

Is Suppletion Local?: Evidence from Ainu

Introduction: In this paper, we will argue that *suppletion is not stringently local*, contra Bobaljik & Harley’s (2013) conclusion based on verbal root suppletion in Hiaki: suppletive roots and suppletion-triggering arguments must be within the same XP. Our evidence comes from number-governed verbal root suppletion in Ainu, an endangered language spoken in the northern part of Japan. Specifically, three arguments will be provided: (i) non-unaccusative intransitive predicates do supplete, (ii) external arguments of transitive predicates can trigger suppletion, and (iii) morphologically-complex derived transitive predicates can be suppletive, all of which are not predicted by Bobaljik & Harley (2013). Our conclusion is that *the locality domain of suppletion should be sufficiently broad to include external arguments*. Two theoretical implications and the possible reason why the locality domains in Ainu and Hiaki are different will also be discussed.

Bobaljik & Harley (2013) – suppletion is local: Harley, Tubino-Blanco & Haugen (2009) observe that verbal root suppletion in Hiaki is conditioned by the number of subjects of intransitive predicates (1-2) and objects of transitive predicates (3-4):

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| <p>(1) Aapo weye.
3SG walk.SG
‘He is walking.’</p> | <p>(2) Vempo kate.
3PL walk.PL
‘They are walking.’</p> |
| <p>(3) Aapo/Vempo uka koowi-ta me’a-k.
3SG/3PL the.SG pig-SG kill.SG-PRF
‘He/They killed the pig.’</p> | <p>(4) Aapo/Vempo ume kowi-m sua-k.
3SG/3PL the.PL pig-PL kill.PL-PRF
‘He/They killed the pigs.’</p> |

Turning to the locality of suppletion, Bobaljik (2012) proposes based on comparative morphology that suppletion is stringently local; namely, suppletion cannot be triggered across XP, as in (5):

- (5) Locality
 β may condition α in (a), not (b):
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|--|---|
| a. $\beta \dots x_0[\dots \alpha \dots]$ | b. $*\beta \dots x_P[\dots \alpha \dots]$ |
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Importantly, Hiaki verbal root suppletion triggered by objects of transitive predicates (3-4) is naturally predicted by Bobaljik’s (2012) proposal, because no XP intervenes between an object and a verbal root; that is, they are in sister-relationship (i.e. $\sqrt{P}[\text{DP}_{\text{object}} \sqrt{\quad}]$). However, suppletion conditioned by subjects of intransitive predicates (1-2) would be a counterexample, in which a subject seems to condition suppletion of a verbal root across XP (i.e. $\text{DP}_{\text{subject}} \dots \sqrt{P}[\sqrt{\quad}]$). Bobaljik & Harley (2013) claim that this is only apparent, along the following reasoning: (i) unaccusative verbs cannot undergo applicativization, (ii) Hiaki suppletive intransitive verbs are all incompatible with applicatives, (iii) suppletive intransitive verbs in Hiaki are all unaccusatives, thus (iv) subjects of intransitive suppletive verbs are base-generated as internal arguments in sister-relationship with verbal roots. Therefore, they conclude that Bobaljik’s (2012) proposal is maintained.

Root Suppletion in Ainu – is suppletion local?: Interestingly, Ainu also has number-governed verbal root suppletion in both intransitive (6-7) and transitive (8-9) predicates such as *oman vs. paye* ‘go’, *an vs. okay* ‘be’, *a vs. rok* ‘sit’, *rayke vs. ronnu* ‘kill’, *asi vs. roski* ‘build’, etc. (Shibatani 1990; Tamura 2000):

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| <p>(6) Nea kur oman.
the man go.SG
‘He goes.’</p> | <p>(7) Nea utar paye.
the men go.PL
‘They go.’</p> |
| <p>(8) Nea kur kamiyasi rayke.
the man monster kill.SG
‘He killed the monster.’</p> | <p>(9) Nea kur kamiyasi utar ronnu.
the man monster guys kill.PL
‘He killed the monsters.’</p> |

Now three arguments will be made against Bobaljik & Harley (2013): (i) suppletive non-unaccusative intransitive verbs, (ii) subject-triggered suppletive transitive verbs, and (iii) suppletive derived transitive verbs:

Evidence 1 – Non-accusative intransitive: First, Bobaljik & Harley (2013) predict that suppletive intransitive predicates cannot undergo applicativization because they must be unaccusative to meet the locality of suppletion. This prediction is not born out in Ainu:

- (10) Nupursar kotan petetok kasi **e-rok** kamuy (11) Utar ... usa imikinkay nuwe **ko-oka(y)**
 Nupursar villages source top Appl-sit.PL god people ... various clothes plenty Appl-be.PL
 ‘God that lives in the source of Nupursar villages’ ‘People are with plenty of various clothes’

In the examples (10) and (11), suppletive intransitive verbs are applicativized to introduce locative arguments. This strongly suggests that (i) Ainu intransitive suppletive verbs are not unaccusative or (ii) Bobaljik & Harley’s assumption that unaccusative verbs cannot undergo applicativization is wrong.

Evidence 2 – Subject-triggered transitive: Second, Bobaljik & Harley (2013) also predict that the number of subjects of transitive predicates cannot condition verbal root suppletion due to the stringent locality domain. Ainu falsifies this prediction:

- (12) Okaypo nispa eci=**ronnu** (13) Sisak rametok utarorke e=**ronnu**
 boy headman 2pl=kill.PL Unusual brave people 2sg=kill.PL
 ‘You killed the young headman (of the village).’ ‘Unusually brave people killed you’

In these examples, subjects are plural while objects are clearly singular, as indicated by person agreement morphemes attached onto suppletive verbs (2nd person plural subject expressed by “eci=” in (12) and 2nd person singular object indicated by “e=” in (13)). This is a strong indication that subjects of transitive predicates do trigger verbal root suppletion.

Evidence 3 – Derived transitive: Finally, Bobaljik & Harley (2013) make the prediction that morphologically-complex derived predicates cannot be suppletive because arguments and verbal roots must be in sister-relationship without any XP intervened. Ainu does not confirm the prediction:

Intransitive	Transitive.SG	Transitive.PL (suppletive)
ray ‘die’	ray-ke ‘kill.SG’	ronnu ‘kill.PL’
as ‘stand’	as-i ‘build.SG’	roski ‘build.PL’

Notice here that transitivizers like “-ke” and “-i” attach to intransitives like “ray” and “as”, respectively, to create morphologically-complex derived transitives such as “ray-ke” and “as-i”, which in turn undergo suppletion. Thus, it is reasonable to argue that suppletion can be conditioned across a transitive vP.

Conclusion: To sum, this paper has argued against Bobaljik & Harley (2013) based on number-governed verbal root suppletion in Ainu. We conclude that *the locality domain of suppletion should be sufficiently broad to include external arguments*, which is reminiscent of the first cyclic domain (Chomsky 2001). If our conclusion is right, two theoretical implications will emerge. First, Harley’s (2014) argument that root suppletion corroborates the view that roots take complements is not necessarily true (Alexiadou 2014). Second, even though we argued against the stringent locality of suppletion, Ainu indicates that root suppletion does exist, supporting the late insertion view of roots (Marantz 1995; Haugen & Siddiqi 2013). Finally, we can speculate why the locality of suppletion is variable between Ainu and Hiaki. One possibility would be polysyntheticity of Ainu (Baker 1996, 2001), where head movement is massively applied (up to T, at least) and consequently the locality domain might be expanded as a function of head movement.

Selected References: Baker, M. 1996. *The Polysynthesis Parameter.*; Bobaljik, J. (2012). *Universals in Comparative Morphology.*; Bobaljik, J. & Harley, H. (2013). *Suppletion is Local: Evidence from Hiaki.*; Harley, H. (2014). *On the identity of roots.*; Shibatani, M. (1990). *The languages of Japan.*