Focus without movement: syntax-prosody interface in Georgian*

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1. Introduction

Properties of constituents with a particular information-structural (IS) status have long been an object of investigation. Constituents that play a specific role in the IS make-up of an utterance, such as focal and wh-items, often have a well-defined syntactic distribution, relative to each other as well as other components of a clause. This observation has led to the development of the cartographic approach to the study of IS. In this tradition, the distribution of IS-salient constituents within a clause in a given language is defined by the hierarchical ordering of functional projections that house the constituents with a given IS-status (Rizzi 1997 and subsequent work). According to an alternative approach, syntactic structure building in the narrow syntax is blind to the IS-status of the constituents, and the IS-properties of an utterance are determined at the interfaces with LF and (possibly) PF (Chomsky 1995:202).

This paper investigates the expression of IS in Georgian, a Kartvelian language of the Caucasus. We selected Georgian as an object of investigation due to its cross-linguistically uncommon properties, both syntactic and prosodic, that affect the expression of IS in the language. On the syntactic front, Georgian lacks cross-clausal A-bar movement (Harris 1981:17) and shows very little evidence for syntactic movement in general. On the prosodic front, it has acoustically weak and phonologically "inactive" stress (Zhghenti 1959; cf. Hyman 2012), which affects the expression of prosodic prominence. In this paper, we show how the interplay of these two properties shapes the expression of IS in Georgian.

In particular, we show that there is no support for postulating a dedicated functional syntactic projection in Georgian clause structure that houses IS-salient material. Instead,

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we argue that wh-expressions and various types of focus are expressed in-situ, and the overall architecture of clauses containing them is determined by Georgian-specific expression of prosodic prominence. Specifically, prosodic prominence is manifested by grouping the wh-/focal material and the verb together into a single prosodic phrase. The material that might intervene between wh-/focal material and the verb undergoes altruistic displacement.

To introduce our proposal, we start with relevant facts of the grammatical make-up of Georgian in Section 2; Section 3 discusses syntactic and prosodic properties of Georgian wh-/focal items, and Section 4 addresses the syntax and prosody of non-focal material.

2. Grammatical make-up of Georgian

2.1 Syntax

Georgian is a predominantly head-final language: e.g., it allows only potspositional phrases and strictly head-final participial relative clauses. In contrast with more rigidly head-final languages like Japanese or Korean, in Georgian both VO and OV orders are frequently found in discourse, including in all-new contexts. Corpus studies show a slight preference for SOV in conservative/written registers, and for SVO in colloquial registers; the preference for VO also increases as the number and complexity of constituents increase (Vogt 1971, Apridonidze 1986). Skopeteas & Fanselow (2010) argue that OV and VO are largely interchangeable in Georgian, and VO is derived by verb raising. However, the facts are more complex and require further investigation that goes beyond the scope of this paper. Importantly for our purposes, researchers agree that OV is the underlying of the two orders. This is also attested to by data from small clauses and verb-object idioms.

- (1) a. Manana [Gela-s č'k'vian-ad] tvl-i-s.²
 M.NOM G-DAT clever-ADV consider-SM-PRS.3SG
 'Manana considers Gela smart.'
 - b. *Manana [č'k'vianad Gelas] tvlis.

The unavailability of (1b) is accounted for if we assume that small clauses lack higher functional projections that the verb can move to and thus reveal the underlying word order of the minimal VP (cf. Johnson & Tomioka 1997). Another piece of evidence for OV as the underlying order in Georgian comes from object-verb idioms: at least for some speakers, the idiomatic reading is lost in VO word order (Skopeteas & Fanselow 2010):

(2) a. Manana-m pex-eb-i ga-č'im-a.

M-ERG legs-PL-NOM PRV-stretch-AOR.3SG

'Manana stretched her legs.'/'Manana died.'

¹ Finite relative clauses have a more flexible structure (exemplified below).

² Glosses follow the Leipzig Glossing Rules. 1–first person, 3–third person, ADV–adverbial, AOR–aorist, COMP–complementizer, DAT–dative, DEM–demonstrative, ERG–ergative, FUT–future, GEN–genitive, IO–indirect object, MOD–modal, NEG–negation, NOM–nominative, PL—plural, POSS–possessive, PRF–perfect, PRS–present, PRV–preverb, PTCP–participle, REFL–reflexive, SF–stem formant, SG–singular, SM–screeve marker, VER–versionizer. Glosses in examples cited from other work are modified for uniformity.

b. Manana-m ga-č'im-a pex-eb-i.
M-ERG PRV-stretch-AOR.3SG legs-PL-NOM
'Manana stretched her legs.'/NOT 'Manana died.'

In the CP domain, however, Georgian does not show consistent head-final properties. Embedded complement clauses are headed by the initial complementizer rom; the complementizers tu (interrogative) and c (relative) are second-position clitics, and the relative rom can cliticize to any element, as long as it is preverbal. Since C^0 's can cliticize to the first constituent of the embedded clause, and not the first prosodic word, they cannot be accounted for under prosodic inversion according to which a second position C^0 is merged on the right before undergoing inversion (Bošković 2002).

The position of the verb is notoriously difficult to determine in verb-final languages; some of the commonly used tests, such as adverb placement, do not apply in Georgian. Lomashvili (2011) proposes a detailed hierarchy of the verbal projections in Georgian, and hypothesizes — based on Georgian complex verbal morphology — that the verb raises through a succession of functional projections to T, where person agreement takes place. However, such an analysis does not rule out the possibility of an alternative analysis based on m-merger instead of verb movement (Matushansky 2006).

There is, in fact, some evidence suggesting that the verb does not raise in Georgian. It comes from scopal interaction between verbal negation and other elements, such as the quantified external argument and adverbs (cf. Han et al. 2007 on Korean). Verbal negation in Georgian is expressed by a clitic which must be immediately left-adjacent to the verb; no other material can intervene between negation and the verb. This adjunction is below the base position of the external argument in Spec, v (Lomashvili 2011:82). A quantified expression in the external argument position must scope over verbal negation, which indicates that the negative clitic + verb does not move out of the vP (3); a similar picture obtains with adverbs and verbal negation: only surface scope is available (4).

- (3) Sam-ze nak'leb st'udent'-s ar e-codin-eb-a es p'asuxi. three-on less student-DAT NEG VER-know-SF-FUT.3SG DEM answer.NOM 'Fewer than three students will not know the answer.' (~3 > NEG; *NEG > ~3)
- (4) Manana-m p'uri išviat-ad ar ga-mo-a-cx-o.
 M-ERG bread.NOM seldom-ADV NEG PRV-PRV-VER-bake-AOR.3SG
 'Manana seldom did not bake bread.' (seldom > NEG; * NEG > seldom)

To conclude, we adopt the following phrase structure for Georgian:

(5) [TP [VoiceP Subject [VP [VP Object V]]]]

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³ Georgian shows a case-marking split, with ergative alignment in the aorist and optative, and nominative-accusative alignment with all other verb forms. For reasons of space, we will not address the details of Georgian case licensing, which remain somewhat controversial (see Nash 2017 for a recent overview).

⁴ Testing the relative scope of verbal negation and quantified direct objects (cf. Han et al. 2007 on Korean) is not used here, because the relevant facts about the position of the direct object in Georgian have not been established. (4) provides evidence for possible raising of the object, but it is unclear if object raising is restricted to particular constructions. There is no evidence for object-shift-related meaning differences.

2.2 Prosody

Word stress in Georgian has long been a matter of debate. Native speakers of Georgian have no consistent intuitions about stress placement, and no morphophonological process relies on stress. The literature on Georgian stress is considerable, including both instrumental studies and research based on native speakers' introspection, but the conclusions vary. The authors advocating for the existence of word stress in Georgian typically conclude that stress targets the initial syllable in di- and trisyllabic words, while in longer words the antepenultimate or penultimate syllable carries another stress-like target (Robins & Waterson 1952, a.o.). The other prominent hypothesis is that Georgian lacks word stress, and its prosodic make-up is defined by phrase-level prosodic targets (Alkhazishvili 1959, a.o). Recent acoustic studies (Vicenik & Jun 2014, Borise & Zientarski 2018) call for a hybrid approach, showing that the initial syllable is a locus of greater vowel duration that can only be easily explained as a manifestation of stress, while the (ante)penultimate syllables house phrase-level prosodic targets. Most authors agree that word-level stress in Georgian, if present at all, is unusually phonologically inactive.

Absence of (strong) word-level stress has implications for the expression of phrasal prosodic prominence, such as Nuclear Stress (NS)/nuclear pitch accent. It is often assumed that NS/nuclear pitch accent targets a word in a particular structural position (e.g., most deeply embedded in a given phrase) and is anchored to a syllable that carries word-level stress (Chomsky & Halle 1968, Cinque 1993). The prediction is that in Georgian, a language without strong word-level stress, prosodic prominence is manifested not via prominence-lending prosodic targets such as pitch accents (since they have nothing to anchor to), but rather through manipulating boundary-marking prosodic targets.

3. The immediately preverbal position (IPP) in Georgian

3.1 IPP occupancy

The immediately preverbal position in Georgian is associated with a specific IS-status – particularly, wh-/focal expressions, including new information and contrastive focus. In this regard, Georgian facts are a mirror image of what is found in Bantu languages, where there is a strong tendency to place focal/wh-expressions into the position immediately after the verb (IAV) (Watters 1979 and subsequent work). In order to capture this similarity, we refer to the immediately preverbal position in Georgian as the IPP.

Wh-expressions are obligatorily found in the IPP. No material other than verbal negation can intervene between the wh-expression and the verb; postverbal wh-expressions are infelicitous unless they receive an echo interpretation. This is an absolute requirement that holds for both single and multiple wh-questions (e.g., if more than one, all wh-words must be left-adjacent to the verb).

- (6) a. Bebia **ra-s** a-lag-eb-d-a? grandma.NOM what-DAT PRV-clean-SF-SM-PRF.3SG 'What did grandma clean?'
 - b. * **Ras** bebia alagebda?

In non-fragment replies to wh-questions, the constituent carrying new information/corresponding to identificational focus (Kiss 1998) appears in the IPP – cf. (7), as a reply to (6a):

- (7) a. Bebia **samzareulo-s** a-lag-eb-d-a. grandma.NOM kitchen-DAT PRV-clean-SF-SM-PRF.3SG 'Grandma cleaned the kitchen.'
 - b: *Samzareulos bebia alagebda.
 - c. ?? Bebia alagebda samzareulos.

Constituents modified by focus-sensitive particles -ac (lit.: 'too') k'i 'even', and mxolod 'only' also appear in the IPP (8). If the IPP is occupied by a wh-expression, a constituent modified by a focus-sensitive particle appears in the postverbal domain (9a).⁵ The reverse order, with a focus-sensitive particle modified expression placed preverbally and the wh-word postverbally, is ungrammatical (9b), as is the order in which the wh-expression is separated from the verb by a focus-particle modified expression (9c):

- (8) a. Maimuni mxolod Manana-m/ Manana-m-ac k'i monkey-NOM only M-ERG/ M-ERG-too even a-k'oc-a.
 PRV-kiss-AOR3.SG
 'Only/even Manana kissed the monkey.'
 - b. *Mxolod Mananam/ Manana-m-ac k'i maimuni ak'oca.
- (9) a. **Vin** muša-ob-s **mxolod k'vira-s**/ **k'vira-s-ac k'i**? who.NOM work-SF-PRS.3SG only Sunday-DAT/ Sunday-DAT-too even 'Who works only/even on Sundays?'
 - b. *Mxolod k'vira-s/ k'vira-s-ac k'i mušaobs vin?
 - c. *Vin mxolod k'vira-s/ k'vira-s-ac k'i mušaobs?

Contrastively focused items appear in the IPP as well (10): ⁶

- (10) A: ('A fisherman caught an octopus.')
 - B: Rvapexa ara, mebadur-ma **zvigeni** da-i-č'ir-a. octopus.NOM NEG fisherman-ERG shark.NOM PRV-VER-catch-AOR.3SG 'Not an octopus the fisherman caught a shark.'

⁵ Pre-wh placement is also possible for some speakers, but less preferred than postverbal placement.

⁶ Experimental evidence strongly supports the preverbal placement of Georgian contrastive focus, though that it is not an absolute requirement (Skopeteas & Fanselow 2010).

A focused item in the IPP may (but does not have to) be interpreted exhaustively (Skopeteas & Fanselow 2010):

(11) Agretve Maria-m **K'ot'e-s** s-cem-a. among.other M-ERG K-DAT 3SG.IO-hit-AOR.3SG 'Maria hit Kote (among others that she hit).' (Skopeteas & Fanselow 2010:1389)

Not every immediately preverbal constituent must be interpreted as inherently focused, which is why prosodic prominence is important. The constituents that allow variable placement in an utterance (that is, constituents other than wh-words and the negative adverb ar), may appear immediately preverbally without constituting narrow focus. This is particularly clear in object-verb sequences; as already mentioned, the object is naturally found immediately preverbally, but it is only interpreted as narrow focus if prosodically grouped with the verb.

Finally, a wh-/focal expression must appear in the IPP of the clause that it is merged in; it is impossible to raise such an expression to the IPP of the higher clause:

- (12) a. *Vi-s_i/vin_i tkv-a Nino-m [t_i unda v-u-q'ur-o-t]? who-DAT/who.NOM say-AOR.3SG N-ERG MOD 1-VER-watch-SM-PL ('Who did Nino say that we must watch?')
 - b. Ra tkv-a Nino-m [(rom) vi-s unda what.NOM say-AOR.3SG N-ERG COMP who-DAT MOD v-u-q'ur-o-t]?
 1-VER-watch-SM-PL
 'Who did Nino say that we must watch?'
- (13) a. *Manana-si/Mananai tkv-a Nino-m [t_i unda v-u-q'ur-o-t]. M-DAT/M.NOM say-AOR.3SG N-ERG MOD 1-VER-watch-SM-PL ('It is Manana that Nino said that we must watch.')
 - b. Nino-m tkva [(rom) **Manana-s** unda v-u-q'ur-o-t]. N-ERG say-AOR.3SG COMP M-DAT MOD 1-VER-watch-SM-PL 'It is Manana that Nino said that we must watch.'

3.2 Syntactic properties of the IPP

In this section, we present several empirical observations suggesting that the IPP is not a product of A-bar movement. First, we rule out the possibility of a type of A-bar movement familiar from English, which targets Spec, C and can apply cross-clausally; after that, we rule out focus as A-scrambling. We then consider an analysis that involves short A-bar movement and an in-situ interpretation analysis, and propose an account in terms of in-situ interpretation via existential quantification over choice functions (Reinhart 1998).

First of all, (12-13) above indicate that Georgian wh-questions and focus structures obey locality, which argues against an English-type A-bar movement. However, there are other languages with locality restrictions on A-bar movement, e.g. Tsez (Polinsky and Potsdam 2001) and a number of Austronesian languages (Chen 2017), so this restriction may be independently motivated.

Next, there is evidence against Spec, C as the landing site, which comes from replies to multiple wh-questions. Bošković (2002:358) argues that single-pair answers to multiple wh-questions (in addition to pair-list answers) are available in languages that do not have wh-movement targeting Spec, C. These are available in Georgian:

- (14) A; **Vi-s-tvis sad** i-mgher-a Levan-ma simghera? Who-GEN-for where VER-sing-AOR.3SG L-ERG song.NOM 'Where did Levan sing a song for who?'
 - B: Levan-ma Lena-s-tvis pilarmonia-ši i-mgher-a
 L-ERG L-GEN-for Philharmonic.Hall-in VER-sing-AOR.3SG simghera.
 song.NOM
 'Levani sang a song for Lena at the Philharmonic Hall.'

Finally, placing the IPP in Spec, C would involve movement of the verb to C, but there is no evidence for verb raising to C in Georgian (see 2.1.1). When these factors are taken together, the analysis of the IPP as a product of A-bar movement to Spec, C is untenable.

Could movement to the IPP be a kind of A-scrambling that is otherwise attested in Georgian (McGinnis 1999; Amiridze 2006)? A focused constituent in the IPP is not bound by a hierarchically higher possible antecedent, suggesting that it does not end up in the IPP position by A-movement (cf. Amiridze 2006:54):⁷

- (15) a. *K'las-ši tavisi_i tavi Manana-s_i class-in 3.REFL.POSS.SG.NOM self.NOM M-DAT a-k-eb-s.

 VER-praise-SF-PRS.3SG

 ('In class, Manana praises herself.')
 - b. *K'las-ši Manana-s_i tavisi_i tavi
 class-in M-DAT 3.REFL.POSS.SG.NOM self.NOM
 a-k-eb-s.
 VER-praise-SF-PRS.3SG
 ('In class, Manana praises herself.')

This leaves us with two analytical options, short A-bar movement and in-situ interpretation. According to the former, the focus/wh-material moves to the specifier of a functional projection FP that immediately dominates the verb phrase, and the verb undergoes head movement to the head of that phrase, which is arguably head-final (16). The material that intervenes between the specifier and the head of FP undergoes displacement which we discuss in Section 4.

(16) $\left[\text{CP} \left[\text{FP Focus/wh} \left[\text{Voice P} \left[\text{VP} \left[\text{VP} \dots \right] \right] \right] \text{F-Voice-v-V} \right] \right]$

⁷ Nominative and subject anaphors are independently attested in Georgian (Amiridze 2006:219). Additional complications in possessive reflexives are not considered here (cf. Amiridze 2006).

Support for this analysis is scant at best. Some diagnostics of A-bar movement are either uninformative or lend themselves to multiple interpretations. In particular, there is no difference in scope readings between utterances with a narrow focus in the IPP and corresponding broad focus utterances. Both types of utterances allow only surface scope.

The status of superiority restrictions in Georgian is not clear either; researchers point to considerable inter- and intra-speaker variation (Erschler 2015:43). According to Amiridze (2006:64), superiority restrictions hold between subjects and direct objects, and between indirect and direct objects, but not outside these two dyads.

- (17) a. **Vin ra** č'am-a gušin? who.ERG what.NOM eat-AOR.3SG yesterday? 'Who ate what yesterday?'
 - b. *Ra vin č'ama gušin?

Superiority effects are compatible both with short A-bar movement and with in-situ interpretation of wh-expressions. In the absence of A-bar movement, the strict ordering of wh-expressions may simply reflect the order in which they were merged.

Weak crossover (WCO) configurations can help disentangle short A-bar movement and in-situ interpretation. Assuming that short A-bar movement targets a projection FP that dominates vP, WCO effects should be present; on the in-situ account, there should be no WCO effects. WCO effects exist in Georgian between pronominal subjects and quantified objects (18), but they are absent from constructions with pronominal subjects and whobjects (19), as well as relative clauses (Amiridze 2006:62). While providing evidence against short A-bar movement, WCO turns out to be not a decisive test either, for an independent reason: there is a strong preference, supported by a prescriptive rule, to use a reflexive possessive *tavis*- and not a 3sG possessive *mis*- in clause-mate antecedent contexts. This introduces binding requirements into the construction and potentially obscures the results of the test.

- ??Tavis-ma_i/ *mis-ma_i p'ropesor-ma mo-u-c'-od-a 3.REFL.POSS.SG-ERG/3.POSS.SG-ERG professor-ERG PRV-VER-call-SM-AOR.3SG titoeul st'udent'-s. each student-DAT ('His_i professor called each student_i.')
- (19) Tavis-ma_i/??mis-ma_i kmar-ma **vin**_i
 3.REFL.POSS.SG-ERG/3.POSS.SG-ERG husband-ERG who.NOM
 agh-u-c'er-a Giorgi-s?
 PRV-VER-write-AOR.3SG G-DAT
 'Whose_i husband described her_i to Giorgi?'
 (lit.: Who_i did her_i husband describe to Giorgi?)

Finally, let us consider island constraints with respect to the IPP construction. On the short A-bar movement account, the IPP construction should be subject to island violations; on the in-situ account, it should not. The results, again, point in the direction of the in-situ analysis. There is a caveat, however. While complex NPs do not induce island violations (20), relative clauses do (21):

- (20) Vis-ze_i ga-i-g-o ch'ori rom vin_i
 Who-about PRV-VER-hear-AOR.3SG rumor.NOM COMP who.NOM
 u-q'var-s Marik'a-s?
 VER-love-PRS.3SG M-DAT
 lit.: 'Who_i did you hear the rumor about, that Marika loves who_i?'
- (21) *Mariam-ma nax-a bič'i, [RC romel-ma-c **romeli c'igni**M-ERG see-AOR.3SG boy.NOM which-ERG-COMP which.NOM book.NOM i-p'ov-a]?
 PRV-find-AOR.3SG
 (Intended: 'Which book_i did Mariam see a boy that *t_i* found?')

However, (unsuccessful) short A-bar movement is not the only possible explanation of the ungrammaticality of (21); in fact, it only goes through as an explanation of the ungrammaticality if we presuppose that movement is involved in the IPP construction. According to the in-situ interpretation alternative, a wh-expression that does not move to Spec, C overtly is bound in-situ by an operator merged in CP. Unselective binding (Baker 1970 and subsequent work) is commonly used for this, but Reinhart (1998) shows that existential quantification over choice functions accounts for the same data and avoids making some of the wrong predictions made by the unselective binding approach. Adopting Reinhart's (1998) approach, *vis* 'who' in (22) below is bound by an existential operator in the CP-layer of the embedded clause. We suggest that the same mechanism can be adopted for the interpretation of focus items in the IPP.

- (22) a. Bič'-ma **romeli c'igni** i-p'ov-a? boy-ERG which.NOM book.NOM PRV-find-AOR.3SG 'Which book did the boy find?'
 - b. For which f, the boy found f(book)
 - c. $\{P \mid (\exists f) (CH(f) \& P = \land (the boy found f(book)) \& true(P))\}$

The ungrammaticality of (21), then, can be explained as an intervention effect. In (21), the CP of the embedded clause contains two operators: an existential one binding the whexpression, and the operator that binds the gap in the relative clause (Quine 1960 and much subsequent work). This results in a clash between two operators that attempt to bind into the same domain, with the gap-binding operator in the path of the existential one (cf. Linebarger 1980 on intervening operators in NPI licensing, Beck 1996 on negation blocking LF-movement of wh-in-situ). Such an analysis makes a prediction that island constructions that do not involve another operator in addition to the existential operator binding the wh-expression should be grammatical. This prediction is borne out, as (20) above shows.

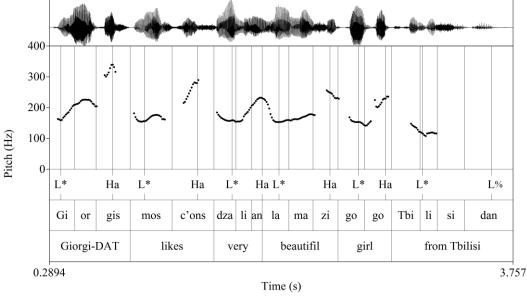
Therefore, we conclude that the derivation of the IPP construction in Georgian does not necessitate a movement analysis. Both empirical considerations and parsimony expectations favor an in-situ interpretation analysis.

3.3 Prosodic properties of the IPP

Focus is expressed with prosodic prominence: focus-bearing constituent must be more prominent prosodically than other constituents in the same clause. Focus placement is often understood to be determined by the position of NS in a clause (Chomsky & Halle 1968:91); cf. accounts of preverbal focus in Basque (Arregi 2002) and Hungarian (Szendrői 2003). However, Georgian word stress is unusually phonologically inactive (see 2.2). Consequently, Georgian exhibits no evidence of NS (Zhghenti 1963); instead, there is some evidence suggesting that the verb itself is the locus of prosodic prominence (Tevdoradze 2005, a.o). If another constituent needs to be prosodically prominent, as in the IPP constructions, that is expressed via prosodic grouping of the IPP together with the verb.

This stands in opposition to unmarked/broad focus contexts, in which the preverbal element is not prosodically phrased with the verb. In the broad-focus context, each prosodic word typically forms its own Accentual Phrase (AP) (Vicenik & Jun 2014); this manifests as a high final boundary tone of the AP (Ha), which is typically combined with a low pitch accent L* on the initial syllable:

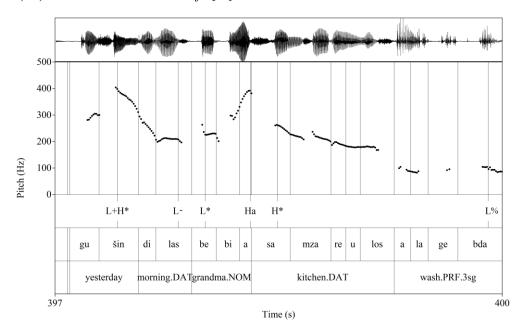
- (23) Giorgi-s mo-s-c'on-s dzalian lamazi gogo Tbilisi-dan. G-DAT PRV-3SG.IO-like-PRS.3SG very beautiful.NOM girl.NOM Tbilisi-from 'Giorgi likes a very beautiful girl from Tbilisi.'
- (24) Prosodic realization of a broad focus declarative



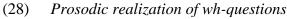
In focal contexts, however, the element in the IPP does not form an AP by itself, and instead is prosodically phrased together with the following verb, with an overall falling contour over both constituents, H* L%:

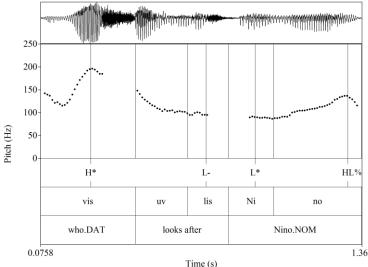
(25) ('What did grandma clean yesterday morning?')
Gušin dila-s bebia **samzareulo-s** a-lag-eb-d-a.
yesterday morning-DAT grandma.NOM kitchen-DAT VER-wash-SF-SM-PRF.3SG
'Yesterday morning, grandma cleaned the kitchen.'

(26) Prosodic realization of S[O]_FV



(27) **Vi-s** u-vl-i-s Nino? who-DAT VER-look.after-SM-PRS.3SG N.NOM 'Who does Nino look after?'





To conclude, the IPP in focal contexts has a distinctive prosodic signature: the the wh-/focal expression is prosodically grouped together with the verb. Because this expression of prominence is unique to wh-/focal contexts, we take it to be the driving force behind the syntactic shape of these structures. Specifically, we suggest that the requirement for prosodic grouping of wh-/focal material with the verb causes displacement of the material that would intervene between them.

4. Non-focal items in IPP constructions

We suggest that in IPP constructions, all the intervening material undergoes "altruistic displacement", in order to allow for the wh/-focal constituent to appear in the IPP and be prosodically phrased together with the verb. Such displacement is not movement, and that is in keeping with the general design of Georgian where A-bar movement seems extremely limited, as we have demonstrated. Based on scope facts and Condition C effects, the displaced material is adjoined in the peripheral positions. Wide scope is strongly preferred for such constituents (29, 30), which indicates lack of reconstruction effects.

- (29)Or ena-s q'oveli st'udent'i am k'las-ši sc'avl-ob-s. two language-DAT all.NOM student.NOM this class-in learn-SF-PRS.3SG 'Two langages, every student in this class is studying.' (Two $> \forall$; ???? \forall > Two)
- (30)Am k'las-ši q'oveli st'udent'i sc'avl-ob-s or ena-s. this class-in all. .NOM student.NOM learn-SF-PRS.3SG two language-DAT 'In this class, every student is studying two languages.' (TWO > \forall ; ??? \forall > TWO)

Similarly, lack of Condition C effects with the dislocated material in both right and left periphery also suggests high base-generation:⁸

- Mananak-s bavšv-s isi/%k mdinare-ši ban-s. (31)child-DAT 3SG.NOM river-in M-GEN wash-PRS.3SG 'Mananak's child, shei/k is washing in the river.'
- (32)mdinare-ši Mananak-s bavšv-s. $Is_{i/k}$ bans 3sg.nom wash.prs.3sg river-in child-DAT M-GEN 'She_{i/k} is washing Manana_k's child in the river.'

Our account, then, mirrors that of Zulu (Cheng and Downing 2006, Buell 2008), where non-focal/given constituents obligatorily extrapose, in order to allow for the wh-/focal material to appear in the IAV. In Georgian, however, this mechanism relies on basegeneration of dislocated material, as opposed to movement.

5. **Conclusions**

In this paper, we have shown that wh-/focal items in Georgian appear in the immediately preverbal position (IPP). Based on a number of diagnostics, we argue that constituents in the IPP do not undergo movement to a specific functional projection. Instead, we propose that the wh-/focal items are interpreted in-situ using existential quantification over choice functions. In the absence of movement, operator interaction plays a major role in the interpretation of IPP constructions. This manifests in the ungrammaticality of a whexpression embedded in relative clause. The main identification of the IPP comes from prosody; IPP constructions have a unique prosodic make-up, in which the prosodic prominence of the focal item manifests itself as prosodic grouping of the wh-/focal item and the verb.

⁸ Condition C effects are independently operative in Georgian.

In order to achieve immediately preverbal placement and prosodic prominence of wh/focal items, the material intervening between the focal item and the verb undergoes altruistic displacement to the peripheries, which is similar in spirit but different in mechanism from focus-induced extraposition proposed for Bantu: base-generation instead of movement.

References

- Alkhazishvili, Arčil. 1959. Porjadok slov i intonacija v prostom povestvovatel'nom predloženii gruzinskogo jazyka [Word order and intonation in a simple declarative sentence in Georgian], *Fonetika [Fonetičeskij sbornik]* 1, 367–414.
- Apridonidze, Šukia. 1986. Sit'q'vatganlageba axal kartulši (XIX-XX sauk'unis prozis mixedvit. Mart'ivi c'inadadeba) [Word Order in Modern Georgian (According to the Prose of the XIX-XX Centuries. Simple Sentence)]. Tbilisi: Mecniereba.
- Amiridze, Nino. 2006. Reflexivization strategies in Georgian. Utrecht: LOT.
- Arregi, Karlos. 2002. Focus on Basque movements. PhD thesis, MIT.
- Baker, Carl L. 1970. Notes on the description of English questions: The role of an abstract question morpheme. *Foundations of language*, 197–219.
- Beck, Sigrid. 1996. Quantified structures as barriers for LF movement. *Natural language* semantics 4.1: 1-56.
- Borise, Lena. 2017. Prosody of Focus in a Language with a Fixed Focus Position: Evidence from Georgian. *Proceedings of WCCFL* 34, 89–96.
- Borise, Lena, and Xavier Zientarski. 2018. Word Stress and Phrase Accent in Georgian. *Proceedings of TAL 2018*, Beuth University, Berlin, 13-16 June 2018.
- Bošković, Željko. 2002. On multiple wh-fronting. Linguistic Inquiry 33(3), 351-383.
- Buell, Leston. 2009. Evaluating the immediate postverbal position as a focus position in Zulu. In M. Matondo, F. McLaughlin, & E. Potsdam (Eds.), *Selected proceedings of the 38th Annual Conference on African Linguistics: linguistic theory and African language documentation*, 166-172.
- Chen, Victoria. 2017. A reexamination of the Philippine-type voice system and its implications for Austronesian primary-level subgrouping. PhD thesis, U of Hawaii.
- Cheng, Lisa, and Laura Downing. 2006. Phonology and syntax at the right edge in Zulu. *Prosody-Syntax Interface Workshop, UCL*, 6.
- Chomsky, Noam, and Morris Halle. 1968. *The sound pattern of English*. New York: Harper & Row.
- Chomsky, Noam. 1995. The Minimalist Program. Cambridge, Mass.: MIT Press.
- Cinque, Guglielmo. 1993. A null theory of phrase and compound stress. *Linguistic Inquiry* 24:239-297.
- Erschler, David. 2015. Embedded questions and sluicing in Georgian and Svan. *Languages of the Caucasus* 1(1), 38-74.
- Han, Chung-hye, Jeffrey Lidz, and Julien Musolino. 2007. V-raising and grammar competition in Korean: Evidence from negation and quantifier scope. *Linguistic Inquiry* 38.1, 1-47.
- Harris, Alice. C. 1981. *Georgian syntax: A study in Relational Grammar*. Cambridge: Cambridge University Press.
- Hyman, Larry. 2012. Do all languages have word accent? *UC Berkeley Phonology Lab Annual Reports*, 32–54.

- Johnson, Kyle, and Satoshi Tomioka. 1997. Lowering and mid-size clauses. Reconstruction: Proceedings of the 1997 Tübingen Workshop, Universität Stuttgart and Universität Tübingen.
- Kiss, Katalin É. 1998. Identificational focus versus information focus. *Language*, 245-273. Linebarger, Marcia C. 1980. *The grammar of negative polarity*. PhD thesis, MIT.
- Lomashvili, Leila. 2011. *Complex predicates: The syntax-morphology interface*. Amsterdam: John Benjamins.
- Matushansky, Ora. 2006. Head-movement in linguistic theory. *Linguistic Inquiry* 37: 69-109.
- McGinnis, Martha. 1999. A-scrambling exists! *University of Pennsylvania Working Papers in Linguistics*, vol. 6, Article 20.
- Nash, Léa. 2017. The structural source of split ergativity and ergative case in Georgian. In Coon, Jessica, Diane Massam, and Lisa deMena Travis (eds.): *The Oxford Handbook of Ergativity*. Oxford: Oxford University Press.
- Polinsky, Maria, and Eric Potsdam. 2001. Long-distance agreement and topic in Tsez. *Natural Language & Linguistic Theory*, 19(3), 583-646.
- Quine, Willard Van Orman. 1960. Word and Object. Cambridge, Mass.: MIT Press.
- Reinhart, Tanya. 1998. Wh-in-situ in the framework of the Minimalist Program. *Natural language semantics* 6(1), 29–56.
- Rizzi, Luigi. 1997. The fine structure of the left periphery. *Elements of grammar*. Springer, Dordrecht, 281-337.
- Robins, Robert. H, and Natalie Waterson. 1952. Notes on the Phonetics of the Georgian Word. *Bulletin of the School of Oriental and African Studies* 14.1 (1952): 55-72.
- Skopeteas, Stavros, and Gisbert Fanselow. 2010. Focus in Georgian and the expression of contrast. *Lingua* 120:1370-1391.
- Szendrői, Krista. 2003. A stress-based approach to the syntax of Hungarian focus. *The Linguistic Review* 20(1), 37-78.
- Tevdoradze, Izabela. 2005. K'itxviti c'inadadebebis melodik'uri surati kartul salit'erat'uro enaši [Melodic makeup of interrogative sentences in literary Georgian language], *T'ip'ologiuri dziebani [Typological studies]* 5, 85–89.
- Vicenik, Chad, and Sun-Ah Jun. 2014. An autosegmental-metrical analysis of Georgian intonation. In: Jun, Sun-Ah (ed.): *Prosodic Typology II: The Phonology of Intonation and Phrasing*. Oxford: Oxford University Press.
- Vogt, Hans. 1971. Grammaire de la langue géorgienne. Oslo: Universitetsforlaget.
- Watters, John R. 1979. Focus in Aghem: A study of its formal correlates and typology. In: L. Hyman (ed.) *Aghem grammatical structure*, *SCOPiL* 7. Los Angeles: University of Southern California, 137–197.
- Zhghenti, Sergi. 1959. Eksperimental'no-fonetičeskoje izučenije akcentuacii gruzinskogo jazyka [Experimental phonetic study of Georgian accentuation], *Fonetika [Fonetičeskij sbornik]*, vol. I, pp. 69–108, 1959.
- Zhghenti, Sergi. 1963. Kartuli enis rit'mik'ul-melodik'uri st'rukt'ura [The rhythmic-melodic structure of Georgian language], Tbilisi: Mecniereba.

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