Prosodic marking of syntactic heads

On post-head pitch compression in Turkish

GÜLIZ GÜNEŞ

University of Groningen

03.07.2013

In Turkish – a head-final, SOV language – constituents that are reordered to a position that follows the verb cannot receive prosodic prominence (this is *post-verbal pitch compression*, or *PVPC*). This observation has been discussed in the literature in terms of syntax, prosody, and information structure (Erguvanlı 1979, 1984, Kural 1997, Göksel 1998, Göksel and Özsoy 2000, Özge 2003, Kornfilt 1998, 2005, Özge and Bozşahin 2010, Güneş 2013a, b, *i.a.*) (1).[1]

(1)   a. $((\text{Ali})_\Phi \quad (\text{OKUL-A}_N \quad \text{git-ti})_\Phi)_\iota$
              Ali   school-DAT go-PST
              'Ali went to school.'

    b.   GITTI Ali okula.

    c.   ALI gitti okula.

    d. * Gitti Ali OKULA.

    e. * Gitti ALI okula.

From a prosodic perspective, the utterance in (1a) is an intonational phrase (ι), in which the N-marked constituent (the *nucleus*) is the prosodically prominent item of the utterance. From a syntactic perspective, the sentences in (1) are root clauses, with a finite verb as their lexical syntactic head. For the cases of (1b) and (1c), the ban on pitch prominence on the reordered items is considered as an indication of the informational structural status of these items (i.e. discourse given topics/ background, etc.).

Unnoticed in the previous literature is that the same prohibition on prominence-assignment is attested in phonological phrase (Φ) level prosodic constituents that are mapped from non-finite CPs, NPs, certain APs, possessive phrases, certain postpositional phrases, etc. Specifically, any XP that allows rightward reordering (reordering to the right of their head) is subject to obligatory

---

[1] SMALL CAPS denotes prosodic prominence on the ι and/or Φ level, N denotes sentence level nuclear prominence, square brackets denote syntactic constituency, regular brackets denote prosodic constituency and smaller fonts denote pitch compression.

pitch compression on their reordered constituents. Thus, PVPC is an instantiation of a broader phenomenon, *post-**head** pitch compression* (PHPC), which is not only observed in ɩ-level prominence-marking, but also in Φ-level prominence relations.

(2)   *Nominalized clauses*[2]   (where boldface denotes a syntactic **head**)

    a. [NOM-CLDers-i-ne **çalış-an**]   çocuk sınıf-ı   geç-er.
        lesson-POSS-DAT   study-NOM child class-ACC pass-AOR
        'The child who studies his/her homework passes the class.'

    b. ((**ÇALIŞ-AN** ders-i-ne   çocuk)Φ   (sınıf-ıN   geç-er)Φ)ɩ.
        study-NOM lesson-POSS-DAT child   class-ACC pass-AOR
        'The child who studies his/her homework passes the class.'

    b´. * ((**Çalış-an**   DERS-İ-NE   çocuk)Φ   (sınıf-ıN   geç-er)Φ)ɩ.
         study-NOM lesson-POSS-DAT   child   class-ACC pass-AOR
         'The child who studies his/her homework passes the class.'

(3)   *Possesive constructions*

    a. [ALI-NIN **kitab-ı-nı**]   ev-eN   getir-di.
        Ali-GEN   book-POSS-ACC home-DAT   bring-PST
        'He brought Ali's book home.'

    b. ((**KITAB-I-NI**   Ali-nin)Φ   (ev-eN   getir-di)Φ)ɩ.
        Book-POSS-ACC Ali-GEN   home-DAT bring-PST
        'He brought Ali's book home.'

    b´.* ((**Kitab-ı-nı**   ALI-NIN)Φ   (ev-eN   getir-di)Φ)ɩ.
        Book-POSS-ACC Ali-GEN   home-DAT bring-PST
        'He brought Ali's book home.'

(4)   *Clausal coordination*

    a. [Ali ev-e   gel-**ip**]   elma-yı   ye-di.
        Ali home-DAT come-CONVERB apple-ACC   eat-PST
        'Ali came home, and ate the apple. '

    b. ((**GEL-IP**   ev-e   Ali)Φ, (elma-yıN ye-di)Φ)ɩ.
        come- CONVERB home-DAT Ali   apple-ACC eat-PST

---

[2] In (2), the head to which I refer is not the head of the relative clause construction (in this case, *çocuk* 'child') but the head of the modifying clause (i.e. the nominalized verb). In constructions like (2), the nominalized clause (or a constituent thereof) cannot reorder to the right *çocuk*.

'Ali came home, and ate the apple. '

b´. * ((Gel-**ip** EV-E Ali)_Φ, (elma-yı_N ye-di)_Φ)_ι.
    come- CONVERB home-DAT Ali apple-ACC eat-PST
    'Ali came home, and ate the apple. '

(5) *Adverbial Clauses*

a. [Ali ev-e gel-**ince**] elma-yı_N ye-di.
    Ali home-DAT come- CONVERB apple-ACC eat-PST
    'When Ali came home, he ate the apple.'

b. ((Ali GEL-**INCE** ev-e)_Φ (elma-yı_N ye-di.)_Φ)_ι
    Ali come- CONVERB home-DAT apple-ACC eat-PST
    'When Ali came home, he ate the apple.'

b´. * ((Ali gel-**ince** EV-E)_Φ (elma-yı_N ye-di.)_Φ)_ι
    Ali come- CONVERB home-DAT apple-ACC eat-PST
    'When Ali came home, he ate the apple.'

(6) *Partitive constructions*

a. [Elma-lar-dan **yedi tane-si**] çürük_N çık-tı.
    apple-PL-ABL seven piece-POSS rotten come.out-PST
    'Seven of the apples turned out to be rotten.'

b. ((**YEDI tane-si** elma-lar-dan)_Φ (çürük_N çık-tı.)_Φ)_ι
    seven piece-POSS apple-PL-ABL rotten come.out-PST
    'Seven of the apples turned out to be rotten.'

b´. * ((**Yedi tane-si** ELMA-LAR-DAN)_Φ (çürük_N çık-tı.)_Φ)_ι
    seven piece-POSS apple-PL-ABL rotten come.out-PST
    'Seven of the apples turned out to be rotten.'

(7) *Noun Phrases with certain adjectival modification*

a. Ali [ev-de-ki **elma-lar-ı**] Aylin-e ver-di.
    Ali home-LOC-*ki* apple-PL-ACC Aylin-DAT give-PST
    'Ali gave Aylin the apples at home.'

b. ((Ali)_Φ (**ELMA-LAR-I** ev-de-ki)_Φ (Aylin-e_N ver-di.)_Φ)_ι
    Ali apple-PL-ACC home-LOC-*ki* Aylin-DAT give-PST
    'Ali gave Aylin the apples at home.'

b´. * ((Ali)_Φ(**elma-lar-ı** EV-DE-KI)_Φ (Aylin-e_N ver-di.)_Φ)_ι
    Ali apple-PL-ACC home-LOC-*ki* Aylin-DAT give-PST

'Ali gave Aylin the apples at home.'

(8)   *Post-positional phrases*

   a. [Kapı-dan **içeri-ye**]   Ali-nin anne-si   gir-di.
       door-ABL inside-DAT Ali-GEN mother-POSS enter-PST
       'Ali's mother has entered from the door.'

   b. ((**IÇERI-YE** kapı-dan)$_\Phi$ (Ali-nin)$_\Phi$(anne-si$_N$ gir-di.)$_\Phi$)$_\iota$
       inside-DAT door-ABL   Ali-GEN   mother-POSS enter-PST
       'Ali's mother has entered from the door.'

   b´. *((**Içeri-ye**   KAPI-DAN)$_\Phi$(Ali-nin)$_\Phi$(anne-si$_N$ gir-di.)$_\Phi$)$_\iota$
       inside-DAT door-ABL Ali-GEN   mother-POSS enter-PST
       'Ali's mother has entered from the door.'

The data show that, PVPC is only an instance, on the level of ι, of a more general law of pitch compression. In light of this novel observation, previous explanations of the PVPC that cannot be extended to cover PHPC must be abandoned or revised.[3] Whether the obligatory pitch compression is directly related to information structural status of the items that are reordered to the right of their heads; or the compression is primarily because of the linear distribution of these items with respect to their syntactic heads are issues that require further investigation.

   Also, languages other than Turkish that display PVPC should be examined to discover whether, in these languages, PVPC is only an instantiation of PHPC on the level of ι or the Φ.

   The observation that the formation of prosodic constituents within certain languages is strictly related to the linear order of the constituents with respect to their syntactic heads will hopefully shed more light on our understanding of the syntax-prosody mapping mechanisms. Furthermore, this phenomenon may be employed to diagnose syntactic heads.

   Overall, the fact that constituents cannot receive pitch prominence when they are reordered to the right is a topic that requires further inquiry in terms of syntax, prosody, and information structure.

---

[3] Specifically, syntactic accounts that treat the post-verbal position as related to a high syntactic functional projection reserved for [+topic]-marked constituents (such as Kural 1997; Kornfilt 1998, 2005, among others) must be amended. To see why, consider (3) above. (3a) is a congruent answer to question like *Ali'nin kitabını nereye getirdi?* 'Where did he bring Ali's book?'; where *eve* 'to home' is the focus, and *Ali'nin kitabı* 'Ali's book' is backgrounded. In (3b), reordering occurs within the phrase *Ali'nin kitabı*. This reordering cannot be triggered by a desire to check [+topic]-features, as the phrase [*Ali'nin kitabı*]$_{TOPIC}$ has no focus-background structure of its own: it contains no focus, and thus, no topic.

References

Erguvanlı, E. 1979. *The function of word order in Turkish grammar*. Ph.D. Thesis. UCLA.

Erguvanlı, E. 1984. *The function of word order in Turkish grammar*. Berkeley: University of California Press.

Göksel, A. 1998. Linearity, focus and the postverbal position in Turkish. In: Johanson, L. (Ed.), *The Mainz Meeting Proceedings of the Seventh International Conference on Turkish Linguistics*. Harrassowitz Verlag, Wiesbaden. pp. 85–106.

Göksel, A. & Özsoy, S. 2000. Is there a focus position in Turkish? In: Göksel, A., Kerslake, C. (Eds.), *Studies on Turkish and Turkic Languages; Proceedings of the Ninth International Conference on Turkish Linguistics*. Harrassowitz, Wiesbaden, pp. 219–228.

Güneş, G. 2013a. Limits of Prosody in Turkish. In *Dilbilim Araştırmaları Dergisi* 2013/1 "*Updates in Turkish Phonology*" (special issue, edited by Eser Erguvanlı Taylan)

Güneş, G. 2013b. On the Role of Prosodic Constituency in Turkish. In: Özge, U. (Ed.), *The Proceedings of Workshop on Altaic Formal Linguistics 8*. Cambridge: MITWPL.

Kornfilt, J., 1998. On rightward movement in Turkish. In: Johanson, L. (Ed.), *The Mainz Meeting Proceedings of the Seventh International Conference on Turkish Linguistics*. Harrassowitz   Verlag, Wiesbaden, pp. 107–123.

Kornfilt, J. 2005. Asymmetries between pre-verbal and post-verbal scrambling in Turkish. In: Sabel, J. & Saito, M. (Ed.), *The free word order phenomenon: its syntactic sources and diversity*. Mouton de Gruyter: Berlin. pp. 163-181.

Kural, M. 1997. Postverbal Constituents in Turkish and the Linear Correspondence Axiom," *Linguistic Inquiry* 28, 498-519.

Özge, U. 2003. *A tune-based account of Turkish information structure*. MA thesis, Middle East Technical University.

Özge, U. & Bozşahin, C. 2010. Intonation in the grammar of Turkish. In *Lingua*, 120:132-175.