Extract to Unravel: Left Branch Extraction in Romanian/Serbian Code-switching

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It has been proposed that languages differ structurally depending on whether they have or lack definite articles ([1], [2], i.a.). This is due to the additional DP layer (where definite articles are presumed to be positioned), present in languages with articles (DP languages) as in (1a), but missing in languages that lack them (NP languages) as in (1b):

(1) a. [DP the [NP boy]]
   b. [NP boy]

According to [2], one of the tests that can show what parameter setting (DP or NP) is set in a language is Left Branch Extraction (LBE) of adjectives or adjective-like elements out of the Traditional NP (TPN). LBE has two characteristics: 1) It is only allowed in NP languages; and, among those, 2) It is only allowed in languages with Noun-Adjective (N-A) agreement. So while LBE is disallowed in English (a DP language with no N-A agreement) (2), it is allowed in Serbian (Srb) (an NP language with N-A agreement) (3):

(2) *Expensive/That, he saw [t, car].
(3) Skupa/That, je [t, kola].
   expensive/that.FEM is.AUX seen car.FEM

Adopting a contextual approach to phases where the highest projection of the extended domain of a lexical head is as a phase [3], I apply the LBE test on code-switching (CS) to determine the NP/DP status of a fused structure involving Romanian (DP language) and Serbian (NP language) elements. This language pair is especially intriguing because while N-A agreement (present in both languages) is maintained in CS, the two languages differ regarding the NP/DP parameter setting (4). Consequentially, each has different phasal points in isolation; while the NP is a phase in Serbian (4a & 5a) and allows LBE, in Romanian (4b & 5b) the additional DP layer acts as a phase and extraction out of the DP is ruled out by antilocality [5]. Antilocality is violated due to the Phase Impenetrability Condition (PIC) [4] which requires the AP to move via SpecDP, and this makes the movement too short; the AP not crossing a full phrase, just a segment.

(4) a. Serbian

   NP (= phase)
   AP

b. Romanian

   DP (= phase)
   Spec
   D'
   D
   NP
   AP
   NP

(5) a. Skupa, expensive.SG.FEM sam, kupio t, kola.
   (Srb)
   b. *Scumpe, expensive.PL.FEM am, vāzut t, automobile.
   (Rom)

In examples that involve CS, Romanian elements are in **bold** and Serbian in *italics.*
While the affairs are clear in these languages in isolation, CS is more tricky since it involves both languages, i.e. two competing parameter settings (Table 1). To determine which parameter setting is set, I apply the LBE test to structures with switches occurring at different points in the derivation. This is summarized in Table (2), where the dotted line represents relevant points of switching, with illustrations in the examples below.

<table>
<thead>
<tr>
<th>Languages</th>
<th>DP/NP</th>
<th>N-A agreement</th>
<th>LBE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Romanian</td>
<td>DP</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Serbian</td>
<td>NP</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Code-switching</td>
<td>DP/NP</td>
<td>✓</td>
<td>?</td>
</tr>
</tbody>
</table>

Table 1: (Selected) structural information on Romanian, Serbian, and R-S CS

<table>
<thead>
<tr>
<th>E.g.</th>
<th>Auxiliary</th>
<th>Main Verb</th>
<th>TNP</th>
<th>LBE</th>
</tr>
</thead>
<tbody>
<tr>
<td>(6)</td>
<td>ROM</td>
<td>ROM</td>
<td>ROM</td>
<td>✗</td>
</tr>
<tr>
<td>(7)</td>
<td>ROM</td>
<td>ROM</td>
<td>SRB</td>
<td>✗</td>
</tr>
<tr>
<td>(8)</td>
<td>ROM</td>
<td>ROM</td>
<td>SRB</td>
<td>✗</td>
</tr>
<tr>
<td>(9)</td>
<td>ROM</td>
<td>SRB</td>
<td>SRB</td>
<td>✓/?</td>
</tr>
</tbody>
</table>

Table 2: Relevant points of CS

Based on this, I take (dis)allowing LBE to be an indication of the presence or absence of the DP layer. Given that (6 - 8) failed the LBE test, despite the N-A agreement having been maintained, it seems that the switch containing a Romanian verb does have the additional DP layer. Example in (8) shows that even when the entire TNP is in Serbian, LBE cannot take place, which suggests that although no overt Romanian D element is present, we might still be dealing with a DP projection. This, however, is not the case in (9), where LBE improves drastically with a Serbian verb introduced in the structure.

Due to the NP/DP difference between these two languages, LBE appears to be reliable in determining the point where CS occurs, but also in showing that mixing two languages may not necessarily result in a uniform system. In other words, this variant of CS shows flexibility when it comes to elements that are switched, but also regarding what parameter setting will prevail depending on when CS occurs in the derivation.