Cyclically Conditioned Prosodic Constituency in Gyalsumdo and beyond
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Background This paper puts forward a new approach to the phonology-syntax interface, on the basis of data from the Gyalsumdo language, a largely undocumented Tibetan language of Nepal. Recent work in the phonology-syntax interface can be divided into two main approaches, which may be called the ‘cyclic’ approach and the ‘prosodic’ approach. ‘Cyclic’ approaches tend to assume a relatively ‘flat’ phonological structure (Pak 2008, Scheer 2008 D’Alessandro and Scheer forthc.), attributing the role traditionally played by higher prosodic constituents in defining phonological locality domains to phase domains created by cyclic syntactic Spellout (Chomsky 2000, 2001). ‘Prosodic’ approaches, on the other hand, retain the traditional prosodic hierarchy of Nespor and Vogel (1986) (albeit somewhat modified – see e.g. Ito and Mester 2013) and define locality domains for phonological processes in terms of prosodic constituents. These approaches also tend to take the complete syntactic derivation as the input to mapping processes, meaning that any role of the cyclic domains of syntax in delimiting these locality domains must be independently stipulated, for instance by violable OT constraints which map phase domains to prosodic constituents (see e.g. Selkirk 2009, 2011, Cheng and Downing forthc.).

Proposal I propose an alternative to these two approaches, and adopt a framework where prosodic constituents do delineate locality domains for phonological processes, but where these constituents are built up cyclically. Although prosodic constituents under this approach do are conditioned by the syntactic cycle, they need not be precisely isomorphic to phase domains. As an example I consider the structure of lexical category items (henceforth LCIs) items in Gyalsumdo. Gyalsumdo nouns and adjectives are, in general (and universally in the case of adjectives) bipartite, consisting of a root and a categoriser:

(1) Nouns   Adjectives
 tá-bu ‘horse’ kðág-bu ‘cold’
√horse-NMZ √cold-ADJ
dða-mu ‘chicken’ kól-ma ‘hot’
√bird-NMZ √boil-ADJ

These items are suggestive of the structure of lexical items assumed by Distributed Morphology accounts of word-structure, under which all LCIs are assumed to be bipartite, containing a root and a categorising functional head, which are combined during the course of the syntactic derivation (Marantz 1997 et. seq.) These are argued to constitute syntactic phases (Marantz 2001, Marvin 2002 et. seq.), with the categoriser acting as phase head. This kind of structure presents a challenge to the ‘cyclic’ approaches discussed above – if these bipartite items constitute a phase, then the root constitutes phase domain. If phonological locality domains correspond directly to phase domains, we expect the root and its categoriser to stand in different locality domains for the purposes of phonological processes. However, this is not the case: returning to the Gyalsumdo examples above, the root and categoriser not only fall into the same locality domain (ϕ) for the purposes of a tone deletion process, but also form a smaller locality domain (p) for the purposes of metrification, to the exclusion of subsequent elements of the tone-deletion domain.

(2) (ϕ (p bì-dza) dàŋ) (q (ϕ bò-mo) go la)
√boy-NMZ and √girl-NMZ DEF DAT

This problem is solved if we propose that there are prosodic constituents constructed in a cyclic manner which may extend beyond the phase domain. I assume (with e.g. Arregi and Nevins 2012) that there exist processes (such as linearisation processes) which apply before the operation of Vocabulary Insertion. We can observe that such operations may apply to the phase edge (including the head) without effecting its role as a syntactic escape hatch. I propose that prosodification is one of these processes, and that it applies cyclically to the whole phase, including the edge, and not just the phase domain. This allows us to construct prosodic constituents which (for instance) contain
both the root and the categoriser of LCIs. We can refine this analysis by considering the conditions under which a constituent constructed in one phase may be modified in the next. I propose that the application of VI divides a constituent into two: an interior, which undergoes VI and may not be modified by cyclic operations in subsequent phases, and an exterior, which does not undergo VI, and is modifiable. This accounts for the distribution of tone deletion domains in Gyalsumdo – the categoriser at the right edge of a LCI lies in the exterior of the domain, and so the domain may be modified at this edge. The root at the left edge constitutes the interior, so this edge is fixed. This account explains the fact (exemplified by (2)) that roots always stand at the left edge of any phonological domain in Gyalsumdo. The processes are outlined as follows:

(3) Cyclic Construction of Constituents

<table>
<thead>
<tr>
<th>Inner Phase:</th>
<th>Input:</th>
<th>Output:</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>[nɔ́ ˈgirl n]</td>
<td>( quotas bò n) [interior of φ italicised]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outer Phase:</th>
<th>Input:</th>
<th>Output:</th>
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<tbody>
<tr>
<td></td>
<td>[( quotas bò n) D K]</td>
<td>( quotas bò mo go [la]) ‘to the girl’</td>
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The approach adopted here allows us to explain two cross-linguistic observations without further stipulation: the generalisation which Truckenbrodt (1999) calls the Lexical Category Condition: that prosodic alignment must make reference to LCIs but not functional items. It also allows us to capture a generalisation that is observed but not explained by Nespor and Vogel (1986) – that phonological phrases tend to only contain functional items on the ‘recursive’ side of a given lexical item – that is, on the right in head-final languages and the left in head-initial languages. This follows in our framework from the direction of linearization of the phase head relative to the phase domain – the modifiable exterior is always on the same side of the domain as the categorising phase head.

References


