Not-so-across-the-board Movement in Macedonian*

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Across-the-board (ATB) constructions have long posed interesting problems for traditional assumptions of compositionality and the input to syntactic operations. In this paper, I offer a new means of deriving ATB constructions that avoids these issues by disavowing the very ‘across-board-nature’ that the name of the construction implies. Instead, I argue on the basis of Macedonian data that it is possible to derive ATB sentences with movement only from the leftmost of the conjuncts involved. In virtue of this movement, the moved element becomes presupposed and is thus interpreted into any gap in subsequent conjuncts.

1 Basics of the present analysis

Examples of Macedonian ATB constructions are shown in (1) and (2) below. The sentence in (1) shows ATB wh-movement and (2) shows ATB topicalization.

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In what follows I argue for a syntactic analysis of the above sentences sketched in (3) and (4) respectively. The displaced element has only been extracted from the first conjunct. There is no syntactic trace, copy, or null element of any kind in the second conjunct. The extracted element is interpreted there only at post-syntactically.

Macedonian is a useful language to test this hypothesis in because of work done by Kochovska (2010) who argues that Macedonian long-distance dependencies can be derived in two different ways: either via traditional syntactic movement or via base-generation of the ‘displaced’ element in the left periphery and binding of a variable in a thematic position. In this paper I show that the dependency between the displaced elements and second conjunct gaps in Macedonian ATB constructions pattern more closely with the latter type of dependency.

2 Previous analyses

There are two contemporary analyses of ATB constructions that can be broadly sorted into two groups: symmetrical approaches and asymmetrical approaches. The symmetrical approach finds its forbearers in Williams 1978 and Goodall 1987 and its most recent instantiation in Citko 2005. Shown in (5) below is a sketch Citko’s approach. The wh-phrase is first Merged into both conjuncts derivationally simultaneously (5a) before being extracted to the spec,CP position (5b).
This approach captures many interesting facts. It renders entirely unmysterious the fact that only one wh-phrase appears overtly in the surface representation: there was only one wh-word to begin with. This is particularly relevant for multiple wh-fronting languages like Polish (and Macedonian) where moving wh-phrases from both conjuncts might be incorrectly predicted to be licit (example in Polish from Citko 2005):

(6)  *Kogo_{1} kogo_{1} Jan lubi t_{1} a Maria kocha t_{1}?
    whom whom Jan likes and Maria loves
    ‘Whom does Jan like and Maria love?’
Further, Citko’s analysis predicts that the case morphology on the extracted element should be such that it would be licit in both conjuncts. Again this makes the correct prediction for Polish (examples from Citko 2005). In (7a) the wh-word *kogo* is both the form of the accusative and the genitive and as such it can be extracted from positions that assign either. In (7b), wh-words that are only accusative or only genitive cannot be ATB extracted from positions that do not match in case assignment.

(7) a.  
\begin{align*} 
\text{Kogo}_{\text{ACC/GEN}} \quad \text{Jan lubi } \text{t}_{\text{ACC}} \quad \text{i} \quad \text{Maria } \text{nienawidzi } \text{t}_{\text{GEN}}? \\
\text{who} \quad \text{Jan likes} \quad \text{and} \quad \text{Maria} \quad \text{hates} \\
\text{‘Who does Jan like and Maria hate?’} 
\end{align*}

b.  
\begin{align*} 
*\text{Co}_{\text{ACC/Czego}_{\text{GEN}}} \quad \text{Jan lubi } \text{t}_{\text{ACC}} \quad \text{i} \quad \text{Maria } \text{nienawidzi } \text{t}_{\text{GEN}}? \\
\text{what} \quad \text{Jan likes} \quad \text{and} \quad \text{Maria} \quad \text{hates} \\
\text{‘What does Jan like and Maria hate?’} 
\end{align*}

Important for the data presented herein is that under this account, the movement from each conjunct is traditional syntactic movement and as such is subject to traditional constraints on syntactic movement.

Asymmetrical approaches are posited by Munn 1993 and Fernández-Salgueiro 2008. Munn argues that the ATB moved element only moves from the first conjunct and that the second conjunct bears a null operator, co-indexed with the moved element that moves in a parallel fashion (8). Fernández-Salgueiro 2008 offers an analysis by which the wh-word first vacates the second conjunct via sideward movement (Nunes 2001) into the first conjunct before moving to spec,CP (9).
Munn’s analysis accounts for this because the wh-phrase never was in the second conjunct and is not expected to reconstruct there. Fernández-Salgueiro’s analysis accounts for this to the extent that ATB
constructions are similar to parasitic gap constructions, which have the same reconstruction profile. His analysis of ATB movement uses sideward movement like the Nunes 2001 analysis of parasitic gaps. However, similar to the symmetrical approaches, movement constraints are predicted to hold for both conjuncts. Munn’s analysis predicts them in the second conjunct because the movement of null operators is subject also to such constraints. Fernández-Salgueiro’s approach does as well because Nunes 2001 notes that sideward movement is subject to island constraints as well. Again, this is relevant to Macedonian data presented here which will suggest asymmetric constraints across the conjuncts.

3 Basics of Macedonian long-distance dependencies

Kochovska 2010 argues that there are two ways to derive long-distant dependencies in Macedonian: movement or high base-generation plus binding. All examples in this section are from Kochovska 2010.

3.1 Definite wh-phrases

Definite wh-phrases (which N) do not undergo movement according to Kochovska. Rather the phrase is base-generated high and binds a null pro in the thematic position. One characteristic of such dependencies is that they require corresponding clitics as seen in (11).

\[(11) \quad \text{Koja kniga *(ja) kupi Petar?} \]
\[\quad \text{which book CL bought Petar} \]
\[\quad \text{‘Which book did Petar buy?’} \]

Another characteristic is that they do not effect weak-crossover violations:

\[(12) \quad [\text{Koe momče}, [\text{brat mu}] go poseti? \]
\[\quad \text{which boy brother his CL visit} \]
\[\quad \text{‘Which boy did his brother visit?’} \]

Long-distance dependencies with definite wh-phrases are also impervious to weak islands (in the sense on Cinque 1990) (13), but subject to strong ones (14):
(13) Koi studenti se misliš dali da gi isprašaš?
   which students refl think whether to CL examine
   ‘Which students are you wondering whether to examine?’

(14) *Koja topka go izbrka kučeto što ja ukrade?
   which ball CL chased dog-the that CL stole
   ‘Which ball did you chase the dog that stole it?’

3.2 Indefinite wh-phrases
Contrasting with the above examples, indefinite wh-phrases (What N/What) do involve movement and have a different profile. They do not allow clitics (15), they show weak crossover effects (16), and are subject to both weak and strong islands (17,18):

(15) Kakva kniga (*ja) pročita Petar?
    what book CL read Petar
    ‘What book did Petar read?’

(16) *[Kakvo momče], [brat mu] poseti?
    what boy brother his visit
    ‘What boy did his brother visit?’

(17) *Kakvi studenti se misliš dali da ispраšaš?
    what students refl think whether to examine
    ‘What students are you wondering whether to examine?’

(18) *Kakva topka go izbrka kučeto što ukrade?
    what ball CL chased dog-the that stole
    ‘What ball did you chase the dog that stole?’

3.3 Non-question ATB
The exact same pattern can be found with non-question ATB constructions. Kochovska argues that the same split can be found between Clitic Left Dislocation (CLLD) constructions and Topicalization constructions. CLLD constructions involve definite NPs and strong quantifiers; topicalization involves indefinite NPs and weak quantifiers. Showing this with just weak island effects below for the sake of space, we can see in (19) that CLLD is not subject to weak islands whereas Topicalization is subject to them (20):
(19) Sekoj student, se prašuvam kako kje go najdeš.
every student refl. wonder-I how will CL find
‘Every student, I wonder how will CL find him.’

(20) *Mnogu knigi, se prašuvam kako kje najdeš.
many books refl. wonder-I how will find
‘Many books, I wonder how you will find them.’

The results of this section are summarized below. Moved elements do not allow clitics, obey weak crossover, and are subject to both weak and strong islands. Elements base generated in the left periphery require clitics, are impervious to weak crossover violations and are subject to strong islands but not weak ones.

<table>
<thead>
<tr>
<th></th>
<th>Movement</th>
<th>Binding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clitics</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Weak Crossover</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Weak Islands</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Strong Islands</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

4 Macedonian ATB data

In this section I show that the dependency between a displaced element and its locus of interpretation in the second conjunct of Macedonian ATB constructions share the profile of the non-movement dependencies. In these cases, the elements that normally require movement (indefinite wh-phrases and topicalized elements) can show the characteristics of those that do not (definite wh-phrases and CLLD elements).

4.1 ATB wh-questions
Recall from above that indefinite wh-phrases (What N/What) showed movement restrictions, were sensitive to weak crossover, and did disallowed clitics. First, for ATB, clitics are disallowed in the first conjunct, but optional in the second:

(21) a. Kakva kniga (*ja) pročita Ana i (ja) kupi Ivan?
    what book CL read Ana and CL bought Ivan
    ‘What book did Ana read and Ivan buy?’
The fact that clitics are not necessary for indefinite wh-phrases in the second conjunct is different from the normal long-distance dependencies of both definite and indefinite extraction. This will be relevant later when I argue that the dependency into the second conjunct, while not mediated by movement, is still not the same non-movement dependency that Kochovska posits.

Also, there is no weak crossover violation in the second conjunct (22). This again more closely resembles the definite wh-phrases.

Further, weak islands are not felt in the second conjunct (23), but strong islands are (24):

(23) a. Kakvi studenti Ana poseti i se misliš dali da isprašaš?
   what students Ana visited and refl. think whether to examine
   ‘What students did Ana visit and are you wondering whether to examine?’

   b. Što Ivan skri i se prasuvam kako kje najdeš?
   What Ivan hid and refl. wonder how will find
   ‘What did Ivan hide and I wonder how you will find?’

(24) *Kakvi studenti Ivan mrazi i Ana go izbrka čovekot što
   what students Ivan hates and Ana CL chased man who
   istepa
   beat
   ‘What students does Ivan hate and Ana chased the man who beat.’

4.2 ATB topicalization
The same pattern appears for ATB topicalized elements. Clitics corresponding to the extracted element (obligatory generally) are not necessary in the second conjunct:

(25) Mnogu knigi Ana pročita i Ivan (gi) ukrade
many books Ana read and Ivan CL stole
‘Many books, Ana read and Ivan stole.’

Further, they are not subject to weak crossover or weak islands whereas Kochovska shows that they generally are in non-ATB cases:

(26) [Mnogu deca], Ivan mrazi i maikite nivni, sakaat
many children Ivan hates and mothers their love
‘Many children, Ivan hates and their mothers love’

(27) Mnogu deca Ivan skri i se prašuvam kako kje najdeš
Many children Ivan hid and refl. wonder-I how will find
‘Many children, Ivan hid and I wonder how you will find them.’

This again contrasts with strong islands, which are still obeyed in the second conjunct:

(28) *Mnogu deca Ivan mrazi i Ana go izbrka čovekot što
many children Ivan hates and Ana CL chased man who
istepa
beat
‘Many children, Ivan hates and Ana chased the man who beat.’

4.3 Summary

In this section I have shown that the dependency between the moved element and the second conjunct closely resembles what Kochovska deems a non-movement dependency in regular extraction cases. This dependency does not have the characteristics of traditional movement and it is for this reason that I posit that the second conjunct’s dependency is not mediated by movement. This is shown in the table below:
The previous analyses cannot account for the fact that the second conjunct’s dependency does not show evidence of syntactic extraction. If movement only stems from the first conjunct as in (29), we can account for this. I assume that extraction is only possible out of the first conjunct. Munn 1993 takes coordination to be a type of clausal adjunction, out of which extraction is banned. Extraction is free from the first conjunct and causes the extracted element to necessarily be interpreted in the second.

The sketch in (29) however leaves unspecified the nature of the second conjunct’s internal argument. I argue that the *e* above is actually
literally nothing. Kochovska posits that the analogue to e in her binding dependencies is a null pronoun pro. This does not seem to be the case here. The reference of the second conjunct’s gap need not be the same as the gap in the first conjunct. Were there a pro in the second conjunct, we would expect it and the trace in the first conjunct to be bound by a single entity and thus have the same reference. This is not the case. The sentence in (30) can have a reading in which Ana and Ivan read different books:

(30) Kakva kniga pročita Ana i (ja) kupi Ivan?
what book read Ana and CL bought Ivan
‘What book did Ana read and Ivan buy?’

As we have seen earlier, it cannot be a trace in the second conjunct, nor can it be a null element bound by the extracted element. A final possibility is that there is literally nothing in the gap position.

For it to work that there is nothing in the second conjunct’s gap position, we require a syntax without c-selection. Otherwise the subcategorization frame of the second conjunct’s verb would go unfulfilled and the sentence would be ungrammatical. Further, such an analysis requires a semantics that also does not require of its verbs that they have internal arguments. The LF representation of the second conjunct will also be missing an internal argument. An example of such a semantics that would allow this is that of Pietroski 2005 (cf. Heim and Kratzer 1998). In this system, a sentence like (31a) that is missing an internal argument would have an LF representation like (31b) (a translation of the representation is given in italics):

(31) a. Ivan hit

b. $\exists e \{\text{hit}(e) & \text{Agent}(\text{Ivan, e})\} = \text{There was an event of hitting whose agent was Ivan.}$

The interpretation of (31a) is odd because hitting generally entails a thing hit, but the representation in (31b) is not ill-formed.

Questions work slightly differently. Let us say that a wh-phrase is decomposed into a wh-operator and a restrictor to that operator (loosely following Chomsky 1995). That is, a wh-word like what is decomposed like in (32).
(32) \[ [\text{what}] = \text{`wh-`} \text{ operator restricted by `-at`} \text{ to non-human things.} \]

When the wh-word moves from the first conjunct into the spec,CP position it thereby creates a restriction that its trace is interpreted as a non-human. For the question in (33a), the LF representation is in (33b). The wh-movement creates a binding relation between the wh-operator and the trace. The restriction introduced by the wh-word restricts the interpretation of the trace to solely non-human entities.

(33) a. What did Ivan steal?
   b. \[ ?x[\exists e: x \text{ a thing in } e] \{\text{steal}(e) \& \text{Agent}(Ivan, e) \& \text{Theme}(x,e)\} = \text{For what } x \text{ does there exist some event } e \text{ that involves a thing } x \text{ such that it is astealing event with Ivan as its agent and } x \text{ as its theme?} \]

The restriction to non-humans is thus presupposed for what. For more complex wh-phrases like what cat, the ‘cat’ interpretation restricts the wh-dependency and is presupposed. This dovetails with Herburger’s (1997, 2000) notion of presupposed material restricting event quantifiers. If we assume plural events for coordinated clauses, the interpretation of the ATB wh-sentence in (34a) would be like in (34b):

(34) a. What did Ana read and Ivan steal?
   b. \[ ?x[\exists E: e \& e' \& x \text{ a thing in } E] \{\text{read}(e) \& \text{Agent}(Ana, e) \& \text{Theme}(x,e) \& \text{steal}(e') \& \text{Agent}(Ivan, e')\} = \text{For what } x \text{ does there exist some events of which one is event-A and one is event-B and these events involved a thing } x \text{ had such that event-A’s agent is Ana and it is a reading and its theme was } x \text{ and event-B’s agent is Ivan and it is a stealing.} \]

Simply put, in virtue of the first conjunct’s wh-word moving, a restriction is created. In the above case, the restriction presupposes a non-human thing in both events. There is a missing internal argument in the second conjunct, but the presupposed non-human entity in the event restrictor forces it to be interpreted in the second conjunct. That is, the second conjunct’s event is restricted to those involving that non-human thing. We can thus interpret an argument in the second conjunct (in fact
we are forced to due to the event restriction) despite it having been missing that argument.

6 Conclusion

In this paper I have shown that the second conjunct of Macedonian ATB constructions does not involve movement. There exists a different derivational option by which movement takes place only from the first conjunct and in virtue of that movement causes that moved element to also be interpreted in the second conjunct.

References


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