Unusual Case Realizations in Coordinate Structure

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Contents (What I want to talk...)

- Introduction
- Some data of Coordination
- Previous Accounts
- Proposal:Merge = Projection + labeling?
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Introduction

- Study of Coordination
- The Structure of Coordination
 - (i) the study of CoP: (Munn 1993, Johannessen 1998, Zoerner 1995a.o.)
 - (ii) Syntactic structure and surface representation:

(Koizumi 2000, Takano 2002, Wilder 1995 a.o)

The locus of CSC Effect

(i) PF approach (Pesetsky 1982 a.o)

(ii) LF approach (Fox 2000 a.o)

Symmetry and Antisymmetry (Progovac 1998, Munn 1993, Jackendoff and Culicover 1997, Citko 2011 a.o.)

Coordination Symmetry: Extraction

Probably (Most) famous symmetric aspect of Coordination.

- (1) Coordinate Structure Constraint
- a. In a coordinate structure no conjunct may be moved, nor may any element contained in a conjunct be moved out of that conjunct.
- b. ... Unless the same element is moved out of the conjuncts.

(Ross 1967: 89)

- (2) a. *What do you like [apples and t_i]?
 - b. What do you like t_i ?
- (3) a. *What did you [drink wine and eat *t*]?
 - b. What did you [drink t_i and eat t]?

Extraction of one of conjunct is prohibited.

Coordinate Symmetry: Agree

Another example from the Coordinate Symmetry is Agreement:

- (3) a. He and she ate break first.
 - b. Taro-ga sosite Hanako-ga tyoosyoku-o tabe-ta.
 T-Nom and H-Nom breakfast-Acc ate.
 "Taro and Hanako ate breakfast"
- Agreement also seems to exhibit the symmetry in coordinate structures. the distance between the functional head, $\Upsilon_{[probe]}$ and the conjoined DP [goal] are supposed to be the same.

Coordination Symmetry: Category

Category of the conjoined elements needs to be equal.

- (5) (Relatively) Small coordination
 - a. **√**John and Mary
 - b. * John and run
- (6) Pat has become [a banker] and [very conservative].

(7) Robin is [ugly], [a dolt] and [of no help].

(Sag et al. 1985)

(Zoerner 1995)

- (6) Clausal coordination
 - a. [$_{\rm S}$ John ate apple] and [$_{\rm S}$ Mary ate banana].
 - b. [_S Taro-ga ringo-o 3-tu tabe-ta] sosite [_S Mary-ga banana-o 3-bon tabe-ta]. T-Nom apple-A 3-CL ate and M-Nom banana-A 3-CL ate.
 "Taro ate three apples and Mary ate 3 bananas"
 - Coordinate α may be the operation that juxtaposes two (or more) categorically identical element.

Coordinate Asymmetry: Binding

There exists the structural asymmetry between the first conjunct and the second conjunct.

(7) a. Every man_i and his_i dog went to mow the meadow.

b. *His_{*i*} dog and every man_i went to mow the meadow.

(Munn 1993: 16)

- ▲ Note that, Q-element undergoes QR and moves up to A'. Therefore, the [+pro] should be licensed by Q-elements. If this is WCO, the grammaticality of the sentence should be much better. (something like"??")
- (8) a. Taro sosite Kare-zishin-no hahaoya-ga gakko-ni ki-ta.

T and He-SELF-Gen mother-Nom school-to came

"Taro and mother of himself came to school"

b. *Kare-zishin-no hahaoya sosite Taro-ga gakko-ni ki-ta.

He-SELF-Gen mother and T-Nom school-to came.

"Mother of himself and Taro came to school"

The Japanese data exhibits the fact that, if the binder is placed in A position, binding is successfully undergone.

Coordinate Binding Puzzle

- Some data, as noted by Munn (1993). a.o., exhibit the first conjunct can binds the second conjunct, which indicates that there is hierarchal difference between/ among conjuncts.
- However, some other data exhibit counterintuitive data.
- Progovac (1998) extensively exhibits the data which indicates there is no binding relation between the first conjunct and the second conjunct.
- (9) a. John_{*i*} and John_{*i*}'s wife are certainly invited.
 - b. *John_i certainly likes John_i's wife.

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(Progovac 1998)
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if the first conjunct > the second conjunct, (9) should induce BC(C) violation.

- (10) a. *He chased nobody and/or any dogs. (NPI) (cf. NPI <Neg)
 - b. * He chased any dogs and/or nobody. (NPI)

(Progovac 1998)

No hierarchal structure between the first conjunct and the second conjunct?

Coordination Agreement Puzzle

Boskovič reports that English postverbal subjects exhibit Asymmetrical Agreement in terms of ϕ feature.

- (11) a. There is <u>a man</u> and five women in the house.
 - b. *There are a man and <u>five women</u> in the house.
 - c. There are **four men** and a woman in the house.
 - d. *There is four men and <u>a woman</u> in the house. (Boškovic 2002)

Either first conjunct or second conjunct is located structurally higher position?

Not only φ feature, but also Case valuation exhibits Assymmetrical Agreement.

(12) Subjects:

a. Them and us are going to the game together. (Stahlke 1984, 360, quoted in Johannessen 1998)

b. She and him will drive to the movies. (Schwartz, B.D. 1985, 165, quoted in Johannessen 1998)(13) Objects:

a. All debts are cleared between you and I.

(Shakespeare, Merchant of Venice, quoted in Johannessen 1998)

b. I really wanted my mother to live with my husband, Michael and I.

(Evening Standard, 30 June 1992, 16, quoted in Johannessen 1998)

Some more Chaotic Data

(14)a. Him and I both left.

b. Robin saw he and me.

c. All debts are cleared between I and him

d. I really wanted my mother to live with I, him, and Michael.

⊗OMG…

English examples are really chaos...

Note that there are some studies which try to capture the generalization on this phenomena such as:

(i) Johannessen's Correlation

"There is very strong correlation between, on the one hand, the order of verb + object, and on the other, that of normal conjunct + deviant conjunct (usually the same as that between conjunction + deviant conjunct).

(ii) Zoerner's Generalization

All non-final conjuncts must have identical Case.

Other languages

Some other languages exhibits similar behavior in terms of Case Agreement. Lebanese:

(15) a. Keeno	kariim	W	Marwaan Sa	m	yilSab	0.		
were.PL	Kareem	and	Marwaan As	p	playir	ıg.Pl	Ĺ	
b. Keen	Kariim w	Mar	waan Sam	yils	abo.			
was.3M.SG	Kareem an	d Mar	waan Asp	play	ing.PI			
'Kareem and Marwaan were playing"								
Aoun, Benmamoun and Sportich (1994)								
▲ In ABS, the chaotic Case realization is attributed to the two distinct structures. One is "Sentential Coordination+Deletion". The other is "DP coordination"								
(16) a. Verb D	P & DP	(17)	a. *Raaħ	Kari	im	w	Marwaan	sawa.

b. Verb...DP & Verb DP

)	a. *Raaħ	Kariim	W	Marwaan	sawa.		
	left3M.SG	Kareem	and Marwaan		together.		
	b. Raaħ	Kariim	W	Marwaan	sawa.		
	left.PL	Kareem	and	Marwaan	together.		
'Kareem and Marwaan left together.'							

Some other languages

However, cross-linguistically ABS's analysis cannot be maintain... In Czech and German:

(18) Czech

Půjdu	tam	já		i	ty.
Will-go.1.SC	J.	there I.NOM.1.SG	and	you	.NOM.2SG
'You and I will go there'			e'		

(19) German

- a. ... als sei in ihren weiten Hindermissprüngen Roβ und Reiter
 as were.3SG in their great jumps horse.Nom.SG and horseman.Nom.SG
 zusammengewachsen.
 grown-together.
- b. Es stürzte der Berg und das Land in sich zusammen it collapsed.3SG the.Nom.SG mountain.Nom.SG and the.Nom.SG land.Nom.SG in itself together. (H.Hesse, quated in Findreng 1976)

Crosslinguistic survey deny the possibility of structural analysis put forward by ABS.

Johannessen's analysis:

She claims: (i) there are two different structure of Coordinatin in terms of head parameter: (ii), as well as ABS, there is structural variation between two distinct Case realization, such as: (20)CoP[X]

Co'

CoP[X]

second conjunct

Co conjunction

Co'

X first conjunct

b.

(21) a. Normal Realization: DP-Case & DP-Case b. Peculiar (Abnormal) Realization: either

- DP-Case & DP (i)
 - OR
- DP & DP-Case (ii)

She proposes two structures toward them.

(a) is the structure of Normal and (b) is Peculiar.



What should we do?

Options currently we have are...

ABS (1994) : "Sentential Coordination + Deletion" + DP Coordination
Johannessen (1998): Parameterized Coordinate Structure + DP/S Coordination
☺ Johannessen's Account seems to be (theoretically) redundant
☺ ABS's approach cannot account for the cross-linguistic fact

Then what can we do? Any alternatives???

Let's back to the Theoretical Assumption in Minimalist Program!!

Core Concepts of Minimalist Program

The Minimalist Program (=We) has... at least...

(22) a. Merge based on Select

Select selects a lexical item from the Numeration (Σ =(SO₁,SO₂, SO₃...SO_n), reduces its index by one and add it to the set of syntactic object Σ . Merge takes a pair of syntactic object(SO₁, SO₂) and replace them by a new object SO_k (Collins 1997)

b. Project/Labeling/Headness

a.labeling: association of nonterminal symbols (*labels*; S, NP, V', etc.) with phrasal constituents
b.projection: duplication of features of a lexical item (LI) onto (typically 'dominating') constituents
c. Headness(endocentricity):centrality of a certain LI in the distribu-headedness tion/interpretation of a constituent

(Narita to appear)

c. Agree

for the Agree to take place.... (i) the Goal has to be active, where being active means having an unvalued feature. (ii) the Goal has to be in the c-command domain of the Probe. (iii) there can be no closer potential Goal.

(Citoko 2011)

Merge and Projection

(External) Merge is, roughly speaking, the operation that is "picking up SOs from the Σ and combine two of them".

questions I would like to address here is on Headness.

In some cases, such as Coordination, Head movement etc the single headness is dubious, since as we have seen, there is some chaotic case in terms of Locality of Agreement.

(23) Assumption:

(i) only the SO in side of Derivation can be visible from the Syntactic operation (= after SO is spelled-out SO cannot be the target of Syntactic Operation)

(ii) only the projected SO can remains in D.

Case in Coordination

Schema of Structure building

(24)

- a. $\Sigma = {SO_1, SO_2, SO_3....SO_n}$
- b. Select : $\{SO_1\}\{SO_2\}$
- c. Merge : ${SO_1, SO_2}$
- d. Project : $\{SO_k (=SO_1 \& SO_2, SO_1, SO_2) \{SO_1, SO_2\}\}$

Only when the both SO_1 and SO_2 are project (=project both:cf Citoko 2008), both of them can be a target of Syntactic Operation.



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Other instances: (27)

- ?This is the loot that you just identify t and we arrest the thief on the spot. a.
- ?This is the thief that you just identify the loot and we arrest t on the spot. b.
- *This is the loot that you have identified t and we have arrested the thief on C. the spot.
- This is the thief that you have identified the loot and we have arrested t on the d. (Jackendoff and Culicover 1997) spot.

Note that, current theory does not explain Coordinate Structure Constraint: I claim the projected SO can be a target of Syntactic Operation. In this sense, we cannot exclude sentences like "*What did John like and hate apple" I assume Coordinate Structure Constraint is LF Constraint (cf. Fox 2000, Kato 2010 a.o.)