The Curious Case of Archi’s father*

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1 Introduction

The phenomenon of (morphological) suppletion refers to the situation where a single lexical item is associated with two phonologically unrelated forms, and the choice of form depends on the morphosyntactic context. Although suppletion is rare in absolute terms, it is frequently observed across languages (Hippisley et al. 2004). That is to say, whereas it is usually a (very) small number of lexical items within a language that display suppletion, most languages do have such a small set. To illustrate the phenomenon, compare the (non-suppletive) adjective-comparative-superlative paradigm *smart-smarter-smartest* with the familiar example of the suppletive *good-better-best* paradigm.

In particular, in the case of *smart-smarter-smartest* we observe that the root remains the same throughout the paradigm, viz. *smart*. In contrast, in the case of *good-better-best* we see that the root in the adjective surfaces as *good*, whereas in the context of the comparative and superlative we observe *be(tt)*. Specifically, suppletion refers to a phonologically distinct realisation of a particular item in a particular context (see Corbett 2007 on specific criteria for canonical suppletion). In this case, the root of the lexical item *GOOD* is realised as *good* when it is the adjectival form but surfaces as *be(tt)* in the context of the comparative (and superlative).

When we look at nouns, we observe that languages can display suppletion for number (#). Consider data from Ket (spoken in the Krasnoyarsk region). First

* Many thanks to Jonathan Bobaljik, Andrea Calabrese, Peter Smith and the audience at BLS 39 and GLOW 36 for feedback and discussion on the ideas expressed here. All errors are mine.
consider regular nouns, which display a nasal suffix in the plural (data from the Surrey Suppletion Database):

(1) SINGULAR PLURAL

<table>
<thead>
<tr>
<th>SINGULAR</th>
<th>PLURAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>am</td>
<td>ama-ŋ</td>
</tr>
<tr>
<td>doʔn</td>
<td>doʔna-ŋ</td>
</tr>
<tr>
<td>kyl</td>
<td>kyle-n</td>
</tr>
</tbody>
</table>

Now, consider the nouns below in (2), which display root suppletion in the context of number (Werner 1997). For instance, the root for ‘tree’ in the singular corresponds to $o'ks'$ while in the plural it surfaces as $a'q$.\(^1\)

(2) SINGULAR PLURAL

<table>
<thead>
<tr>
<th>SINGULAR</th>
<th>PLURAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>$o'ks'$</td>
<td>$a'q$</td>
</tr>
<tr>
<td>dɪʔl’</td>
<td>kAʔt</td>
</tr>
<tr>
<td>kεʔt</td>
<td>deʔ-ŋ</td>
</tr>
</tbody>
</table>

Indeed, when we look at various languages, it is not rare to find a (small) group of nouns that displays suppletion in the context of number. In (3), 18 genetically diverse languages are listed that show suppletion in the presence of number:\(^2\)

(3) Languages that display noun suppletion in the context of number

<table>
<thead>
<tr>
<th>language</th>
<th>family</th>
</tr>
</thead>
<tbody>
<tr>
<td>!Xʊʊ*</td>
<td>Khoisan</td>
</tr>
<tr>
<td>Afrikaans</td>
<td>Indo-European</td>
</tr>
<tr>
<td>Arapesh*</td>
<td>Torricelli</td>
</tr>
<tr>
<td>Archi*</td>
<td>North Caucasian</td>
</tr>
<tr>
<td>Eastern Pomo</td>
<td>Pomoan</td>
</tr>
<tr>
<td>Hebrew*</td>
<td>Afro-Asiatic</td>
</tr>
<tr>
<td>Hua*</td>
<td>Trans-New Guinea</td>
</tr>
<tr>
<td>Ket*</td>
<td>Yeniseian</td>
</tr>
<tr>
<td>Komi*</td>
<td>Uralic</td>
</tr>
<tr>
<td>Lango</td>
<td>Nilo-Saharan(?)</td>
</tr>
<tr>
<td>Lavukaleve</td>
<td>Central Solomons</td>
</tr>
<tr>
<td>Russian*</td>
<td>Indo-European</td>
</tr>
<tr>
<td>Tariana*</td>
<td>Arawak</td>
</tr>
<tr>
<td>Tiwi</td>
<td>isolate</td>
</tr>
</tbody>
</table>

\(^1\) Note that the form ‘man’ actually displays both a suppletive root as well as an exponent of the regular plural suffix.

\(^2\) An asterisk ‘*’ means that they are also listed in the Surrey Suppletion Database (which can be found online at http://www.smg.surrey.ac.uk/Suppletion/explore.aspx), in which 34 genetically diverse languages were investigated for suppletion.
Curiously, although root suppletion in nouns in the context of number is clearly observed, root suppletion in nouns in the context of case (K) seems to be largely unattested (Bybee 1985) (apparent counterexamples are discussed in section 5). 3

The central goal of this paper is to account for the discrepancy between, on the one hand, regularly observed root-suppletion in lexical nouns in the context of number, and, on the other hand, the lack of root-suppletion in lexical nouns in the context of case. In particular, to explain the lack of case-driven root-suppletion, I draw on the structural representation of nouns and combine that with locality claims as proposed in the framework of Distributed Morphology (DM; Halle and Marantz 1993).

In the following, I first introduce the framework adopted here (section 2) and introduce the key assumptions to derive the ban on case-driven root-suppletion in nouns, cyclic locality in particular. After discussing some examples of suppletion patterns that we observe in nouns (section 3), and a short aside on portmanteau morphology (section 4), I discuss apparent counter-examples to the claims suggested here in section 5, offering an analysis in line with the proposal advocated here. Section 6 offers some final remarks.

2 Cyclicity

As briefly touched upon above, I draw on hierarchical structure to limit the possibilities of suppletion, and, as such, I assume the framework of Distributed Morphology (DM; Halle and Marantz 1993) in order to derive the different behaviour of lexical nouns in the context of number and in the context of case. DM crucially incorporates hierarchical structure into the morphology; essentially, it assumes the input to morphology to be syntactic structure. Features (or feature bundles) are distributed over nodes, which in turn are subject to Vocabulary Insertion (VI).

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3 Note that I exclude ‘surface’ suppletion such as kyr ‘cow’ and ær ‘sheep’ in Old Icelandic:

(4) NOM kyr ‘cow’ NOM ær ‘sheep’
ACC kú ACC á
DAT kú DAT á
GEN kyr GEN ær

Even though the accusative and dative forms seem to have different roots, these actually result from a phonological (readjustment) rule, which causes the vowel before r to front (i-umlaut). As such, they do not qualify as instances of root suppletion as intended here; see also note 5.
Furthermore, VI proceeds cyclically from the lowest element in the structure out-
wards.\(^4\) Suppletion is modelled as contextual allomorphy; that is, although a particu-
lar feature bundle has a corresponding exponent as a context-free default, an ex-
ponent specified for a more specific context can take precedence (per the Elsewhere
principle; Kiparsky 1973). Consider again the good\(\text{-}\)better\(\text{-}\)best paradigm; where-
as its regular (context-free) exponent is good, in the context of the comparative
(and superlative) it corresponds to the exponent be(tt):\(^5\)

\[
\begin{align*}
\sqrt{\text{GOOD}} & \leftrightarrow \text{be(tt)} / \_ \text{COMPARATIVE} \\
\sqrt{\text{GOOD}} & \leftrightarrow \text{good}
\end{align*}
\]

A central research topic within DM is the identification of locality restrictions
regarding what is accessible as a potential context for a vocabulary insertion rule
such as (5). Minimally, locality approaches in DM assume the cyclicity hypothe-
sis, which entails that accessibility to structure is domain-dependent. That is to
say, certain nodes in the structure function as domain delimiters and morphologi-
cal processes are confined to operate within this domain. An implementation of
domains (and their delimiters) would be phases (and phase heads) (Chomsky
2000, 2001). A simple approach would be that phasal heads induce spellout of
their sister. Consider the following structure:

\[
\begin{tikzpicture}
  \node (root) {Root} child {node (n) {n}};
  \node (a) at (0,0) {A} child {node (alpha) {\(\alpha\)}} child {node (b) {B}};
\end{tikzpicture}
\]

If \(\alpha\) is a phasal head, then it forces the spellout of its sister \(A\). On the assump-
tion that spellout freezes a string, \(B\) and \(A\) cannot interact across \(\alpha\) (Embick 2010,
Bobaljik 2012; see Scheer 2010 for an overview). A natural choice of domain de-
limiters would be category heads (Embick 2010). Now, consider a standard repre-
sentation of a noun in DM in (7). Crucially, the root, which does not bear an in-
herent specification for its category, is followed by a category-defining node \(n\).

\[
\begin{tikzpicture}
  \node (root) {Root} child {node (n) {n}};
\end{tikzpicture}
\]

\(^4\) Contra Embick (2010), I assume that roots are subject to VI; for discussion on this point, see
Bonet & Harbour (2010).

\(^5\) An important question concerns what does and what does not count as a suppletive root. As men-
tioned above, Corbett (2007) discusses criteria for canonical suppletion, and, while certainly valid
concerns, these matters cannot be resolved in the current paper. In particular, the criterion for noun
suppletion here is singular-plural pairs identified as suppletive in prior literature, where these are
strongly suppletive, i.e., not plausibly related by (possibly idiosyncratic) phonological (readjust-
ment) rules.
On the assumption that category heads are phasal heads that spell out their sister, this would result in $n$ causing spellout of the root. Now, if it were the case the case that spellout and accessibility to govern suppletion lined up perfectly, no allomorphy would ever cross a category-defining node, since the root would always be closed off. However, as Embick (2010) notes, this theory would be too restrictive. Vocabulary insertion must have access to at least a small amount of structure above the domain-defining head. As an example of suppletion across a category-defining node, consider certain forms of the past tense in English (Embick 2010). First off, the structure of a past tense form is given below:

![Diagram](/images/diagram.png)

Now, in the case of the *go - wen-t* alternation we see that the past tense governs the (suppletive) form of the verbal root. Similarly, just as the form of the verb root may be governed by tense (*tell - tol-d*), the verb root in turn may influence allomorphy of tense (*spell - spelt, cf. fell - felled*). Clearly, this happens across the category-defining node $v$, and, as such, the root cannot be entirely closed-off from material outside of the spellout domain.

Specifically, I assume that both the phasal node and ‘the next node up’ are *accessible* as a context for insertion; as such, in (6), although only $A$ is subject to spellout, both (phasal) $\alpha$ as well as $B$ are *accessible* to condition VI (and suppletion) of $A$. $^6$

(9) **Accessibility domain:** For vocabulary insertion at the root, accessible nodes are: the first category-defining node above the root; and one node above that.

(where accessibility means: if node $n$ is accessible to a root $A$, then $n$ may condition allomorphy, including suppletion, at $A$)

The motivation for this approach can be thought of as ‘morphological subjacency’, where a morphological dependency may span no more than one node (cf. the (syntactic) subjacency condition, Chomsky 1973). $^7$ That is to say, a node $n$ may condition allomorphy of the root iff no more than one phasal node intervenes between $n$ and the root (see also Embick 2010). Below, I suggest that the node

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$^6$ Embick (2010) and Bobaljik (2012) also propose similar theories of accessibility of material for purposes of VI; due to space limitations I refer the reader to Moskal (2013) for discussion of how the current formulation of the accessibility domain relates to Embick’s and Bobaljik’s proposals.

$^7$ Note that this condition holds with regard to an outwards dependency, i.e., where the root is dependent on an affix. However, it arguably does not hold with regard to an inwards dependency, as case affixes may show allomorphy for root classes. I thank Andrea Calabrese for bringing this point to my attention.
immediately above the category-defining node \( n \) hosts the complex of \( \varphi \)-features; if we assume that this \( \varphi \)-node is phasal (cf. Sauerland 2008), then it may condition allomorphy of the root, since in that configuration \( n \) is the intervening phasal node and the node hosting \( \varphi \) is the next phasal node.\(^8\) However, for expository reasons, I henceforth use (7) as the formulation of the locality restriction operating on Vocabulary Insertion.

To repeat, for vocabulary insertion at a node \( A \) (e.g. the root) the domain of accessible nodes is limited to the first category-defining node above \( A \) and one node above that. Due to space limitations, I refer the reader to Moskal (2013, to appear) for more discussion on the proposal of accessibility domain in these terms.

3 Nouns

Fleshing out the representation of nouns from (7) above, I propose the following structure for nouns. In addition to a root and a category-defining node \( n \), I will use a projection labelled ‘case’ (\( K \)) as an umbrella term for what is realised as the case morpheme.\(^9\) Similarly, I collapse the \( \varphi \)-features into a single projection, and for expository reasons I equate \( \varphi \) with its internal constituents, in particular with the number node (\(#\)). Furthermore, in accordance with Greenberg’s (1963) universal, case is assumed to be located higher than number (and all other \( \varphi \)-features).

\[
\text{(10) Universal 39 (Greenberg 1963:95): Where morphemes of both number and case are present and both follow or both precede the noun base, the expression of number always comes between the noun base and the expression of case.}
\]

This gives an abstract representation for a noun as in (11):

\[
\text{(11)}
\]

\[
\text{Root} \quad n \quad # \quad K
\]

Furthermore, as mentioned above, vocabulary insertion proceeds cyclically from the root outwards (Bobaljik 2000, Embick 2010). As such, we start at the root. Next we reach the category node \( n \), which triggers spellout of its comple-

\(^8\) It should be noted that this is a simplification; in Moskal (2013) a variety of locality conditions are considered and I argue for an alternative which does not require that the complex of \( \varphi \)-features are phasal - but in the interests of space, the condition in (9) will suffice.

\(^9\) For more articulated representations see e.g. Caha (2009), Radkevich (2010) and Pesetsky (2013).
ment, the root. However, per the above in (9), the accessible nodes that can condition allomorphy (Vocabulary Insertion) at the root will include the category-defining node $n$ as well ‘one node up’, viz. #.

As for practical application, the VI rules for languages that display a suppletive form in the plural will take the following form, where $\alpha$ is the default form and $\beta$ is the suppletive variant:

$$
\sqrt{\text{ROOT}} \leftrightarrow \beta / \_ \text{PL}
\sqrt{\text{ROOT}} \leftrightarrow \alpha
$$

As an actual example, consider again the suppletive forms in Ket given in (2) above. The VI entries for child in Ket would correspond to the following:\footnote{Here I put aside the question of when the plural morpheme is the regular plural exponent or a zero, an issue that arises in English past tense (run-ran vs. tell-told) and comparatives (bettr-er, vs. worse) as well.}

$$
\sqrt{\text{CHILD}} \leftrightarrow \text{ka'it} / \_ \text{PL}
\sqrt{\text{CHILD}} \leftrightarrow \text{di'l}
$$

To repeat, by virtue of the elsewhere principle the more specific VI rule ($\sqrt{\text{CHILD}} \leftrightarrow \text{ka'it} / \_ \text{PL}$) is chosen if the context for it is met. Furthermore, the content of the number node (i.e., PL) is available to condition root suppletion since when the root is sent to spellout (i.e., undergoes VI) the number node, which carries plural, is sufficiently local by virtue of being one node up from phasal $n$.

However, the root cannot access information about case, since at the point that the root is being spelled out (subject to VI) only the category-defining node $n$ and number are accessible to govern its potential suppletion. In contrast, K is located too far away to govern root-suppletion.

$$
\text{Root} \\
\text{n} \\
\text{#} \\
\text{K}
$$

It is important to note that it is cyclic locality that prevents the root from accessing case information. That is, there is nothing that prevents the formulation of a hypothetical VI entry making reference to case such as (15); rather, (15) is inaccessible due to locality.

$$
\sqrt{\text{CHILD}} \leftrightarrow \text{gu:} / \_ \text{K}
$$
In sum, whilst number-driven root-suppletion is possible, case-driven suppletion is excluded by cyclic locality. Thus we derive the lack of case-driven root-suppletion in lexical nouns.¹¹

4 Aside: Portmanteaux

At this point, a note on portmanteaux is in order. Consider languages in which number and case are collapsed into a single morpheme (a ‘portmanteau’), such as Serbian:

(16)   SINGULAR     PLURAL
  NOM  ruk-a    ruk-e   ‘arm’
  ACC  ruk-u    ruk-e

In (16), both number and case information are pronounced in a single vowel, e.g. the nominative singular has a single exponent -a.

Indeed, Radkevich (2010) and Bobaljik (2012) have argued that portmanteaux extend locality domains. In effect, they serve to make the node that dominates the elements within a portmanteau the focal point; that is to say, whether by pre-VI fusion of morphosyntactic nodes or VI-insertion at nonterminal nodes, the relevant node at which VI (and as such sensitivity to suppletive contexts) applies is higher than the VI-targeted nodes prior to the portmanteau. Applying this to the case at hand, when case and # form a portmanteau, this would at first blush provide an opportunity for case-driven suppletion. As seen in (17), a portmanteau would result in a configuration where K would be sister to the category node, and, as such, it would be sufficiently local to condition root-suppletion.

¹¹ Contrast this to the situation with pronouns, which regularly display suppletion for number as well as case. Consider the paradigm for German first person, which displays suppletion of pronouns for number as well as case (no claims are made about any internal regularities within the pronoun paradigm, just that there is suppletion for case in at least some of the cells in (17).

(17) SINGULAR     PLURAL
  NOM  ich    wir
  DAT  mir  uns
  ACC  mich  uns

Indeed, it is widely assumed that pronouns have less structure than lexical nouns (Postal 1969, Longobardi 1994, Déchaine and Wiltschko 2002). The key difference between nouns and pronouns is that pronouns are functional (D) - they crucially lack a root and a (lexical-)category-defining node (n). The absence of n means that even the deepest node in the pronoun will be in the same cyclic domain as K, and thus potentially subject to allomorphy (i.e., suppletion) conditioned by K. Due to space limitations, the reader is referred to Moskal (2013) for a discussion on the difference between suppletion patterns in lexical nouns and pronouns.
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(17)

However, this creates a dangerous situation. Indeed we predict that in (the numerous) languages which fuse number and case into a single portmanteau morpheme we should see cases of case-driven root-suppletion. However, this is not the case; even in languages that display root-suppletion in the context of a fused number and case morpheme, the suppletion is driven by the number specification:

(18)

<table>
<thead>
<tr>
<th>SINGULAR</th>
<th>PLURAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOM čovek</td>
<td>ljud-i ‘man’</td>
</tr>
<tr>
<td>ACC čovek-a</td>
<td>ljud-e</td>
</tr>
</tbody>
</table>

In (18), the noun suppletes for all plurals and the suppletion pattern is not governed by case. As such, portmanteaux as represented in (17) seem to overgenerate.

However, if we assume that portmanteaux are formed only at the point that their sub-components are subject to spellout, we see that a [#-K] portmanteau would be formed at the point that (at least) # is in a spellout domain, and, as such, subject to VI. Crucially, such a ‘late’ view on portmanteaux keeps the morphosyntactic structure intact up to the point of Vocabulary Insertion of (at least one of) the elements of the portmanteau. Applied to the case at hand, given that the domain of spellout is the root, it is at that point entirely irrelevant whether the number node, which though accessible is not subject to spellout, is part of a portmanteau or not.

(19)

In (19), at the point that the root \( \sqrt{\text{MAN}} \) undergoes VI, it has access to number information ensuring that suppletive \( ljud- \) will be inserted. However, it has no information as to whether the number exponent is part of a portmanteau or not. This information becomes accessible at the point that (at least) number is subject to VI, at which point the root has been frozen for further interaction.

(20)
That is, it is irrelevant whether number morphology is expressed separately or as part of a portmanteau; either way, the locality restrictions hold and case-governed suppletion is still banned.

In sum, whilst number-driven root-suppletion is possible in lexical nouns, case-driven root-suppletion is prohibited by virtue of locality. Indeed, in total, 18 languages from the survey were found to display some item(s) that supplete in the presence of the plural (see Appendix A). In contrast, only four items (in two languages) display root-suppletion that is conditioned by case. Indeed, the formulation in terms of accessibility of the phasal node plus one node up blocks case-driven root-suppletion in a structure as in (11), which represents a canonical lexical noun consisting of a root, n, number and case. However, it allows for a possible class of exceptions: K may be close enough to the root just in case the number node is missing. Indeed, in the next section I argue that the three apparent counter-examples may be analyzed in exactly this way.

5 Case-driven root-suppletion

The three instances of root-suppletion in the context of case come from two Northeast Caucasian languages. In the following, I will argue that these can be analysed as lacking a number node in certain contexts, which opens the door to case-driven root-suppletion.

5.1 Archi’s ‘father’

The first two counter-examples come from Archi, a language spoken in Southern Dagestan. One item will be discussed in this section and I return to the second item in section 5.3 below. First consider some ‘regular’ root-suppletion in the presence of number (Archi Dictionary).

\[
\begin{array}{ccc}
\text{ABS} & \text{SINGULAR} & \text{PLURAL} \\
\text{úldu} & \text{úl-li} & \text{úl-čaj} \\
\text{bič’ni} & \text{boždó} & \text{boždó-čaj} \\
\text{λ:onnól} & \text{λ:anná} & \text{λ:om-aj} \\
\text{χon} & \text{buc:’i} & \text{buc:’i-li} \\
\end{array}
\]

The data above are a clear case of root-suppletion caused by number. However, the forms for ‘father’ and ‘child’ in Archi displays suppletion for case. Leav-
ing the case of Archi’s ‘child’ aside for the moment (see section 5.3), consider the paradigm for Archi’s ‘father’ (Archi Dictionary):

\[
\begin{array}{ccc}
(22) & \text{SINGULAR} & \text{PLURAL} \\
\text{ABS} & \text{ábt:u} & \text{---} \\
\text{ERG} & \text{úmmu} & \text{---} \\
\end{array}
\]

Intriguingly, though, this form is listed as a singulare tantum and as such the form does not have a corresponding plural. I argue that Archi’s ‘father’ is defective in that it lacks number.\(^{12}\) Indeed, the absence of number opens up the door for case-driven root-suppletion; in the case of Archi’s ‘father’ we see that the (ergative) case node is sufficiently local to the root. That is, it is accessible as a context that can affect the choice of exponent of the root, since it is immediately adjacent (‘one node up’) to the category-defining node \(n\):

\[
(23) \\
\square \rightarrow \n \rightarrow \text{[ERG]} \\
\text{FATHER} \\
\]

5.2 Lezgian

The next case comes from Lezgian; consider the forms for ‘water’ and ‘son’, which display suppletion in the context of non-absolutive (oblique) case in the singular (Haspelmath 1993:80):\(^{13}\)

\[
(24) \quad \begin{array}{ccc}
\text{SINGULAR} & \text{PLURAL} \\
\text{ABS} & \text{jad} & \text{jat-ar} & \text{‘water’} \\
\text{OBL} & \text{c-i} & \text{jat-ar-i} \\
\text{ABS} & \text{xwa} & \text{ruxwa-jar} & \text{‘son’} \\
\text{OBL} & \text{xc-i} & \text{ruxwa-jr-i} \\
\end{array}
\]

Clearly, at first blush these patterns seem to contradict the hypothesis advanced here; however, although there is an overt plural, I will argue that in these cases what we see is what we get: in the forms for ‘water’ and ‘son’ the singular is absent and, as such, as we saw in the case of Archi’s ‘father’, the door is opened for (oblique) case to govern suppletion. That is to say, rather than the

\(^{12}\) As to singular nature of the singulare tantum, I assume that default agreement is required (Preminger 2011). Furthermore, it has been suggested that absent features would be realised by the unmarked value (e.g. Smith 2013), and Bale et al. (2011), a.o., argue that singular is the morphologically unmarked value for number.

\(^{13}\) Thanks to Martin Haspelmath (p.c.) for providing the oblique plural forms for ‘water’ and ‘son’.
structure in (11), in the suppletive forms in (25) the number node is missing and, as such, K is sufficiently local to govern root-suppletion.

(25)

\[
\begin{array}{c}
\text{\sqrt{WATER}} \\
\text{\sqrt{SON}} \\
\text{n} \\
\text{[OBL]}
\end{array}
\]

In order to show this, we need to take a closer look at the structure of the oblique stems. As can be seen even from the data above, the absolutive singular has no exponent. In contrast, the oblique suffix in the suppletive (singular) forms in (24) corresponds to \(-i\). I argue that this suffix \(-i\) is the exponent of (the oblique) case exclusively (and does not include number information).

First, consider the formation of (non-suppletive) oblique plural forms in Lezgian (Haspelmath 1993:75); these are formed by adding \(-i\) to their non-oblique (absolutive) plural stem.\(^{14}\) In particular, the absolutive plural exponent corresponds to \(-(C)ar\).\(^{15}\) The plural of the oblique, then, is formed by observing the plural \(-(C)ar\) (with syncope) followed by \(-i\).

(26)  
\begin{tabular}{lll}
abs pl & obl pl &
\hline
balk’an-ar & balk’án-r-i & ‘horse’ 
\hline
buba-jar & bubá-jr-i & ‘father’ 
\hline
dağ-lar & dağ-lár-i & ‘mountain’
\end{tabular}

This suggests the following structure for e.g. ‘mountain-PL-OBL’:

(27)  
dağ-lar -i

mountain -PL -OBL

Turning to the singular forms, (Haspelmath 1993:74ff) lists the following eight additional realisations of the ‘oblique stem affix’:

(28)  
\begin{tabular}{lll}
-di & -a & -Adi -rA 
\hline
-uni & -A & -ci/-c’i/-či/-č’i/-ži
\end{tabular}

\(^{14}\) The only exception are items that take \(-bur\) as a plural, in which case we observe \(-u\) instead of \(-i\) (e.g. \(jarú-bur-u\) ‘red one-PL-OBL’); I take this to be a case of underlying \(-i\) undergoing vowel harmony (which is independently observed in Lezgian).

\(^{15}\) I abstract away from some additional allomorphy of the plural since it does not bear directly on the argument here.
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The default oblique stem suffix -di I argue is actually decomposable into two morphemes -d-i corresponding to ‘-SG-OBL’. This leads to the following (subset of) Vocabulary Insertion rules for Lezgian:

\[
\begin{align*}
\text{[SG]} & \leftrightarrow -d / \_K^{16} \\
\text{[PL]} & \leftrightarrow -(C)ar \\
\text{[OBL]} & \leftrightarrow -i
\end{align*}
\]

Furthermore, I assume that Haspelmath’s ‘oblique stem affixes’ -Ad-i (30a), -Un-i (30b) and -c-i/-c’-i/-c’-i/-ž-i (30c) are examples of allomorphy of the singular in the context of the root followed by the oblique suffix.\textsuperscript{17}

\[
(30) \quad \begin{array}{ll}
\text{a. } \text{nek’} & -éd-i \\
& \text{milk } -SG-OBL \\
\text{b. } \text{kam} & -ún-i \\
& \text{trap } -SG-OBL \\
\text{c. } \text{par} & -c’-i \\
& \text{load } -SG-OBL
\end{array}
\]

This leaves us with the following ‘oblique stem affixes’: -a, -rA, -A and -U. Strikingly, all these suffixes end in a vowel; as such, I suggest that most of the above-listed exponents are allomorphic realisations of the singular node but that the resulting configuration of V-i is phonologically dispreferred. Indeed, Lezgian only has two long vowels (/æ:/ and /a:/), which have a marginal status: they result from compensatory lengthening after the loss of ʁ in (combinations of different preverbs with the verb) jağun ‘hit’ (Haspelmath 1993:32).

As such, I suggest that in the situation where the singular allomorph and the oblique result in vowel hiatus this is resolved by virtue of deleting the high vowel /i/, resulting in a surface situation in which the ‘oblique stem affix’ does not include (morphological) -i: -a (31a), -rA (31b), -A (31c) and -U (31d).

Finally, the remaining realisation of the ‘oblique stem affix’ is a ‘bare’ -i.\textsuperscript{18} Interestingly, (some of) the nouns that take a ‘bare’ oblique marker -i are suggested to be “former pluralia tantum which have been reanalyzed as singulars” (Haspelmath 1993:75). Indeed, pluralia tantum have been argued to have a lexical number specification, which would exempt them from projecting a number node (Smith to appear).

\textsuperscript{16} The exponent of the singular in (31) is the default realisation; I assume it applies when all other more specific (and lexically restricted) VI rules for the singular (such as, in (32), [SG] ⇔ -ed / _K \{nek’, …\}) have applied.

\textsuperscript{17} The variants -c-i/-c’-i/-c’-i/-ž-i result from Affricate Assimilation, see Haspelmath (1993:63, section 5.13).

\textsuperscript{18} Another realisation of the ‘oblique stem affix’ is a stressed -i; however, I assume that this again involves a singular exponent (stressed) -i followed by ergative -i, which is resolved as -i.
At long last, we can return to the suppletive nouns in the table in (24) above; indeed, I suggest that in the case of ‘water’ and ‘son’, the singular is pruned (i.e., deleted) by a specific rule, targeting these two items. As such, the oblique case node becomes sufficiently local to the root, thus allowing it to condition root-suppletion, as depicted in (25) above.

5.3 Archi’s ‘child’

Returning to Archi, the second case of case-driven suppletion in Archi we observe is that of the ergative singular of the item ‘child’, which displays (case-driven) suppletion:

\[
\begin{array}{cccc}
\text{SINGULAR} & \text{PLURAL} \\
\text{ABS} & \text{lo} & \text{ló-bur} & \text{‘child’} \\
\text{ERG} & \text{lahá} & \text{ló-bur-čaj} \\
\end{array}
\]

However, as in Lezgian, we observe the same two interesting aspects here: (i) the plural morpheme (-bur) blocks the suppletive root from surfacing (we observe ló-bur-čaj rather than *lahá-bur-čaj), and (ii) there is no overt suffix on the ergative singular form. The fact that the regular root surfaces in the ergative plural supports an analysis analogous to the analysis of Lezgian proposed here, since the presence of the plural morpheme intervenes between the root and the ergative, thus preventing root suppletion.

\[
\begin{array}{cccc}
\text{CHILD} & \text{n} & \text{[PL]} & \text{[ERG]} \\
\end{array}
\]

Secondly, the ergative singular form is missing a case suffix. Indeed, the missing singular ergative suffix allows for an analysis of the item ‘child’ where the singular is absent in the context of the ergative.\(^{19}\) As such, as was the case in

\(^{19}\) Presumably, as in the case of Archi’s ‘father’ the singular character results from default agree-
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Lezgian, this configuration opens up the door for (ergative) case to be sufficiently local to the root to govern suppletion. The corresponding structure for Archi’s ‘child’ is given in (34) (cf. the structure for the suppletive forms in Lezgian in (25) above).

(34)

\[ \sqrt{\text{CHILD}} \rightarrow [\text{ERG}] \]

6 Final remarks

In the above, I have argued that a minimal approach to locality, which crucially draws on syntactic hierarchical structure as the input to morphology, is sufficient to account for the observation that in lexical nouns suppletion driven by number is regularly observed, whereas suppletion driven by case is virtually unattested. In particular, lexical nouns contain a category-defining node which induces a spellout domain, which, combined with the notion of accessibility as the first category-defining node above the root and one node above that, prohibits case-driven root-suppletion in canonical lexical nouns. The three apparent counterexamples follow from this assumption about locality restrictions on accessibility, as their particular circumstances motivate a structure where the K projection is located closer to the root than usual.

Furthermore, given the locality restrictions discussed here certain blocking effects are expected. As we saw in the case of Lezgian and Archi’s ‘child’, a plural exponent prevented the suppletive root from surfacing. Specifically, an additional restriction on allomorphy is expected from the structure proposed here for lexical nouns: an (overt) element between the category node \( n \) and number should block number-driven root-suppletion, since in that configuration number is no longer one node up from the spellout domain. This prediction seems to be borne out: in Slavic the diminutive is located closer to the root than number and indeed blocks number-driven root suppletion; however, due to space limitations I refer to Moskal (2013, to appear) for details.

To conclude, it is argued here that a minimal approach to locality is sufficient to explain the patterns identified in a study that looked at suppletion in nouns across some 80 languages. The results from this study bear on the discussion of the formalisation of locality domains as employed in DM. Indeed, the hypothesis advocated here relies on (morpho)syntactic structure playing a crucial role in the decision of whether material is accessible to govern suppletion patterns, which, as such, raises the question whether these observations can be captured in frame-
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works that deny that hierarchical syntactic structure plays a role in the morphology, such as Word and Paradigm approaches (e.g. Anderson 1992, Stump 2001).

References


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