## Appendix 3: Romanian adverbs tested for Cinque's hierarchy

## I. Aspectual adverbs in the vP field

According to Cinque (1999), this area should display the hierarchy in (1).

(1) Asp<sub>CELERATIVEII</sub> repede 'fast' > Asp<sub>REPETITIVEII</sub> iar 'again' > Asp<sub>FREQUENTATIVEII</sub>des 'often' > Asp<sub>COMPLETIVEII</sub> complet 'completely'

The criteria we use for testing these Romanian adverbs are: (i) A post-verbal bare quantifier subject, necessarily in the argumental Spec, vP, precedes these adverbs; (ii) The direct object kept in situ, be it DP or CP, follows these adverbs; and (iii) The position of these adverbs in relation to each other. Consider the adverbs in (2).

- (2) a. Ne-a servit cineva repede iar câte ceva. somebody fast us has served again some thing 'Somebody served us fast something again.'
  - des Repeta cineva сă fumează aici. b. nu se repeated.3sg somebody often REFL.3 smoke.3 here. that not 'Somebody was often repeating that smoking is forbidden here.'
  - c. A terminat cineva iarăşi complet un raport has finished somebody again completely a report 'Somebody has completely finished a report yet again.'

The examples in (2) confirm that these adverbs occur in the vP field because they are sandwiched between the bare quantifier subject in situ (i.e., *cineva* 'someone'), hence, lower than VoiceP, and the direct object in situ, thus, there is no right dislocation of the adverb.

When it comes to the hierarchy of these adverbs in relation to each other, as illustrated in (3), Cinque's hierarchy applies as expected.

- (3) a. Ne-a servit cineva iar repede câte ceva. us has served somebody again fast some Thing 'Somebody served us fast something again.'
  - b. Tot repetă cineva iar des / des iar același lucru. still repeats somebody often often again Same thing again 'Somebody is continuously repeating often again the same thing.'
  - c. Recită cineva repede des / \*des repede poezia.
    recites somebody fast often often fast poem.the
    'Somebody often repeats the poem fast.'
  - d. Nu termină nimeni repede complet ce promite. finishes nobody completely promises not fast what 'Nobody finishes fast completely what they promise.'
  - e. \*Nu *termină nimeni* **complet repede** ce promite.
    not finishes nobody completely fast what promises
  - f. *Împachetează cineva* **des complet** toată casa.

    packs somebody often completely all house.the 'Somebody often packs completely the whole house.'

g. \*Împachetează cineva **complet des** toată casa.
packs somebody often completely all house.the

The data in (3) indicate that *complet* 'completely' is very stable in its position at the bottom of the hierarchy. When we bring it forward, ungrammaticality ensues (3e, g). The other adverbs are also chained as in Cinque's hierarchy, but a slight variation may apply: *repede* 'fast' and *iar* 'again' may occur in reverse order (3a compared to 2a), and so do *iar* 'again' and *des* 'often' (3b), but *repede* 'fast' and *des* 'often' cannot switch places with felicitous results (3c). It seems that the reversal is possible only when the adverbs are in adjacent positions, and when at least one of them is monosyllabic. Hence, the optional reversal may be a PF matter. Crucially, they all occur in the area predicted by Cinque's hierarchy.

## II. Adverbs between T<sub>past</sub> and vP

According to Cinque (1999), and adjusting for the availability in the Romanian lexicon, this area should display the hierarchy in (4).

(4) T<sub>past/future</sub>acum 'now'/atunci' 'then' > Asp<sub>repetitivel</sub>tot 'repeatedly' > Asp<sub>frequentativel</sub>mai 'again' > Asp<sub>(anti)celerativel</sub>abia 'barely' > T<sub>anterior</sub>deja 'already' > Asp<sub>terminative</sub> deloc 'not.at.all' > Asp<sub>continuative</sub>încă 'still' > Asp<sub>perfect</sub> totdeauna 'always' > Asp<sub>durative</sub>tot'still' > Asp<sub>prospective</sub> aproape 'almost' > Voice bine 'well'

The assessment of this hierarchical fragment must consider the following:

- Some adverbs are clitics, so they surface as proclitics on the verb irrespective of their direct merge site. Consider *tot* and *mai* in (5).
- (5) a. Atunci tot va mai încerca. then still will.3SG again try 'Then he'll still be trying again.'
  - b. \*Atunci mai va tot încerca.
    then again will.3SG still try
    Intended: 'He'll again still try.'
  - mai / \*mai Atunci tot făcuse c. tot ceva. again still did.3sg Something then still again 'Then he still did something again.'

In (5a), the future auxiliary *va* 'will' is in T<sub>future</sub>, whereas the infinitive *incerca* 'try' originates from lower in the representation/structure. In this configuration, *tot* in Asp<sub>repetitivel</sub> procliticizes on the verbal element in T<sub>future</sub>, whereas *mai* in Asp<sub>frequentativel</sub> cliticizes on the second verbal element at its original merge position. Although *tot mai* may form a clitic cluster, as in (5c), their ordering remains rigid within this cluster. Thus, \**mai tot* is ungrammatical in (5d), as long as both of them are adverbs (versus intensifiers of some other XP).

- The postverbal bare quantifier subject is lower than Voice, and delimits the border between the TP field and the vP argumental field. Hence, *bine* 'well' in (6a) indicates the lowest level in the adverb hierarchy within the TP domain.
- (6) a. O curăța **deja bine** cineva.

- it cleaned.3SG already well somebody 'Somebody was already cleaning it well.
- b. \*O *curăța* **bine deja** *cineva*. it cleaned.3SG well already somebody Intended: 'Somebody was already cleaning it well.'
- totdeauna Ĩi instrui bine cineva c. va pe muncitori. will.3sg workers them instruct always well somebody dom 'Somebody will always instruct well the workers.'
- cheamă încă d. totdeauna cineva 0 la aceeași oră. her calls still all.the.time somebody Hour at same 'Somebody is still calling her all the time at the same time.'

*Deja* 'already' in T<sub>anterior</sub> precedes *bine* 'well' in Spec, VoiceP (6a), and the reverse order is ungrammatical (6b). Predictably, *totdeauna* 'always' is also higher than *bine* 'well'(6c), whereas *încă* 'still' is higher than *totdeauna* 'always' (6d). These examples support the hierarchy in (4).

- The past participle form merges lower, presumably in Asp<sub>perfect</sub>. The exact position for the past participle is irrelevant for complex tenses because the clitic nature of auxiliaries requires adjacency with this form. However, the lower merge position for the past participle becomes relevant with the passive 'be', which is not a clitic. In those contexts, we can verify the distribution of adverbs around the past participle, as in (7).
- (7) a. Prosopul era deja curățat bine. towel.the was already cleaned well 'The towel was already well cleaned.'
  - b. *Prosopul era curățat bine #deja.* towel.the was cleaned well already.'
  - c. Prosopul nu era deloc curățat bine. towel.the not was at.all cleaned well 'The towel wasn't at all well cleaned.'
  - d. #Prosopul nu era bine curățat deloc. towel.the not was well cleaned at.all 'The towel wasn't well cleaned at all.'
  - e. *Era* **încă tot** plasat prea aproape. was yet still located too close 'It was still located too close, yet.'
  - f. \*Era (încă) prea aproape (încă) (tot) plasat. was yet too close yet still located

In (7a, b), we test the adverbs in T<sub>anterior</sub> and Voice. As expected, the former precedes the past participle, whereas the latter follows it (7a). Right dislocation of the higher adverb is possible, hence the '#' sign, but it involves information focus stress (7b). In (7c, d) we test the adverbs in Asp<sub>terminative</sub> and Voice. Their distribution around the past participle, in (7c), follows the hierarchy in (4), while the reversed order is acceptable under discourse stress (7d). In (7e-f), the continuative and durative adverbs are tested for word order and they conform to the hierarchy in (4). Reversing their order yields ungrammaticality, without the addition of significant stress and breaks.

A detailed verification of Cinque's hierarchy in Romanian would involve more detailed paradigms for a complete match to the maps shown in (2) in the above study. However, for the purpose of this paper, this discussion is sufficient to indicate that the hierarchy in (2) is also adequate for an analysis of the Romanian adverbs produced by the children. The inference is that children acquiring Romanian must set the parameters for this adverb hierarchy when they encounter the compatible adverbs. Furthermore, the children must be able to recognize when displacement for discourse purposes applies to adverbs.