of interrogatives can be grammatical depending on the conjunctions. Theoretically, if the asymmetry exists, there must be some constraints to exclude (2a) and include (2b-c). Contra Ross (1967), however, it is not challenging to find the attested coordination data with the conjunctions *and* and *or* whose conjuncts contain distinct types of interrogatives as follows:

(3) **[Wh-interrogative] and [Yes/no-interrogative]**

a. What was your goal **and** did you achieve it?

(COCA 1991 SPOK)

**[Yes/no-interrogative] or [Wh-interrogative]**

b. Should I call you Your Honor, **or** what do I call you?

(COCA 1999 SPOK)

To decide if the coordination of the distinct types of interrogatives is possible regardless of the conjunctions, we need to collect and observe further relevant data. In addition, depending on the result, we should explain the reason of why the coordination of distinct types of interrogatives can be allowed or disallowed.

On the basis of the corpus data at issue<sup>1)</sup>, we claim that the coordinate structure of distinct types of interrogatives is well-formed regardless of

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1) In conducting corpus research, this study adopts the corpus-based approach and uses the data from corpus to investigate the coordination of the distinct types of interrogatives while also checking if these types of coordination are allowed. In addition, this study uses the data to explain the reason of why the coordination of distinct types of interrogatives can be allowed. It needs to note that this study is not intended to generate new insights on the coordination by analyzing the corpus data, which will be left for further research.

the conjunction, when the events of the conjuncts are coherent. The claim we made here can be implemented into Sag et al (2003) as a revised Coordination Rule so that it enables us to give a simple explanation on why some sentences whose conjuncts contain distinct types of interrogatives are natural and others, odd. This paper is organized as follows: Section 2 introduces the distributional and semantic properties of the coordination of interrogatives conjoined with *and* and *or*, based on the attested data from corpora. Section 3 proposes a discourse-based constraint, which says that the events of the conjuncts in the coordination of distinct types of interrogatives must hold a coherence relation, a la Kehler (1995). Section 4 suggests how the pragmatic constraint and the Coordination Rule in Sag et al (2003) can analyze the coordination of distinct types of interrogatives in a constraint-based construction grammar. In Concluding Remarks, we discuss some residual problems.

## II. Distributional and Discourse Properties of Coordination of Interrogatives

To show that the coordinate structure of distinct types of interrogatives (DTIs) is allowed regardless of the conjunctions, this section presents various data including sentences conjoined with either *and* or *or* whose conjuncts are different interrogatives, *i.e.* *yes-no* questions and *wh*-questions. In so doing, we use the relevant data from corpora. Moreover, we examine the semantics of the coordination of DTIs depending on the distinct conjunctions such as *and* and *or*, focusing on the distributional behavior of the pattern [Interrogative AND/OR

**Interrogative].** It is noteworthy that the functional difference between *yes-no* questions and *wh*-questions lies in the type of information they seek. *Yes-no* questions aim to confirm or deny a particular proposition, while *wh*-questions seek specific information concerning *wh*-words. Nonetheless, when two distinct types of interrogatives can form a coordinate structure, we need to account for what causes the coordination to be allowed.

## 2.1 Coordination of DTIs conjoined with *and*

It is widely believed that all conjuncts of a coordinate structure must be of the same syntactic category (Ross 1967; Quirk et al. 1985; Sag et al. 1985; Pullum & Huddleston 2002). The idea appears to work for the coordination of the same type of questions, as shown in (4)-(5): coordinations of *wh*-questions (4) and *yes-no* questions (5).

- (4) a. But [<sub>wh-Q</sub> what are the American interests at stake], and [<sub>wh-Q</sub> what is the best way to protect them?] (COCA 2010 SPOK)  
 b. [<sub>wh-Q</sub> What do you find that is attractive about yourself], and [<sub>wh-Q</sub> what do you absolutely love about you?] (COCA 2012 BLOG)
- (5) a. [<sub>yes/no-Q</sub> Did you report the battle plan to the central command], and [<sub>yes/no-Q</sub> did they approve it?] (MOVIE 2006 MISC)  
 b. [<sub>yes/no-Q</sub> Do you watch him], and [<sub>yes/no-Q</sub> do you take inspiration from Sacha Baron Cohen?] (MOVIE 2014 US/IE)

The coordinate structures in (4)-(5) illustrate that the coordinations of the same type of interrogative are permissible in English. In addition to the distributional property of the patterns such as [*wh-question* &

***wh-question***] and [***yes/no-question & yes/no-question***], the two conjuncts of each sentence in (4-5) can be contextually well connected to get a possible interpretation.

However, there are lots of coordination data whose conjuncts are not of the same type of interrogatives, but of the different types, as in (6)-(7): *yes-no* questions and *wh*-questions.

- (6) a. [<sub>yes/no-Q</sub> Has anyone in your family ever been religious],  
and [<sub>wh-Q</sub> what kind of religion were you brought up by?]  
(COCA 2002 SPOK)
- b. [<sub>yes/no-Q</sub> Will he enter the race], and [<sub>wh-Q</sub> what will happen if he does?]  
(COCA 1992 SPOK)
- (7) a. [<sub>wh-Q</sub> What was your goal] and [<sub>yes/no-Q</sub> did you achieve it?]  
(COCA 1991 SPOK)
- b. [<sub>wh-Q</sub> How much did you spend], and [<sub>yes/no-Q</sub> did you find a Furby?]  
(COCA1998 SPOK)

In utterance (6a), the speaker inquires about the religious background that shaped the listener's upbringing. This inquiry is initiated by ascertaining the presence of any religious influence within the listener's family, followed by a direct query regarding the specific religious affiliation. In utterance (7a), the speaker seeks to ascertain the listener's recent goal attainment. This inquiry is conducted by first requesting clarification on the nature of the goal pursued, followed by a direct query regarding its successful completion. These data demonstrate that the coordinations of DTIs can be allowed with the relevant relations of the two conjuncts which can produce a possible interpretation in the discourse.

## 2.2 Coordination of DTIs conjoined with *or*

Similar to the *and*-coordination as seen in 2.1, the *or*-questions are allowed whether they include same types or different ones. As shown in (8) - (11).

- (8) a. [<sub>wh-Q</sub> What are you wearing to dance?], or [<sub>wh-Q</sub> who is your handsome boyfriend?] (COCA 2010 WEB)  
b. [<sub>wh-Q</sub> Why did the author write this], or [<sub>wh-Q</sub> what was the reason this piece was written?] (COCA 2012 WEB)
- (9) a. [<sub>yes/no-Q</sub> Were you just following up on your suspicions], or [<sub>yes/no-Q</sub> did you intend to do me harm?] (COCA 2016 TV)  
b. [<sub>yes/no-Q</sub> Is it enough to win better pay], or [<sub>yes/no-Q</sub> do they want to be recognized as employees as well?] (COCA 2019 MAG)

To show what kind of reading we can get from the data above, we examine the meaning of (8a) and (9a). The questioner in (8a) asks about the clothing someone plans to wear when they go dancing, and about the identity of the person's good-looking boyfriend. In addition, the speaker of (9a) is asking whether the person's actions were related to their suspicions, and asks about the person's intentions. When the same type of interrogative in (8-9) is conjoined with the conjunction *or*, we can easily get a meaning like the coordination of the same type of interrogative with *and*, since the SOAs of the conjuncts seem to be connected.

Against Ross (1967:114), sentences conjoined with *or* whose conjuncts are DTIs can be allowed as in (10) - (11). The sentences in (10) contain two conjuncts, *i.e.* a *yes-no* question and a *wh*-question. But those in (11) involve a *wh*-question and a *yes-no* question in the reverse order.

- (10) a. [<sub>yes/no-Q</sub> Are you the generous angel], or [<sub>wh-Q</sub> who do we have to thank for this?] (COCA 1993 FIC)  
 b. [<sub>yes/no-Q</sub> Is this show about James Carville], or [<sub>yes/no-Q</sub> is it about Bill Clinton, or [<sub>wh-Q</sub> who's it about?]] (COCA 1998 SPOK)
- (11) a. [<sub>wh-Q</sub> Where does it go from here], or [<sub>yes/no-Q</sub> does it go from here?] (COCA 2009 SPOK)  
 b. [<sub>wh-Q</sub> Who jumped off his bike first], or [<sub>yes/no-Q</sub> did they both jump off at the same time?] (COCA 1994 SPOK)

To see how the patterns such as **[[yes/no-question] OR [wh-question]]** and **[[wh-question] OR [yes/no-question]]** can get a reading, we will provide the interpretation of the data (10b) and (11b). First of all, the speaker of (10b) is asking whether the show is centered around James Carville or on Bill Clinton, and if not, he or she wants to know the subject of the show. Though the conjuncts are not the same type of interrogative, the (questioning) events involved, namely the show being centered on Carville or Clinton, or if not, who it is on, appear to be connected. In addition, the questioner of (11b) is asking about the person who jumped off his bike first, and if not, he or she checks whether both individuals jumped off simultaneously. Similar to (10b), the events in (11b) can be regarded as connected SOAs, too.

If it is correct, a question immediately follows: How come (12) is disallowed while (11b) is allowed though they are the same pattern, *i.e.* **[[wh-question] OR [yes/no-question]]**?

- (12 = (2)) **[Wh-interrogative] or [Yes/no-interrogative]**  
 a. \*What are you eating *or* did you play chess? (Ross 1967:114)

Assuming that all coordination of DTIs are possible, we propose a



pragmatic constraint saying that events of all conjuncts should be connected to distinguish (11b) from (12). Specifically, the event of the *wh*-interrogative and that of the *yes/no*-interrogative in (12) appear to be disconnected, comparing with the connected SOAs of (11b).

In short, it is noteworthy that there exist lots of sentences conjoined with *and/or* whose conjuncts are DTIs, though the coordination of the same type of interrogative is common. It implies that the coordination of all types of interrogatives can be well-formed and acceptable only if the events represented by the interrogatives are contextually connected. The grammar system proposed here hence allows the connected events but disallows the disconnected ones in coordination, generating all sentences whose conjuncts are either DTIs or non-DTIs, regardless of the conjunctions.

### III. Coordination of Interrogatives and Discourse Coherence Relations

#### 3.1 Discourse coherence relations

The key fact to decide if a coordination of DTIs is acceptable is that the states of art (SOAs) or the events represented by the conjuncts of the coordination should be connected<sup>2)</sup>.

Coherence is a semantic attribute of discourse that allows an utterance to be meaningful (Hume 1748; Hobbs & Agar 1985; Grosz & Sidner

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2) Though Ross (1967) used the term *disconnected* first, it sounds somewhat vague; So we will adopt a technically well-defined term *coherence*.

1986; Deane 1991; Beaugrande & Dressler 1996). According to Beaugrande & Dressler (1996), it is characterized as a continuity of senses since discourse is regarded as not being a random collection of segments. On the basis of the messages mentioned earlier, the total meaning of a discourse is more than the sum of the meanings of all its parts, in the sense that there must be an additional meaning from the context. For example, the following sentence lacks coherence:

(13) Bill likes to jog, and George hates broccoli. (Kehler 1995)

(13) sounds odd since it is hard to find a coherent connection established between the two propositions, when we try to identify specific commonalities between the two coordinated messages. Suggesting that for one message to be coherent, it needs the recognition of commonalities and contrasts among entities, Kehler (1995) assumes that there are three types of connection between utterances that can establish a discourse as coherent: Resemblance relation, Cause-Effect relation and Contiguity relation.<sup>3)</sup> First, to establish coherence in a message under a Resemblance relation, the reader or the hearer must identify similarities and differences between corresponding sets of properties and entities. For each relation, the reader identifies a relation  $p_0$  that applies to a set of entities  $a_1, \dots, a_n$  in the first sentence  $S_0$ , and a corresponding relation  $p_1$  that applies to a corresponding set of entities  $b_1, \dots, b_n$  in the second sentence  $S_1$ . Coherence is achieved when these corresponding components are related; in this case, a common (or contrasting) relation  $p$  that subsumes  $p_0$  and  $p_1$  is inferred, along with common (or contrasting)

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3) The Resemblance relation and the Cause-Effect relation are assumed to have 5 and 3 subtypes, respectively. See Kehler (1995) for the further information.

properties  $q_i$  of the corresponding elements  $a_i$  and  $b_i$ , as defined in (14).

(14) Resemblance Relations (Kehler 1995:12)

A common (or contrasting) relation  $p$  subsuming  $p_o$  and  $p_l$  is inferred along with common (or contrasting) properties  $q_i$  of the corresponding elements  $a_i$  and  $b_i$ .

Resemblance relations are those in which the two clauses share some common property that is semantically similar in some way. For example, the two clauses, *John is tall* and *Mary is tall*, are related by Resemblance, because they both describe the property of tallness.

Second, Cause-Effect relations in (15) are those in which one clause brings about the other clause. For example, the clauses *John threw the ball* and *The ball broke the window* are related by Cause-Effect, because John's throwing of the ball caused the window to break.

(15) Cause-Effect Relations (Kehler 1995:14)

For each relation, the hearer identifies a proposition  $P$  from the first sentence  $S_0$  and a proposition  $Q$  from the second sentence  $S_1$ . Coherence results from these two propositions being related: an implication relationship is inferred between the two.

Finally, Contiguity relation in (16) is those in which the two clauses are simply adjacent to each other in the discourse.

(16) Contiguity Relation (Kehler 1995:16)

Infer a change of state for a system of entities from  $S_l$ , inferring the initial state for this system from  $S_0$ .

For example, the clauses *John went to the store* and *He bought some milk* are related by Contiguity, because they are both part of the same story about John going to the store.

### 3.2 Coherence Relations and Coordination of DTIs

The acceptability of a coordinated structure whose conjuncts are different types of interrogatives depends on whether a coherence relation between the SOAs of the conjuncts can be formed or not. Based on the coherence theory proposed by Kehler (1995), we demonstrate how the discourse-based analysis can explain the acceptability of the coordination of DTIs with relevant data including the patterns such as **[Interrogative AND/OR Interrogative]**.

In order to facilitate ease of understanding, the three types of coherence relations outlined above are meticulously represented through the use of appropriate data. First, the sentences in (17) illustrate the coordination of DTIs which shows the resemblance relation. In (17a), the first conjunct seeks the reaction to the content of the tape, and the second conjunct asks whether or not the hearer has any information about the tape. So this sentence establishes the coherence relation, specifically of a resemblance relation type, by the definition of (14). In addition, the two conjuncts of (17b) inquire whether the hearer is responsible for a generous act or if someone else should be thanked for it. Similar to (17a), the events of the coordination can form a type of resemblance relation so that (17b) is naturally acceptable.

- (17) a. What did you think of the tape, or have you heard about it?  
(COCA 2016 SPOK)

- b. Are you the generous angel, or who do we have to thank for this? (COCA 1993 FIC)

Second, the sentences in (18) are the coordination of DTIs whose conjuncts can encode the Cause-Effect Relation. For instance, the first conjunct of (18a) establishes the action necessary for the effect to occur, which is the act of saving money in a manner that it could earn interest, while the second conjunct seeks to understand the magnitude of the effect, which is the rate of interest that the money will earn as a result of being saved. This sentence delivers the coherence relation of result as a type of Cause-effect relation, by the definition of (15).

- (18) a. Will the money you put away earn interest, and what is the rate? (COCA 1995 MAG)
- b. How weird is it that you married sisters, and does it bother you? (MOV 2008 SPOK)

Finally, the sentences in (19) are the examples of the coordination of DTIs whose conjuncts form a contiguity relation. Contiguity relation in (19) has two clauses simply adjacent to each other in the discourse. Each conjunct describes part of the same story about an event. The first conjunct of (19a) expresses the interest in how the hearer can acquire the item mentioned, while the second conjunct is asking if the speaker can obtain some. These two events, hence, can get a contiguity relation, by the definition of (16).

- (19) a. How'd you get it, and can I get some? (COCA 2016 MOV)
- b. Where are those notes now, and will you turn them over? (COCA 2000 SPOK)

#### IV. Constraint-based construction Analysis: Generation and Coherence

This section proposes an analysis of the coordination of DTIs, which includes a slightly modified version of the Coordination Rule and the discourse-based constraint mentioned above. On the basis of the corpus data, we claim that the coordination of DTIs can be allowed if the SOAs of the conjuncts have a coherent relation. Though there are various ways to implement this claim into a formal theory, you may think that you can revise the Coordinate Structure Constraint (CSC) in (20) to explain the asymmetries between (1) and (2).

(20) Coordinate Structure Constraint (CSC)

In a coordinate structure, no conjunct may be moved, nor may any element contained in a conjunct be moved out of that conjunct.

(Ross 1967:89)

In other words, the CSC correctly predicts both sentences in (21) to be ungrammatical since the element *the student* in a conjunct is moved out of the conjunct:

- (21) a. \*Here is the student that [the principal suspended \_\_\_] and [the student council passed new rules].  
b. \*Here is the student that [the student council passed new rules] and [the principal suspended \_\_\_].

(Sag *et al.* 2003:443)

Furthermore, Ross (1967) postulates an additional constraint, which is called ‘Across-The-Board’ (ATB) exception as defined in (22). The ATB exception permits us to allow (23).

(22) ‘Across-The-Board’ exception (addendum to CSC)

The CSC can be violated if extraction occurs from all of the conjuncts. (Ross 1967:176)

(23) Here is the student that [the school suspended \_\_\_ ] and [we defended \_\_\_ ].

However, the CSC, together with its ‘across-the-board (ATB)’ exception, cannot explain the acceptability of the coordination of DTIs depending on the context, because the CSC by Ross (1967) are basically syntactic, not discourse-based. To avoid such difficulties, this study adopts a new strategy as follows: a grammar of coordination should generate all coordinations whether their conjuncts belong to identical or different types, postulating a discourse-based constraint saying that the events of all conjuncts should be coherent. To implement this into a formal grammar, we postulate a constructional constraint which says that the coordination of DTIs should keep a discourse-based constraint. Of course, the types of the coordination can be generated in terms of the Coordination Rule (Sag et al. 1985; Sag et al. 2003).

In other words, Sag et al. (2003) propose a coordination rule, which serves as a constraint that integrates both syntactic and discourse aspects, as indicated in (25). More specifically, the coordination rule elucidates the restrictions on coordinate structures that allow various types of coordinated elements in terms of specific features relevant to those elements, such as VAL (valence) and GAP. This rule, again, states that two conjuncts in a coordinated structure are not allowed to have

different GAP values. Consequently, it ensures that a coordinate structure remains unlicensed in instances where the first conjunct has an empty GAP value while the other(s) a nonempty GAP value. This rule, thus, enables us to properly predict the CSC and ATB exception in coordinate structures.

(24) Coordination Rule (Sag et al. 2003:445)

$$\begin{bmatrix} \text{FORM} & [1] \\ \text{VAL} & [2] \\ \text{GAP} & [A] \\ \text{IND} & s_o \end{bmatrix} \rightarrow \begin{bmatrix} \text{FORM} & [1] \\ \text{VAL} & [2] \\ \text{GAP} & [A] \\ \text{IND} & s_i \end{bmatrix} \dots \begin{bmatrix} \text{HEAD} & \textit{conj} \\ \text{IND} & s_o \\ \text{RESTR} & \langle [\text{ARG} \langle S_1 \dots S_n \rangle] \rangle \end{bmatrix} \begin{bmatrix} \text{FORM} & [1] \\ \text{VAL} & [2] \\ \text{GAP} & [A] \\ \text{IND} & s_2 \end{bmatrix}$$

However, similar to the CSC by Ross (1967), the Coordination Rule above cannot account for why there are asymmetries in acceptability between (1) and (2). To handle the issue, we propose one more additional condition for the coordinate structure of DTIs as a discourse-based constraint, which specifies that all the coordinate structure constructions must bear the discourse coherence relations between their conjuncts, as formalized in (25). This contextual (CNXT) constraint necessitates a coherence relationship between the two conjuncts. In other words, it requires two conjuncts to be in a coherence relation.

(25) Coordinate structure construction of all types of interrogatives

(↑ *coordinate-ext*)

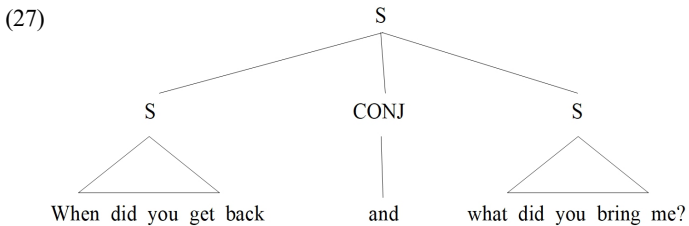
$$\textit{coordinated interrogative cx} \Rightarrow \begin{bmatrix} \text{FORM} & [1] \\ \text{VAL} & [2] \\ \text{GAP} & [A] \\ \text{CNXT} & | \text{PRESUP coherence - rel}(S_1, S_2) \\ \text{IND} & s_o \end{bmatrix}$$



This constraint is a contextually controlled pragmatic condition that the coordination of all types of interrogatives must adhere to.

Given the construction in (25), we can account for how we can distinguish (1) from (2) under our analysis. First of all, the sentences in (26) obey the syntactic constraints (restrictions) in the coordination rule. Thus, we can provide a configuration for (26a) as shown in (27).

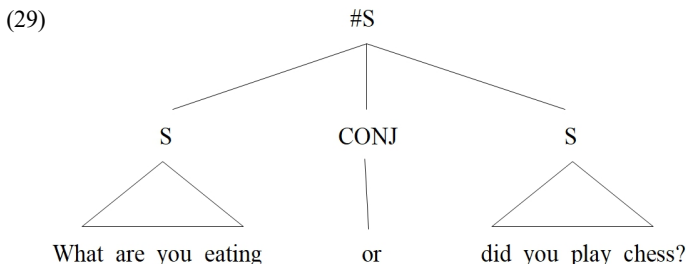
- (26=(1)) a. When did you get back and what did you bring me?  
 b. Did Merv show up or did you play chess? (Ross 1967:114)



As for the Contextual (CNXT) part, (26a) consists of two questions: one is about when the person got back, and the other, about what they brought. In this sentence, the initial event and the subsequent one from the two conjuncts form a parallel relationship, which is a type of resemblance relation. Hence, it is correctly predicted to be acceptable under our analysis.

On the other hand, though the sentences in (28) can be produced in terms of the Coordination rule, they cannot satisfy the pragmatic (contextual) constraint in (25) mainly because the events of the conjuncts are a lack of Coherence relation. For example, (28a) can be represented as in (29):

- (28=(2a-b)) a. \*What are you eating or did you play chess?  
 b. ?Did you have a good time and what did you bring me?  
 (Ross 1967:114-115)



Specifically, (28a) delivers the two events, namely asking about what the hearer is eating and checking whether the hearer played chess or not. The conjunction *or* in this context appears to force the listener to make a choice between the two disconnected questions so that it is hard to form a Coherence relationship. Thus, this sentence is grammatical but sounds odd, resulting in a lack of Coherence relation.

## V. Concluding Remarks

While sentences whose conjuncts contain the same type of interrogatives are allowed, Ross (1967) was not sure of the grammaticality of the coordination of DTIs. To see if there are asymmetries in the coordination of DTIs, we closely examine the relevant data from corpora. As a result, we have found various data for the coordination of DTIs regardless of the conjunctions, contra Ross (1967). On the basis of the empirical property, we have claimed that the coordinations of all types of interrogatives can be well-formed regardless of the conjunctions *and*

and *or*. Furthermore, we propose that the discourse-based account, employing the concept ‘coherence’ by Kehler (1995), can explain the differences in the acceptability between (1) and (2). The key idea, which is implemented into a constraint-based construction grammar, enables us to provide a simple explanation on the distributional and discourse properties of the coordination of DTIs.

Though the study has sought to account for the properties of the coordination of DTIs, we believe the analysis we proposed here can explain all types of coordination. In this sense, our approach is on the right track. However, it is noteworthy that we need to study the exact pragmatic functions of the conjunctions, such as *and* and *or*, in the coordination of DTIs. But we have not dealt with this issue in this paper. It remains for the further study.

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❖ ABSTRACT

## 영어의 이형 의문문의 등위 구조에 관한 연구

김미자

강원대학교, 강사

조세연

강원대학교, 교수

본 논문은 영어의 이형 의문문의 등위 구조에 관한 분포 및 담화 속성을 논의하는 것을 목적으로 한다. Ross(1967)에서는 접속사 *and*를 포함하는 등위 구문에서 등위절이 서로 다른 의문문 유형으로 연결되는 등위 구조는 어색함으로 인해 완전한 문법적 문장으로 간주하기가 힘들다고 주장하고 있다. 반면 접속사 *or*가 형성하는 등위 구문의 경우 서로 다른 의문문 유형으로 연결되면 완벽하게 비문법적이라고 주장하고 있다. 따라서 본 논문에서는 접속사 *and*와 *or*로 연결된 문장에 문법성의 차이가 존재하는지를 확인하고자 한다. 우선 문법성 판단을 위해서는 객관성이 담보되지 않는 직관에만 의존하지 않고, 말뭉치에서 추출된 자료를 바탕으로 연구를 수행한다. 이러한 연구 수행의 결과로 우리는 Ross(1967)의 주장과는 달리 두 접속사 *and*와 *or*로 연결된 등위 구조가 비록 서로 다른 의문문 유형의 등위 요소로 이루어져 있어도 문법적으로 가능하다는 사실을 포착할 수 있었다. 이러한 결과를 이론적으로 수용하기 위하여 우리는 제약기반 구문 문법 이론 틀에서 두 가지 제약이 포함되어있는 등위 규칙을 제안한다. 이 규칙은 Sag *et al.*(2003)의 등위 구문에 관한 제약과 더불어 Kehler(1995)의 담화규칙에 대한 화용론적 제약을 담은 새로운 등위 구문 규칙이다. 결국 이 새로운 규칙은 동일하지 않은 의문문 유형끼리의 등위 요소도 접속사가 *and*이든 *or*이든 상관

없이 화용 (담화 일관성) 조건을 만족하면 문법적으로 생성할 수 있게 해준다.

주제어: 등위 구조 규칙(제약), 이형 의문문 유형의 등위 구조, 담화 일관성, 제약기반 구문문법

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