

## Argument Cluster Coordination and Constituency Test (Non)-Conflicts

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### 1. Introduction

It is well known that strings that can be coordinated often fail other constituency tests such as movement in languages like E(nglish) (cf. 1).

- (1)a. Wallace will give [Gromit crackers] and [Preston dogfood] before breakfast (coordination)
- b. \*[Gromit crackers]<sub>i</sub> Wallace will give t<sub>i</sub> before breakfast (movement)
- c. \*Wallace will give [Gromit crackers] before breakfast and Joey will give ~~Gromit crackers~~ before dinner (ellipsis)

Based on L-R incremental structure building that allows constituency to be revised as structure is built, Phillips (2003) proposes that the difference between coordination and other constituency tests is due to the fact that coordination can target temporary constituents that are destroyed upon further structure-building. In particular, he assumes that there is a stage in the building of (cf. 1a) where the apparent argument cluster *Gromit crackers* is a constituent – namely, a sub-maximal VP in a Larsonian shell. Note, however, that the constituency in question does not change when the sentence construction is finished. Thus, Phillips must assume that only the maximal VP can be moved (cf. 2b vs. 2c) to explain the contrast between coordination and movement of an indirect (IO) plus direct object (DO) cluster.

- (2)a. [<sub>VP</sub> give [<sub>VP</sub> Gromit [ t<sub>V</sub> crackers]]] and [<sub>VP</sub> Preston [ t<sub>V</sub> dog food]] ]
- b. \* [<sub>VP</sub> Gromit [<sub>V</sub> t<sub>V</sub> crackers]]<sub>i</sub> Wallace will [give t<sub>i</sub> ]
- c. [<sub>VP</sub> [<sub>V</sub> give [<sub>VP</sub> Gromit [<sub>V</sub> t<sub>V</sub> crackers]]]]<sub>i</sub> Wallace will t<sub>i</sub>

The sub-maximal VP would not be able to move if it is a remnant VP out of which V has moved to the upper VP shell (thus violating PBC). Under this account, what is puzzling is the fact that the IO+DO cluster can not only be coordinated but also undergo movement (scrambling, cleft) in languages like J(apanese) and K(orean), as Koizumi (1995, 2000) showed (cf. 3). If Koizumi is right in that the IO+DO cluster in J/K is also a (remnant) VP, the contrast between the languages is all the more puzzling.

- (3)a. Cheli-ka [Yenghi-eykey sakwa 2-kay]-wa [Tongswu-eykey banana 3-kay]-lul cwu-ess-ta  
C-Nom Y-Dat apple 2-Cl-Conj T-Dat banana 3-Cl-Acc give-Pst-Dcl  
'Cheli gave Yenghi two apples and Tongswu three bananas.'
- b. [Yenghi-eykey sakwa 2-kay-wa Tongswu-eykey banana 3-kay]-lul Cheli-ka cwu-ess-ta  
Y-Dat apple 2-Cl-Conj T-Dat banana 3-Cl-Acc C-Nom give-Pst-Dcl  
'Yenghi two apples and Tongswu three bananas Cheli gave'
- c. Cheli-ka cwun-kes-un [Yenghi-eykey sakwa 2-kay-wa Tongswu-eykey banana 3-kay]-i-ta  
C-Nom give-thing-Top Y-Dat apple 2-Cl-Conj T-Dat banana 3-Cl-Cop-Dcl  
'What Cheli gave is Yenghi two apples and Tongswu three bananas.'

### 2. Dependent-Marking Parameter and Argument Cluster in Korean/Japanese

We propose that the contrast between E and J/K is due to the fact that while the apparent argument cluster IO+DO in E is a sub-maximal VP, it is a genuine argument (DP) cluster in J/K that movement and other constituency tests can target (Bouchard 2001, Takano 2002, Fukushima 2003; contra Koizumi). The reason for this difference lies in the way arguments and predicates combine in the two languages: E is a **p(redicate)-centered** (a sub-type of Head-Marking) language where predicates license arguments. This results in the lack of genuine argument clusters. S-V-O strings always have a V between S and O. Thus S and O never form a constituent without V. In ditransitive constructions, a variety of arguments, from Larson (1988) to Beck and Johnson (2004), points to the existence of an unpronounced/moved V intervening between IO and DO, i.e., S-V-IO-V-DO. The null V is required if arguments in a p-centered language must be licensed locally by a predicate. As a result, the apparent argument cluster IO+DO is a VP in E. It cannot move, unlike the maximal VP (cf. 2c), due to constraints on movement (PBC).

In J/K, we propose that arguments select the predicate rather than vice versa (Koga 2000; Fukushima 2003). Thus, J/K are **a(rgument)-centered** languages. We claim that this is the fundamental parametric cut of J/K, a type of Dependent-Marking language (Nichols 1986) whose distinctive signatures include systematic case-marking on arguments, pro-drop without agreement, lack of agreement, multiple identical case-marking, freedom of word order, and strict head finality.

Assuming that sentences are built dynamically L-R, we take case-marking to be responsible for turning arguments into functors seeking an appropriate predicate (explaining the pervasiveness of **case**

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and the importance of **head-finality**). Concretely, a Nom-marked DP looks for a range of predicates, as schematically shown in (cf. 4b). However, once it combines with an Acc-marked DP in an argument cluster, the type of predicates is reduced, due to information coming from the Acc-marker (cf. 4d).

- (4)a. [ $\langle \text{Yenghi} \rangle_{\text{root}}$ ]  $\rightarrow$  b. [ $\langle \text{Yenghi-ka(Nom)} \rangle_{\text{DP}}$  P $\langle e, t \rangle$ /P $\langle e, \langle e, t \rangle \rangle$ /...]  $\rightarrow$  c. [ $\langle \text{Yenghi-ka(Nom)} \rangle_{\text{DP}}$   $\langle \text{Mary} \rangle$ ]  
 $\rightarrow$  d. [ $\langle \text{Yenghi-ka(Nom)} \rangle_{\text{DP}}$   $\langle \text{Mary-lul(Acc)} \rangle_{\text{DP}}$  P $\langle e, \langle e, t \rangle \rangle$ /...]  
 $\rightarrow$  e. Yenghi-ka Mary-lul manna-ss-ta $\langle e, \langle e, t \rangle \rangle$  ‘Yenghi met Mary’

Some consequences of this system are the following: arguments may be introduced in any order (**free word order**) (cf. 5). Since case-marking is not dependent on a predicate, there is no need for **agreement** (to license argument case) and **multiple identical case-marking** is possible (case is not licensed by agreement). Radical **pro-drop** is simply an instance of a predicate occurring alone without arguments.

- (5) a. [ $\langle \text{Mary} \rangle_{\text{root}}$ ]  $\rightarrow$  b. [ $\langle \text{Mary-lul(Acc)} \rangle_{\text{DP}}$  P $\langle e, \langle e, t \rangle \rangle$ /...]  $\rightarrow$  c. [ $\langle \text{Mary-lul(Acc)} \rangle_{\text{DP}}$   $\langle \text{Yenghi} \rangle$ ]  
 $\rightarrow$  d. [ $\langle \text{Mary-lul(Acc)} \rangle_{\text{DP}}$   $\langle \text{Yenghi-ka(Nom)} \rangle_{\text{DP}}$  P $\langle e, \langle e, t \rangle \rangle$ /...]  $\rightarrow$  e. Mary-lul Yenghi-ka manna-ss-ta

### 3. Broad Consequences

It should be easy to see that the proposal predicts that IO+DO cluster should behave as a constituent in J/K. In fact, not only IO+DO, but SU+DO and SU+IO+DO strings should behave as constituents for all constituency tests (cf. 6 and 7). This is because case-marked arguments combine first in a cluster, and then seek a compatible predicate. The cluster is available for coordination as well as movement.

- (6) a. [[Cheli-ka] [Yenghi-eykey] [chayk-ul] P  $\langle e, \langle e, \langle e, t \rangle \rangle \rangle$  /]  $\rightarrow$   
 $\rightarrow$  Cheli-ka Yenghi-eykey chayk-ul cwu-ess-ta ‘Cheli gave a book to Yenghi’  
C-Nom Y-Dat book-Acc give-Pst-Dcl  
b. [Cheli-ka Yenghi-eykey [chayk]-kwa ..] [DO] coordination  
 $\rightarrow$  Cheli-ka Yenghi-eykey chayk-kwa kongchayk-ul cwu-ess-ta  
C-Nom Y-Dat book-Conj notebook-Acc give-Pst-Dcl  
‘Cheli gave a book and a notebook to Yenghi’  
c. [Cheli-ka [Yenghi-eykey chayk]-kwa ..] [IO DO coordination]  
 $\rightarrow$  Cheli-ka Yenghi-eykey chayk-kwa Tongswu-eykey kongchayk-ul cwu-ess-ta  
C-Nom Y-Dat book-Conj T-Dat notebook-Acc give-Pst-Dcl  
‘Cheli gave a book to Yenghi and a notebook to Tongswu’  
d. [[Cheli-ka Yenghi-eykey chayk]-kwa ..] [SU IO DO coordination]  
 $\rightarrow$  Cheli-ka Yenghi-eykey chayk-kwa Kilswu-ka Tongswu-eykey kongchayk-ul cwu-ess-ta  
C-Nom Y-Dat book-Conj K-Nom T-Dat notebook-Acc give-Pst-Dcl  
‘Cheli gave a book to Yenghi and Kilswu a notebook to Tongswu’

- (7) Cheli-ka cwun-kes-un [Yenghi-eykey chayk-kwa Tongswu-eykey kongchayk]-i-ess-e  
C-Nom give-Nml-Top Y-Dat book-Conj T-Dat notebook-Cop-Pst-Dcl

The lack of conflict between coordination and other constituency tests in argument cluster coordination is but one consequence of the case-driven Dependent-Marking cut of J/K. Y-J Choi (2005) showed that case-marked fragments in Bare Argument Ellipsis are necessarily clausal, while Yoon and Lee (2005) showed apparent DP coordination with case-marked non-final conjuncts is clausal coordination (cf. 8). These facts are also predicted – case-marked DPs look for predicates.

- (8) a. Q: Cheli-ka nwukwu-lul manna-ss-ni?  
A: Yenghi-lul P  
 $\rightarrow$  P: contextually restricted as P $\langle e, \langle e, t \rangle \rangle = (\text{Cheli-ka}) \text{ manna-ss-ta}$   
b. Cheli-ka kuliko Yenghi-ka cip-ey ka-ss-ta  $\rightarrow$  Cheli-ka P kuliko Yenghi-ka cip-ey ka-ss-ta  
C-Nom Conj Y-Nom home-loc go-Pst-Dcl  
 $\rightarrow$  P: contextually restricted as P $\langle e, t \rangle = \text{cip-ey ka-ss-ta}$

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