

## The phrasing of lexically unaccented words in Lekeitio Basque

Gorka Elordieta, University of the Basque Country [gorka.elordieta@ehu.es](mailto:gorka.elordieta@ehu.es)

Elisabeth Selkirk, University of Massachusetts Amherst [selkirk@linguist.umass.edu](mailto:selkirk@linguist.umass.edu)

In Lekeitio Basque (LB), a variety of Northern Bizkaian Basque, a lexical distinction is made between words with H\*L tonal accent (A) and words that are unaccented (U). As previous work has shown, the accented status of a word has a significant impact on the phonological phrase ( $\varphi$ ) organization of the sentence in LB. We will review evidence establishing the empirical generalization that LB shows *a systematic absence of phonological phrases that consist only of unaccented words*. The presence of a LH boundary rise at the left edge of a word indicates that the word is  $\varphi$ -initial, as seen in the facts of (i) the two-word genitive NP paradigm in (1), with its [AA], [UA], [AU], [UU] combinations (Jun & Elordieta 1997, Elordieta & Selkirk 2010), (ii) the all-U sentences in (2) (Unamuno & Elordieta 2015), and (iii) the new data in (3). A provisional step towards an OT account would be to posit a prosodic markedness constraint “No U-only  $\varphi$ .” Ranking it above the syntactic-prosodic constituency correspondence constraint Match (LexP,  $\varphi$ ), which calls for syntactic phrases to correspond to  $\varphi$  in prosodic structure (Selkirk 2011), would account for the absence of U-only phonological phrases: “No U-only  $\varphi$ ”  $\gg$  Match (LexP,  $\varphi$ ).

The new data to be presented consists of 5-word sentences that contain a single lexically unaccented (U) noun in medial position. The U noun and the accented A nouns that precede and follow are organized into a verb-final sentence which varies in the location of the U noun within the hierarchical syntactic structure. The syntactic structures in this data set are varied so that in (3a) the U is the final element of a sentence-initial three-word NP argument: [A [A U] ] [ A verb]. In (3b) the U is initial in a two-word NP argument of the verb: [A A] [[U A] verb], and in (3c) the U itself constitutes a NP argument that is preceded and followed by other NP arguments of the verb: [A A] [ U [ A verb] ]. Each A and U here is a syntactic phrase itself (see references in Elordieta 2015). [For readability’s sake, these phrasal brackets are not written here in the text, but are present on the next page.]

Three speakers of Lekeitio Basque recorded four repetitions of five tokens of each of the three sentence types in (3). The distribution of LH left-edge boundary rises shows clearly that in cases (3a) and (3b) the U and its sister A within the NP are organized, respectively, into the ((A) U) and (U A)  $\varphi$ -structures that have been previously observed for such NPs, as in (1). As for the sentence type in (3c), the data shows that the two NP object arguments [U] and [A] join in a single phonological phrase (UA). Again, it is the impossibility for a  $\varphi$  to consist only of U-word material—“No U-only  $\varphi$ ”-- that drives the nonisomorphic phrasing.

However, “No U-only  $\varphi$ ” cannot account for a remaining fact concerning the prosodic impact of unaccentedness in LB: a contrastively focused U-word shows no special phonetic prominence at all, though a contrastively focused A-word shows greater phonetic prominence than it would if not focused (Elordieta 2007). On the assumption that the phonetic F0 prominence of contrastive Focus is the consequence of its abstract prosodic head prominence (Katz & Selkirk 2011), U-words can simply be understood as unable to bear any phrasal prosodic head prominence, due to the constraint Prom- $\varphi$ :Tone “Head prominence of  $\varphi$  requires tone” (cf. Elordieta & Selkirk 2012). That is, Prom- $\varphi$ :Tone, along with the constraint ProsProm- $\varphi$ , which requires that any  $\varphi$  be prosodically headed, render the stipulative constraint “No U-only  $\varphi$ ” superfluous: the absence of U-only  $\varphi$  in LB can instead

be explained by independently motivated constraints that appear in the following language-particular constraint ranking: ProsProm- $\phi$ , Prom- $\phi$ :Tone >> Match (LexP,  $\phi$ ).

- (1) a. i.  $NP[NP[A]] \quad NP[A]$  ii.  $\phi(\phi(A) \phi(A))$   
 $NP[NP[Amáyen]] \quad NP[liburúa]$   $\phi(\phi(^{LH}Amá^{H^*L}yen) \phi(^{LH}liburú^{H^*L}a))$   
Amaya-gen book-abs 'Amaya's book'
- b. i.  $NP[NP[U]] \quad NP[U]$  ii.  $\phi(U U)$   
 $NP[NP[lagunen]] \quad NP[dirua]$   $\phi(^{LH}lagunen \ dirua)$   
friend-gen money-abs 'the friend's money'
- c. i.  $NP[NP[U]] \quad NP[A]$  ii.  $\phi(U A)$   
 $NP[NP[lagunen]] \quad NP[amúma]$   $\phi(^{LH}lagunen \ amú^{H^*L}ma)$   
friend-gen grandmother-abs 'the friend's grandmother'
- d. i.  $NP[NP[A]] \quad NP[U]$  ii.  $\phi(\phi(A) U)$   
 $NP[NP[Amáyen]] \quad NP[dirua]$   $\phi(\phi(^{LH}Amá^{H^*L}yen) \ dirua)$   
Amaya-gen money-abs 'Amaya's money'
- (2) a. i.  $NP[NP[U]] \quad NP[U] \quad NP[NP[U]] \quad NP[U] \quad verb$   
 $NP[NP[lagunen]] \quad NP[amari] \quad NP[NP[nebien]] \quad NP[umia] \quad gustaten \ dxáko$   
friend-gen mother-dat brother-gen child-abs like aux  
'The friend's mother likes the brother's child'
- ii.  $\phi(U U U U)$   
 $\phi(^{LH}lagunen \ Amari \ nebien \ umia^{H^*L})_{\phi} \ gustaten \ dxáko$
- b. i.  $NP[NP[U]] \quad AdjP[U] \quad NP[NP[U]] \quad AdjP[U] \quad verb$   
 $NP[[[abade]_{NP} \ AdjP[onari]]] \quad NP[[[madari] \ AdjP[biguna]]] \quad saldu \ dotzo$   
priest good-dat pear soft-abs sell aux  
'(S)he has sold the soft pear to the good priest'
- ii.  $\phi(U U U U)$   
 $\phi(^{LH}abade \ onari \ madari \ biguna^{H^*L})_{\phi} \ saldu \ dotzo$
- (3) a. i.  $NP[NP[NP[A]] \ NP[A]] \ NP[U] \quad VP[NP[A] \ verb]$  ii.  $\phi(\phi(A) \phi(\phi(A) U)) \phi(\phi(A) \ verb)$   
Mirénen lagúnen alabia labanderíra jun da  $\phi(\phi(^{LH}A^{H^*L}) \phi(\phi(^{LH}A^{H^*L}) U)) \phi(\phi(^{LH}A^{H^*L}) \ verb)$   
(N) Gen. (N) Gen.Pl. (N) Abs. (N) Adl. Verb aux  
Miren friends daughter laundry go aux 'Miren's friends' daughter has gone to the laundry.'
- b. i.  $NP[NP[A]] \ NP[A] \quad [NP[NP[U]] \ NP[A]] \ verb]$  ii.  $\phi(\phi(A) \phi(A)) \phi(\phi(UA) \ verb)$   
Mirénen lagúnak alabien medállak hartun dábez  $\phi(\phi(^{LH}A^{H^*L}) \phi(^{LH}A^{H^*L})) \phi(\phi(^{LH}U \ A^{H^*L}) \ verb)$   
(N) Gen. (N) Erg.Pl. (N) Gen. (N) Abs.Pl. Verb aux  
Miren friends daughter medals take aux 'Miren's friends have taken the daughter's medals.'
- c. i.  $NP[NP[A]] \ NP[A] \quad AppIP[NP[U]] \quad VP[NP[A] \ verb]$  ii.  $\phi(\phi(A) \phi(A)) \phi(\phi(UA) \ verb)$   
Iráiden lagúnak alabiari bideúak erregala dótze  $\phi(\phi(^{LH}A^{H^*L}) \phi(^{LH}A^{H^*L})) \phi(\phi(^{LH}U \ A^{H^*L}) \ verb)$   
(N) Gen. (N) Erg.Pl. (N) Dat. (N) Abs.Pl. Verb Aux  
Iraide friends daughter videos give aux 'Iraide's friends have given videos to the daughter.'