Whose domain is this anyway? Few notes on allomorphy, allosemy and morphophonology in compounds

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Abstract

In this squib I review the locality domains of contextual allomorphy, contextual allosemy and morphophonology with a special emphasis on compounds. I show that when the applications of these processes within compounds are compared, we observe a double dissociation of the domain of contextual allomorphy and contextual allosemy, on one hand, and morphophonology on the other. I argue that the mismatches in the domains in question lie in the timing of the operations where operations applying prior to vocabulary insertion are constrained by cycles/phases, whereas operations applying after vocabulary insertion are constrained by extended projections. Under such approach, all of these processes will make reference to the same morphosyntactic structure although their domains will be marked by different points in that same structure.

1 Introduction

In the study of contextual allomorphy/allosemy, i.e., selection of form at PF and meaning at LF, and morphophonology, i.e., morposyntactically covered phonological changes to the selected form, the general assumption has been that the two types of processes are constrained by the same locality restrictions (see, e.g., Embick 2010, Moskal 2015).¹ However, when the two types of processes are compared, and their

¹Note that here I use the term morphophonology to refer to both what has been called readjustment as well as processes that are more phonological in nature but still make reference to the morphosyntactic structure. Although these processes differ in terms of application (see, e.g., Embick 2010:97ff), they do appear to be subject to the same locality restrictions.
applications in single-stem words are juxtaposed with their applications in compound words, the evidence starts pointing to a double dissociation between the two locality domains.

In this paper, I examine contextual allomorphy/allosemoy and morphophonology with a special focus on their applications in compounds crosslinguistically. The data presented point to morphophonology being restricted by the extended projection of the root (Harðarson 2016), whereas contextual allomorphy appears to be constrained by cycles/phases (cf. Bobaljik 2000, 2012, Embick 2010, Moskal 2015). This distinction allows morphophonology to apply across boundaries that contextual allomorphy cannot, and vice versa. The distinction follows straightforwardly from the timing of the relevant processes, i.e., processes applying prior to vocabulary insertion (VI) seem to be constrained by the cyclic domains mentioned above, and processes following VI make reference to extended projections. Furthermore, post-VI processes then apply first within the extended projection and then between two extended projections.

The paper is organized as follows: In section 2, I provide a brief overview of the locality domains in question and the types of interactions predicted to be possible or impossible. In section 3, I discuss contextual allomorphy and contextual allosemoy in the context of compounds. In section 4, I discuss morphophonology and its application in both single-stem words and compounds. In section 5, the main findings of this paper will be summarized and directions for future research sketched out.

2 Domains

Contextual allomorphy and morphophonology have typically been assumed to be subject to the same locality restrictions (, e.g., Embick 2010, Moskal 2015), and with good reason as the locality domains of the various phenomena have typically appeared to line up. However, different proposals have been made with respect to the size of the domain in question, (1). Note that it is not my intention to argue for or against any of the three domains in question. The purpose here is to explore the predictions made by these proposals with respect to the compound structure and whether or not they can account for the various processes that occur between elements within compounds. The data discussed below are (for the most part) consistent with any of the three domains discussed below.

Focussing on the triggers visible to the root, one of the more restrictive ones proposed, Bobaljik (2012) maintains that the domain of contextual allomorphy of the root can only be triggered within the first category node. Moskal (2015) maintains that the domain for triggering suppletion extends to the first node above the first cyclic (category defining) node. Embick (2010) argued that the domain of suppletion is marked by a second cyclic node and hence any node below v in (1) is visible to the root as long as no overt element intervenes.
Each of these three proposals makes different predictions with respect to restricting the domain of application within compounds. Consider a structure such as (2) (following Harðarson 2016, 2017). Under Bobaljik (2012), only the heads $\varphi_3$ and $n_2$ are predicted to interact with outside elements. Under Moskal (2015), the domain of influence extends further into the non-head elements, i.e., down to $\sqrt{\text{ROOT}_2}$ and $n_3$. And finally, under Embick (2010) any part of any element is potentially visible, granted no overt morpheme intervenes.

Harðarson (2016, 2017), however, argues that morphophonology is not subject to the same locality restrictions as contextual allomorphy. Under that approach, the domain of morphophonology is marked by the highest functional projection in the extended projection of the root. Hence, in compounds, the extended projection of the head root contains smaller domains that are predicted to be inaccessible to elements outside of that domain. Although the domain of the head root spans the entire head in (2), the non-head elements will form a domain to themselves (the shaded areas).

Harðarson’s approach also diverges from all three of the previously discussed proposals with respect to single stem words in that it predicts that the domain of mor-
Phonology can in fact span the entire structure in (1). Hence the prediction is that within an extended projection of a root, morphophonology is predicted to cross boundaries that contextual allomorphy/allostery cannot and, likewise, contextual allomorphy is predicted to apply between two extended projections in a compound, which morphophonology cannot. We will see in the following sections how this prediction is borne out.

3 Selection of Form and Meaning

In this section I examine the interaction of elements in terms of both contextual allomorphy and contextual allostery within compounds. The processes in question can both be conditioned by the compound structure in general and also be sensitive to the elements making up the compound. In order for this to be possible, however, compounding must take place prior to vocabulary insertion and, furthermore requires the non-head elements to be syntactically active following their merger with the head and to not have undergone spellout prior to compounding. This hence runs counter to proposals that rely on late adjunction where the modifiers would have to be spelled out prior to merging with the head (see, e.g., Piggott & Travis 2013, building on Nunes & Uriagereka 2000). Under such an approach contextual allomorphy is predicted to be impossible. Note that the interactions observed appear to be highly local in nature, and they do appear to be (for the most part) consistent with all three locality domains shown in (1).

3.1 Contextual Allomorphy

The compound structure can also serve as context for suppletive allomorphy. In Bosnian, nominalizations require an overt nominalizing suffix outside of compounds, (3b). Corresponding $\emptyset$-nominalizations are not grammatical, (3c). When these nominalizations serve as heads of a compound structure, the nominalizing head becomes obligatory null, (4).\(^2\) It is worth noting that it is not clear at this point whether the non-head elements in these examples are properly analyzed as bare or categorized roots.

\[(3)\]
\begin{align*}
\text{a. } & \text{hoda- ti} & \text{b. } & \text{hod- anje} & \text{c. } & \text{*hod- } \emptyset \\
\text{walk- INF} & \text{walk- n} & \text{walk- n} & \text{walk- n} \\
\text{‘to walk’} & \text{‘walking’} & \text{} & \text{}
\end{align*}

\[(4)\]
\begin{align*}
\text{a. } & \text{mimi- o# hod- } \emptyset & \text{b. } & \text{*mimi- o# hod- anje} \\
\text{by/past- L# walk- n} & \text{by/past- L# walk- n} & \text{by/past- L# walk- n} & \text{by/past- L# walk- n}
\end{align*}

\(^2\)Bosnian examples were provided by Aida Talić, p.c.
This pattern extends to other compounds with deverbal heads.

(5)  
a. žder- onja/*∅  
devour- n  
‘devourer’  
b. vod- enje/*∅  
lead- n  
‘leading’  
c. ljud- o#žder- ∅/onja  
people- L# devour- n  
‘man eater’  
d. dalek- o#vod- ∅/enje  
far- L# lead- n  
‘powerline’

This pattern is also attested in Russian (Jonathan Bobaljik, Ksenia Bogolomets, p.c.).

(6)  
a. vod-itel/*∅  
lead-n  
‘leader’  
b. ekskursa#vod-∅  
tour#lead-n  
‘tour leader’

These examples bear a striking resemblance to V-N compounds in Romance where the nominalizing head is never realized in a compound structure, (7). Note that the order of the head and modifier is reversed (cf. Beard 1995).

(7)  
French, (adapted from Snyder 2016:95–96)  
a. lave- ∅/eur#vaiselle  
wash- n#dishware  
‘dishwasher’  
b. lav- eur/*∅ de vaiselle  
wash- n of dishware  
‘washer of dishes’

The compound structure hence appears to not only condition allomorphy on the head of the compound, but, as we saw in Bosnian and Russian, it is possible for the presence of a non-head element in the compound structure to condition a null allomorph of the nominalizer across the root. This indicates that linear adjacency is not a necessary factor in conditioning allomorphy.

The compound structure can also serve as context for allomorphy of the non-head. In Bosnian, the noun čovjek-, ‘man’, is suppletive for number, where the plural form of the noun is ljud-., ‘people’. The plural form is also obligatory in (certain) compounds, although no plural marking is observed.

(8)  
a. ljud-o#žder-∅  
people#devour-n  
‘man eater’  
b. *čovjek-o#žder-∅  
man#devour-n

Although it is not entirely clear at this point whether these elements are properly analyzed as root-root or stem-stem compounds, these examples show that compounding must take place prior to vocabulary insertion and both elements must be syntactically active.

The picture becomes even clearer in Dutch, where linking morphemes occur exclusively with nominal stems and their selection is typically determined by the non-head
element (Krott et al. 2001, 2002, De Belder 2017). There are, however, cases where the choice of a linking morpheme is determined by the head of the compound.

(9) a. schaap-en#tong    b. schaap-s#kooi      c. schaap#herder
     sheep-L#tong        sheep-L#fold        sheep#herder
     ‘sheep’s tongue’    ‘sheep fold’       ‘shepherd’

Note that unlike many of the processes discussed in this paper, the alternations in (9) are not conditioned by the compound structure alone, but makes reference to the identity of the head itself. I assume, following Fenger & Harðarson (2018), that the linking morpheme is a realization of features on $n$, and since the undergoer is structurally peripheral within the non-head element, this effect is compatible with any of the domains in (1).

Icelandic allows non-head elements in compounds containing additional material outside of $n$, i.e., case and number. As argued in Harðarson (2016) inflected non-head elements are structurally peripheral to uninflected non-heads. However, a certain class of strong neuter nouns cannot appear with an overt genitive marker in compounds despite being appearing structurally peripheral to inflected modifiers. The following examples are taken from Harðarson (2017:56).

(10) a.  hör#[vas-a#klútur]
        flaxSTEM#pocket-GEN#cloth
        ‘linen handkerchief’

       b.  tré#[penn-a#standur]
           treeSTEM#pen-GEN#stand
           ‘wooden pen stand’

(11) a.  *hör-s#[vas-a#klútur]
          flax-GEN#pocket-GEN#cloth
          ‘linen handkerchief’

       b.  *tré-s#[penn-a#standur]
           tree-GEN#pen-GEN#stand
           ‘wooden pen stand’

The crucial clue comes from the stem tré- ‘tree’ which has the default form trjá-. The default form surfaces in dative and genitive plural, trjá-m and trjáa and both forms appear in compounds, as is shown in (12) below.

(12) a.  tré#froskur
        tree#frog
        ‘wooden frog/tree frog’

       b.  trjá#froskur
           tree#frog
           ‘tree frog’

However, when the form tré- in (11b) is replaced with the default form trjá-, as in (13), a right branching structure becomes impossible.

3Note that the compounds in (10) are, in principle, ambiguous between right and left branching interpretations.
These asymmetries in the distribution of tré- and trjá- and the general distribution of inflected and uninflected non-head elements in Icelandic, indicate strongly that the leftmost elements in (10) do in fact contain a null genitive marker. The compound structure seems then to condition a null allomorph of the genitive suffix in these cases, and, in turn, contextual allomorphy can then apply across boundaries that morphophonology cannot (see section 4).

In summary, the data presented here appear to be consistent with all of the three locality domains mentioned in section 2. In both Icelandic and Dutch, the affected morphemes are on the peripheries of the non-head elements and it remains to be seen whether the slavic compounds involve stem or root compounding.

### 3.2 Contextual Allosemy

In addition to the selection of VIs at PF, Marantz (2013), i.a., has argued that an analogous choice of meaning occurs at LF, which is constrained by the same locality domains as contextual allomorphy. Marantz (2013) discusses, e.g., the case of the root globe, which has two possible meanings, i.e., ‘the world’ or ‘spherical object’. This ambiguity is lost when an adjective is formed of the root, leaving only the ‘world’ meaning and the ambiguity is then unavailable in all subsequent derivations. Marantz (2013:115, n7) mentions that for some speakers, the ambiguity is maintained in the presence of -al, however, these speakers lose the ambiguity in the context of -ize and any subsequent derivations.

(14)  

<table>
<thead>
<tr>
<th>a.</th>
<th>globe</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>‘the world’/‘spherical object’</td>
</tr>
<tr>
<td>b.</td>
<td>glob-al</td>
</tr>
<tr>
<td></td>
<td>‘pertaining to the world’/‘spherical’</td>
</tr>
<tr>
<td>c.</td>
<td>glob-al-ize</td>
</tr>
<tr>
<td></td>
<td>‘make worldwide’/‘make something spherical’</td>
</tr>
</tbody>
</table>

By further examining the root globe, we observe the same limitations to the choice of meaning in different compounds, i.e., that the choice of meaning appears to be conditioned by the head of the compound, (15).

(15)  

<table>
<thead>
<tr>
<th>a.</th>
<th>globe#trotter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>‘world traveller’</td>
</tr>
<tr>
<td>b.</td>
<td>globe#smasher</td>
</tr>
<tr>
<td></td>
<td>‘smasher of spherical objects’</td>
</tr>
</tbody>
</table>

Following Marantz (2013) in assuming that the domain of contextual allosemy is
the same as the domain of contextual allomorphy, the examples in (15) appear to be compatible with all three locality domains mentioned in (1). It is worth noting, however, considering that for some speakers the meaning of *globe* is not fixed at the first categorial node, (14b), but is fixed at the second one, (14c), Moskal’s (2015) approach does have some clear advantages over the alternatives. Under both Embick (2010) and Bobaljik (2012) the second category node would be excluded from the domain of contextual allomorphy of the root, whereas Moskal’s proposal would include the second category node, as long as no morpheme intervenes. This also requires the non-head elements to be syntactically active.

This can be further corroborated by compounds such as the following example from Icelandic. The nominal stem *eitur* receives the meaning ‘poison/venom’ outside of compounds. This is also the meaning it receives when modifying a nominal stem. However, when *eitur* modifies an adjectival stem, it does not receive the ‘poison/venom’ meaning, but serves as an intensifier to the adjective.

(16) a. eitur#slanga  
   poison#snake  
   ‘venomous snake’  
   b. eitur#hress  
   poison#chipper  
   ‘very chipper’  
   c. eitur#fjótur  
   poison#quick  
   ‘very fast’

As discussed in Harðarson (2016), root-root compounding is very rare in Icelandic, but can be distinguished from stem-stem compounding in terms of (morpho)phonological interactions. In case of *eitur*, the second vowel is deleted when the following morpheme is vowel initial, (17a). This does not occur when *eitur* is modifying a vowel initial adjectival stem, (17b) and (17c).

(17) a. eitr-  
   poison- a°  
   ‘poisonous’  
   b. *eitr#  
   erfiđ-  
   poison# difficult  
   ‘very difficult’  
   c. eitur#  
   erfiđ-  
   poison# difficult  
   ‘very difficult’

It is also worth noting that it is not sufficient to assume that the meaning of the root *eitur* is merely sensitive to the presence of an adjectival head, as can be seen from (17a). Hence the stem must be sensitive to both the presence of the adjectival head and the root it categorizes.

The examples in (16) would then appear to be cases of stem-stem compounding, and hence, if this is correctly characterized as a case of contextual allomorphy, provides additional evidence that i) the domain of contextual allomorphy extends beyond the first category node, and ii) that the non-head elements are syntactically active following compounding.
4 Morphophonology

In this section I discuss phonological interactions between morphemes within a complex head. First I discuss processes that appear to be limited to the extended projection of the root and not the locality domains discussed in section 2. I focus on umlauts in Icelandic (following Harðarson 2016) and vowel harmony in Yoruba. Following this I turn to processes that apply specifically between two extended projections.

4.1 Umlaut and Vowel Harmony

I-umlaut in Icelandic refers to vowel alternations that apply in a variety of contexts, both derivational, (18a), and inflectional, (18b), but it does not apply consistently to all potential undergoers, (18c). Hence the application of i-umlaut is restricted to a particular set of vocabulary items in any given context.4

\[(18) \begin{align*}
\text{a. } & \text{ hú} & \sim \text{ hýs} & \text{ i} \\
& \text{ house-} & \text{ n} & \text{ house-} & \text{ n} \\
\text{b. } & \text{ arn-} & \sim \text{ ern-} & \text{ i} \\
& \text{ eagle. GEN.SG} & \text{ eagle-} & \text{ DAT.SG} \\
\text{c. } & \text{ bát-} & \sim \text{ bát/*bæt-} & \text{ i} \\
& \text{ boat- NOM.SG} & \text{ boat-} & \text{ DAT.SG}
\end{align*} \]

Furthermore, the trigger is not necessarily overt, as is the case with the past subjunctive of ablaut verbs, where the umlaut is triggered by a null past tense affix.5

\[(19) \begin{align*}
\text{a. } & \text{ súp-} & \sim \text{ sýp-} & \text{ i-} \\
& \text{ sip-} & \text{ PRES-} & \text{ SUBJ} & \text{sip-} & \text{ PAST-} & \text{ SUBJ} \\
\text{b. } & *\text{sýp-} & \sim \text{ sýp-} & \text{ i-} \\
& \text{ sip-} & \text{ PRES-} & \text{ SUBJ} & \text{sip-} & \text{ PAST-} & \text{ SUBJ} \\
\text{c. } & \text{ sýp-} & \sim \text{ sýp-} & \text{ i-} \\
& \text{ sip-} & \text{ PRES-} & \text{ SUBJ} & \text{sip-} & \text{ PAST-} & \text{ SUBJ} \\
\text{d. } & *\text{súp-} & \sim \text{ súp-} & \text{ i-} \\
& \text{ sip-} & \text{ PRES-} & \text{ SUBJ} & \text{sip-} & \text{ PAST-} & \text{ SUBJ}
\end{align*} \]

Hence, following Embick (2010:97ff), the i-umlaut fulfills the criteria of readjustment rules and should i) be subject to the same cyclic domain restriction as contextual allomorphy, but ii) not be subject to linear adjacency. Of these two predictions, ii) is borne out, as we'll see below, but i) is not. In (20b), taken from Harðarson (2017:88), the umlaut is triggered by the nominalizer /i/ across an overt morpheme, as expected. However, it applies across two cyclic nodes, i.e., the initial nominalizer and the intervening adjectivizer. This is not expected under any of the three domains in (1).

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4For a more detailed discussion on the precise properties and alternations involved see, e.g., Anderson (1969:55), Árnason (2011:240ff) and many others.

5Note that the umlaut here is interacting with ablaut, hence the the undergoing vowel is u /u/ and not û /û/.
In this case, the domain of morphophonology appears to extend beyond the domain of contextual allomorphy. One possibility for maintaining the isomorphism between the two domains would be to extend the domain to include the entire complex head. If that is the case, it is expected that in a multistem word the domain of morphophonology would include both head and non-head elements. The i-umlaut, however, only applies to a single vowel adjacent to the trigger, hence it is ill-suited to test that prediction. To test this prediction, it is useful to examine the u-umlaut.

The u-umlaut differs from the i-umlaut in that it applies throughout a (single-stem) word as long as there is a chain of potential undergoers (see, e.g., Anderson 1969 and many others).

If the domain of morphophonology does in fact span the entire complex head, the u-umlaut would then be expected to apply freely between two elements of a compound as long as there is a chain of potential undergoers. As Harðarson (2016, 2017) points out, this is not the case.

Eventhough the umlauts do not seem bound by cyclic domains within single-stem words, it is still limited by the compound structure, which Harðarson (op. cit.) argued references the extended projection of the root.

It is not the case, however, that elements in compounds cannot interact. There are various languages in which certain processes can apply between two elements in compounds. In Yoruba vowel harmony is known to apply between two elements

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6Note that the u-umlaut is less straight-forwardly classified in terms of readjustment processes and phonological processes in terms of Embick 2010. It is triggered in various contexts for only certain sets of stems and often without an overt trigger and ignores adjacency, whereas it is applied consistently to all stems in the presence of the DAT.PL and 2p.PL suffixes -/ym/. Hence it would seem that the u-umlaut is somewhat of a hybrid in terms of these criteria. See Ingason (2013) for an analysis along those lines.
in certain cases, (24a), whereas elsewhere it is blocked, (24b). (e.g., Archangeli & Pulleyblank 1989:189–191).

(24) Yoruba (Adapted from Archangeli & Pulleyblank 1989:190)

a. /ògbó/ + /èni/ → [ògbéni]
   ‘old’ ‘person’ ‘sir’

b. /èwè/ + /òbè/ → [èwèbè]
   ‘leaf’ ‘soup’ ‘any pot herb used for making soup’

It has been proposed that the difference is due to compounding taking place at different lexical strata (see Archangeli & Pulleyblank 1989:190 and references cited therein), and such analysis can straightforwardly be translated into a non-lexicalist framework (see Moskal 2015:255ff, Harðarson 2016, De Belder 2017): Compounds such as the ones in (24a) involve compounding of bare roots and hence the non-head element does not form a domain and vowel harmony can apply freely between the two elements. In the case of (24b), the non-head element may contain functional material dominating the root (specifically category nodes for Moskal 2015 and De Belder 2017), hence the non-head element will form a domain to the exclusion of the head and vowel harmony is blocked.

4.2 On the Borderline

In addition to processes restricted by the extended domain of the root, there are also various processes that apply between two elements in a compound that are distinct from processes that apply within an extended projection of the root or between two heads in a phrasal configuration.

One such process is word stress resolution. In Icelandic single-stem words, primary stress falls on the leftmost syllable and rhythmic secondary stress falls (somewhat optionally) on every other subsequent syllable (e.g., Árnason 1985). In compounds, however, secondary stress obligatorily falls on the leftmost syllable of each non-initial stem. Hence, the third syllable of the non-head elements do not receive a rhythmic secondary stress. The following examples were taken from Harðarson (2017:14).

(25) a. dr’öttnin-ar# m. að-ur
    queen-GEN# man-NOM.SG
    ‘the queen’s consort’

b. pr’ófessor# b. indi-∅
    professor# tie-NOM.SG
    ‘a professor tie’

It would then seem that the extended domain of the root serves as a domain for initial stress assignment. Each compound, however, only bears a single primary stress, hence some form of resolution must occur between the two domains resulting in one accent being promoted over the other (e.g., Moskal 2015:262ff).

A similar effect can be observed in Russian where single-stem words typically only allow for a single stress regardless of the length of the word (e.g., Gouskova & Roon
(26) \( v'i-kristal-iz-ova-t^l-s'a \)

‘to crystalize’

In compounds, however, certain classes of underlyingly stressed stems can bear secondary stress as non-head elements if the two stressed syllables are sufficiently distant (Gouskova & Roon 2009, Gouskova 2010).

(27) a. \( v'er-o\#ispoved'anije \)

‘denomination’

b. \( obor'on-o\#spos'obnost^l \)

‘defense capability’

v'er-a ‘faith’

obor'on-a ‘defense’

As in the Icelandic case above, stress here appears to be initially determined within the extended projection of the root and stress is then resolved at a later stage in the derivation. Hence it would seem that word stress is determined within in the same domains as morphophonology, i.e., within the extended projection of the root. Stress resolution, however, indicates a second domain of operation, i.e., between extended domains within a complex head. It is then expected that there would be other compound-specific morphophonological processes. This is borne out (see, e.g., discussion in Vogel 2010).

First there is nasal assimilation in Marathi, where a final stop becomes a nasal when the following element is a nasal. This process applies specifically between two elements in a compound.

(28) Nasal assimilation in Marathi (adapted from Pandharipande 1997:563)

a. \( /b^hagawat/ + /nam/ \rightarrow [b^hagawanna:m] \)

‘god’

‘nam’

‘god’s name’

b. \( /sa:t/ + /ma:s/ \rightarrow [sa:ma:s] \)

‘six’

‘month’

‘six months’

In Hausa, the final vowel of certain verbal non-heads is lengthened in compounds.

(29) Final vowel lengthening in Hausa (adapted from McIntyre 2006:32)

a. \( /b'i/ + /bango/ \rightarrow [b'i:bango] \)

‘follow’

‘wall’

‘leakage along the wall’

b. \( /k'ar`e/ + /dan`i/ \rightarrow [k'ar`e:dan`i] \)

‘finish’

‘relative’

‘type of arrow poison’

The final vowel of certain stems in Swedish can be either deleted or changed in the context of a compound.

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7 Note that the Russian stress system is notoriously complex (see, e.g., Garde (1965), Halle & Vergnaud (1987), Halle & Isardi (1994), Alderete (1999), Revithiadou (1999), i.a.), however, I will set these complexities aside for the purposes of this paper and focus on the stress pattern in compounds.
Vowel deletion in Swedish (Josefsson & Platzack 2004:12)

a. flicka + skola → flickskola
   ‘girl’ ‘school’ ‘girls school’

b. loge + dans → logdans
   ‘barn’ ‘dance’ ‘barn warming’

Vowel change in Swedish (Josefsson & Platzack 2004:13)

a. saga + bok → sagobok
   ‘story’ ‘book’ ‘storybook’

b. gata + skylt → gatuskylt
   ‘street’ ‘sign’ ‘street sign’

In Basque, certain nominal stems take specific combining form in compounds and certain derivations.

Basque (adapted from de Rijk 2008: 237, 884)

a. gizon-    b. gizon-ki    c. giza#bide
   man-      man-adv      man#path
   ‘man’     ‘manly, bravely’ ‘courtesy, decency’

The existence of these processes would then indicate that phonology makes reference to two domains within the complex head, i.e., i) within the extended projection of the root, and ii) between extended projections, echoing the layering of the derivation in, e.g., Lexical Phonology Kiparsky (1982), Monahan (1982) and its descendants. Hence, when the combined with the conclusions from the previous section, the data point to a double dissociation between the domain of contextual allomorphy and the domain of morphophonology. Contextual allomorphy can apply across boundaries that morphophonological processes cannot, and vice versa.

5 Conclusions and Prospects for Future Study

To summarize this paper, although there are still a number of unanswered questions with respect to the structure of some elements, the data presented here provides clear evidence for a double dissociation between the domain of morphophonology and contextual allomorphy/allosemy. Morphophonology appears to operate at two levels, i) within the extended projection of the root, and ii) between two extended projections within the same complex head. Contextual allomorphy/allosemy, however, appears to be restricted by a more typically defined locality domain, as in (1).

Even though all these processes appear to have different domains of application they are still constrained by the same morphosyntactic structure and the mismatches in domains can follow from the cyclic nature of the derivation: Pre-VI processes are constrained by cyclic nodes/phases whereas post-VI processes make reference to the extended projection of the root(s). The question then arises: Why is this the case?
Since all of these processes make reference to the same morphosyntactic structure, why would they not all make reference to the same locality domains? One possible answer could lie in the way the structure is processed from VI onwards. Assuming that VI occurs from the root outwards (Bobaljik 2000), we can assume that morphophonological processes apply immediately following the insertion of vocabulary items when applicable. This occurs step-by-step in each compound element concurrently. At the juncture of two extended projections, drawing on the insights of Lexical Phonology, compound-specific processes and stress resolution apply.

A fully worked out model, however, as well as the various questions that arise from the discussion lie far beyond the scope of this squib, and so I will leave them for further research.

References


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