Focus without movement or operators: syntax-prosody interface in Georgian

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This paper analyzes the syntax and prosody of focus and wh-questions in Georgian (Kartvelian) and argues that Georgian does not have a dedicated syntactic projection for focus or wh-words. Instead, both foci and wh-words are found in situ, which is motivated by Georgian-specific requirements on prosodic prominence of these elements. All other material is base-generated in peripheral positions. While preverbal placement of focus/wh-words is found in other head-final languages (e.g. Basque, Hungarian, Turkish), we argue that Georgian differs from these languages in the absence of operator movement. These results point to two sets of implications: (i) head-final languages with preverbal focus do not form a homogenous group; (ii) information structure (IS) can be read off minimal syntactic structure, and its analysis does not require dedicated syntactic projections for IS categories.

Syntactic design of Georgian. Georgian is generally head-final, as shown by PPs, possessive expressions, participial relative clauses (RCs), small clauses (SCs), and verb-object idioms. At the same time, CPs and tensed RCs exhibit head-initial order, consistent with the Final-Over-Final Condition [13]. This serves as evidence countering Richards' [9] account of Georgian prosody, built on the idea that Georgian CP is head-final. Both OV and VO orders are found in all-new contexts. SCs, being strictly head-final (1), show that Georgian is underlyingly SOV.

   ‘Manana considers Gela smart.’

b. *Manana [sc č’k’vian-ad Gela-s] tvlis. Georgian exhibits no evidence for operator-driven A-bar movement: there is no weak crossover in RCs or root clauses (2), no cross-clausal focus- or wh-movement (3), no island effects (4), and no subextraction out of NPs [5]. Availability of single-pair reading of multiple wh-questions in addition to pair-list reading provides further evidence against wh-movement. The only movement for which there is independent evidence is A-scrambling [1, 7].

(2) Mis-ma, kmar-ma vin, aghuc’era Giorgi-s? 3SG.POSS-ERG husband-ERG who describe.AOR.3SG Giorgi-DAT
   ‘Whose husband described her to Giorgi?’ (lit.: Whom did her husband describe to Giorgi?)

(3) *Vi-s/vin tkva Nino-m [CP (vi-s) unda vuqrot’] who-DAT/who.NOM say.AOR.3SG Nino-ERG who-DAT must watch.SUBJ.1PL
   (‘Whom did Nino say that we must watch?’)

(4) Levani šexvda kal-s [CP romeli-c ra-s at’arebs]? Levani.NOM meet.AOR.3SG woman-DAT which-COMP what-DAT wear.PRS.3SG
   ‘What is x such that L. met the woman who wears x?’ (lit.: L. met a woman who wears what?)

Properties of focus/wh-words. Georgian foci/wh-words appear in the immediately preverbal position; certain foci, strictly non-contrastive and non-wh (except for echo), can appear in the immediately postverbal position (not discussed in this talk). With few exceptions, focus and wh-words are mutually exclusive (5), which suggests that they occupy the same position within a clause. As a result, interaction effects [3] cannot be tested.

(5) a. */(Manana-m-ac k’i)Foc (romeli tojina)wh misc-a švil-eb-s?
   Manana-ERG-also yes (=even) which doll.NOM give-AOR.3SG child-PL-DAT
   (‘Which doll did even Manana give to the children?’)

b. *(Romeli tojina)wh (Mananamac k’i)Foc misca švilebs?

In order to express focus and wh-words in the same utterance, a biclausal structure is needed:

(6) (Romeli ist’oria)wh aris [CP romeli-c (bič’-ma-c k’i )Foc c’aik’itxa]?
   which story.ABS is which-COMP boy-ERG-also yes (=even) read.AOR.3SG
   ‘Which story did even the boy read?’ (lit.: Which was the story [that even the boy read]?)

Unlike in typologically similar Hungarian, mxo lod ‘only’ behaves in the same way as -ac k’i ‘even’, (5, 6). Focus can but doesn’t have to be interpreted exhaustively [11]; there are no syntactic differences between exhaustive and non-exhaustive foci. Using evidence from scope (7), binding, scalar interpretation of focused numerals, verbal idioms, and language-specific distributional facts, we show that the focus/wh-word stays in its base position.

(7) a. Sam-ze ara-nak’leb bič’i (q’ovel čanta-s)Foc caighebs.
   three-on NEG-less boy.NOM all bag-DAT carry.PRS.3SG
‘No less than three boys will carry EVERY BAG.’ (~ 3 > every;?”every > ~ 3)

b. Sam-ze ara-nak’leb bič’i q’ovel čanta-s caighebs.

three-on NEG-less boy.NOM all bag-DAT carry.PRS.3SG

‘No less than three boys will carry every bag.’ (~ 3 > every; every > ~ 3)

**Analysis.** Our analysis is as follows: (A) focus/wh-words enter into a predicative relation with the main predicate of their clause; (B) the adjacency requirement follows from requirements on prosodic prominence of the focus/wh-element; (C) material intervening between the focus/wh-item and the verb undergoes altruistic “p-displacement”. (A) Focus and wh-words in Georgian remain in situ and enter in a predicate relation with the adjacent verb phrase, thus forming a PredP [predP wh/Foc VP]; a similar proposal for Russian and English is put forward in [8]. In addition, we show that there is no exhaustivity operator associated with focus; the semantics of the resulting utterance is computed on the basis of focus alternatives [10]. The uniqueness of focus/wh follows from the uniqueness of PredP. (B) The focus/wh-predicate adjacency requirement follows from the requirements of prosodic prominence imposed on the predicate phrase. Word-level stress in Georgian is weak or possibly non-existent [15]. Since there is no word-level stress to which nuclear stress (NS) can be anchored, prosodic prominence cannot be expressed by aligning the focus-bearing element with the position of NS, as in Hungarian [12] or Basque [2]. Instead, prosodic prominence is expressed via prosodically grouping the focus/wh-element with the verb, with a distinct H* L- intonational contour extending over both (8a). This contrasts with unmarked all-new contexts, in which each lexical word constitutes a prosodic phrase (8b) [4, 15]. In (8), following [15], X* = pitch accent, X-/X% = boundary tone.

(7) a. \( (X)_0 \ldots (\text{focus/wh})_0 \ldots (Y)_0 \) b. \( (X)_0 \ldots (Y)_0 \ldots (\text{Verb})_0 \ldots (Z)_0 \) .
\( L^*H- \quad H^* \quad L- \quad L^*L\% \quad L^*H- \quad L^*H- \quad L^*H- \quad L^*L\%
\)

The prosodic grouping that identifies focus/wh can occur only once per clause, and is uniquely associated with focus. This pattern is a mirror image of prosodic expression of focus in Romance languages, where displaced material receives special prosody, and focal material maintains neutral prosody [14, 16]. Multiple wh-questions support this analysis: they are acceptable only if grouping of wh-words and the verb is maintained, which is possible for no more than two wh-words. (C). Non-focal material appears on either periphery of the clause. Using Condition C effects and epistheth-binding, we show that the material on the right periphery is always base-generated and is discourse-linked. This is supported by scope facts obtained on the right periphery, with the rightmost element taking scope over those further to the left. Right-dislocated material exhibits a low and flat prosodic contour, the Georgian equivalent of de-accenting. Non-focal material in the left periphery can be either base-generated (typical of scene-setting expressions) or A-scrambled [1, 7]. In either case, it is realized with a neutral L* H- tonal contour, or H* L- contour typical of topics. Base-generation or dislocation of non-focal material serves the function of “altruistic p-displacement” of clausal constituents that should not form a predicate phrase with the main verb (cf. [16] on altruistic movement in Romance).

**Implications.** A natural consequence of our analysis is that information structure can be read off minimal syntactic structure without employing movement or operators. Instead, language-specific ways of expressing prosodic prominence, such as prosodic grouping, are the driving force behind the syntax of focus/wh-constructions. In typologically similar Hungarian and Turkish focus/wh-formation crucially involves movement; the difference between Georgian and these languages indicates that head-final languages with a dedicated preverbal focus position do not have a uniform syntactic or prosodic design.

**References:**