## On the inventory of phase heads: Lezgian repetitive in do-support

**Dmitry Ganenkov** 

(University of Bamberg / Institute for Linguistics Russian Academy of Sciences, Moscow)

The paper provides evidence from the interpretation of the repetitive in Lezgian do-support constructions that  $Asp^0$ , not  $v^0$ , behaves as a phase head.

**Problem setting.** Starting from Chomsky's (2001) original work on phases, current theorizing about phases in syntactic derivation often assumes that it is the functional head  $v^0$  that delimits the first (verbal) phase domain from the next (inflectional) phase domain. Recent work on phases, however, has suggested that the phase head might actually be  $Asp^0$  (Bošković 2014, Ramchand and Svenonius 2014). The present paper aims to contribute new empirical evidence to the discussion of phase heads. The evidence comes from Lezgian, a language of the Nakh-Daghestanian family (Caucasus). For a general description of Lezgian grammar see Haspelmath (1993).

**Basics of Lezgian grammar.** The argument involves interaction of three grammatical phenomena in Lezgian. First, Lezgian features a 'do'-support construction, similar to that found in English: in some environments, in addition to the lexical verb responsible for argument structure and transitivity, a semantically empty auxiliary verb 'do' is present which bears most of verbal inflection. Two main formal triggers of the do-support construction are non-indicative negation and V(P)-focus, see example (1).

```
(1) zun ada-z kilig=ni awu-na-č. I(ABS) 3SG-DAT look=ADD do-AOR-NEG 'I did not even look at him.'
```

Second, there are two morphological classes of verbs in Lezgian which, among many other phenomena, differ with respect to their form in the do-support construction. Weak (regular) verbs are in the form of *bare verbal stem* (BVS). Strong (irregular) verbs are in the special form of *periphrastic stem* (PS; only used in the do-support construction). See examples (2) and (3).

- (2) ruš-a q:wan gadar t:-awu-raj. girl-ERG rock(ABS) throw(BVS) NEG-do-JUSS 'Let the girl not throw the rock.'
- (3) ruš-a k:al ac:-un t:-aw-u-raj.
  girl-ERG cow(ABS) milk-PS(PF) NEG-do-PF-JUSS
  'Let the girl not milk the cow.'

The most important difference between the bare verbal stem of weak verbs and the periphrastic stem of strong verbs is that the latter is overtly marked for aspect, whereas the former does not have aspectual marking. See (4) and (5); cf. (2) and (3).

- (4) čn-a q:wan gadar t:-ij-i-n. we-ERG rock(ABS) throw(BVS) NEG-do-IPF-HORT 'Let us not throw the rock.'
- (5) čn-a k:al ac:-an t:-ij-i-n.
  we-ERG cow(ABS) milk-PS(IPF) NEG-do-IPF-JUSS
  'Let us not milk the cow.'

I formalize this distinction in phrase structural terms: the bare verbal stem of weak verbs is lexicalization of vP, whereas the periphrastic stem of strong verbs represents AspP.

Third, Lezgian has the category of repetitive morphologically expressed as a prefix or infix on the verb. Like similar elements in other languages, the repetitive in Lezgian may have two different interpretations: restitutive (low) or repetitive (high). Following existing analyses of repetitives (von Stechow 1996), I assume that different readings arise as a result of different

structural location of the repetitive marker: either on top of VP (ResP) which gives the low restitutive reading, or on top of vP which yields the high repetitive reading. In the do-support construction, many verbs allow the repetitive marker either to be morphologically expressed only on the auxiliary verb 'do' or to be expressed twice on both the lexical verb and the auxiliary.

(6) za stol-dal ktab  $\{e < \gamma > \text{cig}\}$ ec:ig} quwuna. table-ON book(ABS) <REP>put(BVS) put(BVS) REP-do-PF-AOR 'I put the book back on the table.' / 'I put the book on the table for the second time.'

Central fact. I consider the repetitive in do-support constructions and observe interaction of three parameters: (i) semantic interpretation of the repetitive marker (restitutive or repetitive), (ii) the locus of morphological expression of the repetitive (only the auxiliary or both the auxiliary and the lexical verb), (iii) the morphological class of the lexical verb (weak or strong). Nothing interesting is observed in cases when the repetitive appears twice, on the auxiliary and the lexical verb (both readings are available for all verbs). However, a surprising asymmetry between weak and strong verbs is found in case of 'high' location of the repetitive marker (on the auxiliary only). With weak verbs, the repetitive marker has both a restitutive and repetitive reading, (7). With strong verbs, however, it only allows the repetitive, but not restitutive, reading, (8).

- **(7)** za pul ǯibin-da-į aq:ud q-uw-u-na. I(ERG) money(ABS) pocket-IN-ABL pull out(BVS) REP-do-PF-AOR <sup>OK</sup> 'I took the money back out of the pocket.' <sup>OK</sup> 'I took the money out of the pocket for the second time.'
- ada-w-ai (8) q:ač-un q-uw-u-na. za I(ERG) money(ABS) 3SG-AT-ABL take-PS(PF) RE-do-PF-AOR
  - <sup>OK</sup> 'I took the money from him for the second time.'
  - \* 'I took the money back from him.'

Analysis. I suggest that the asymmetry in semantic interpretation of the repetitive should be related to the morphological difference between (stems of) weak and strong verbs in the dosupport construction: the restitutive reading of the repetitive marker is blocked when the lexical verb in do-support is marked for aspect. I propose to analyze this relation between aspect and semantic interpretation of the repetitive in terms of phases: Asp<sup>0</sup> is a phase head and thus acts as a barrier when the repetitive marker is merged above it.

Bare verbs stems of weak verbs are vPs, the auxiliary expresses aspect and other inflectional categories. The repetitive marker is located on the auxiliary and scopes over vP. The whole construction thus has the high repetitive meaning. However, the repetitive marker can also have the low restitutive reading, since both the repetitive and the ResP are in the same Spell-Out domain (complement of AspP) and the repetitive may be interpreted in a lower position, above ResP (I assume that interpretation in a lower position is allowed for a morpheme merged in a higher position, but lay aside the question how this possibility should be implemented technically), see (9).

Periphrastic stems of strong verbs are AspPs. The repetitive is located on the auxiliary and scopes over AspP. The whole construction, again, has the high repetitive reading. The low restitutive interpretation, however, is not available in this case, since by the time the repetitive is merged in the structure, vP (complement of the phase head Asp<sup>0</sup>) has been already sent to Spell-Out and thus cannot be accessed by the repetitive, see (10).

- (9) Repetitive belongs to the same phasal domain as VP: restitutive reading is available [AspP [RepP [vP ERG [VP ABS V] V] Rep] Asp]
- (10) Repetitive and VP belong to different phasal domains: restitutive reading is not available [RepP [AspP [vP ERG [VP ABS V] V] Asp] Rep]