

## Assibilation

INTRODUCTION. Phonological derivations have almost disappeared from the theoretical scene, but the notion of DERIVED ENVIRONMENT is still occasionally mentioned as the conditioning environment of phonological alternations. A familiar textbook example is Finnish Assibilation which turns *ti* into *si* (Kiparsky 1973), illustrated in (1). In (a), *ti* is derived by an earlier phonological rule. In (b), there are two *ti*-sequences: the first is nonderived, the second is derived by morpheme combination. In (c), *ti* is nonderived. Assibilation applies in derived environments and is blocked elsewhere.

(1)		(a)	(b)	(c)
		‘water’	‘order-PAST’	‘parade’
		/vete/	/tilat-i/	/paraati/
e-Raising		veti	–	–
Assibilation		vesi	tilasi	–
		[vesi]	[tilasi]	[paraati]

One might thus expect to find both *ti* and *si* in nonderived environments, but only *si* in derived environments. However, in reality, both *ti* and *si* are found in both environments. Examples like /lehte-i-nä/ → *lehtinä* (\**lehsinä*) ‘leaf-PL-ESS’, /vete-i/ → *veti* (\**vesi*) ‘pull-PAST’, /suunta-i-na/ → *suuntina* (\**suunsina*) ‘direction-PL-ESS’, and /nouta-i/ → *nouti* (\**nousi*) ‘fetch-PAST’ are both phonologically and morphologically derived, yet Assibilation is blocked. In these cases Assibilation is clearly blocked for reasons independent of derivedness. This opens up the tempting possibility that this is so in all cases. This provides the rationale for our talk: (i) Factor out blocking effects independent of derivedness; (ii) See whether genuine derived environment effects still remain. As it turns out, we will get very close to eliminating derived environment effects completely.

PROPOSAL. The new phonological generalization we propose is metrical. Finnish has trochaic feet, assigned from left to right, with main stress on the initial syllable. Assibilation only applies to stops that fall outside the main stress foot. This explains the curious length effect we find in verbs: in CVt-roots Assibilation is blocked, e.g. (*vé.t-i*) ‘pull-PAST’; in CVVt-roots Assibilation is variable because both syllabic and moraic trochees are allowed, e.g. (*múr.t-i*) (*múr*)*s-i* ‘break-PAST’; finally, in CVCVt-roots Assibilation is obligatory, e.g. (*tí.la*)*s-i* ‘order-PAST’. This metrical regularity

is systematically overridden by general phonological constraints such as the OCP and geminate inalterability, as well as morphology: nouns are completely oblivious to it, cf. (*vé.si*) ‘water’ where Assibilation applies inside a foot, and (*pá.raa*)*ti* ‘parade’ where Assibilation is blocked outside a foot. A straightforward analysis is available in terms of partially ordered optimality-theoretic grammars (Anttila 2002) where both variation and morphological conditioning derive from partially ranked phonological constraints. In contrast, derivedness turns out to make empirically incorrect predictions as soon as the full range of data is considered.

A look at a standard unabridged dictionary turns up one single lexeme that remains unaccounted for both by our new analysis and the traditional derived environment analysis: the verb /suunti-i/ ‘navigate-PAST’ → *suunti* (*\*suunsi*) with a trimoraic initial syllable and an underlying /ti/-sequence in a vacuously derived environment. Here Assibilation is blocked, contrary to both analyses. This example is yet another piece of evidence for our claim that derivedness is irrelevant. In the 1970’s, this datum would have provided an argument for global rules against the Strict Cycle Condition. Today, a straightforward analysis is available in terms of Comparative Markedness (McCarthy 2002).

**CONCLUSION.** Finnish Assibilation has served as a showcase example of derived environment effects for almost three decades. However, once the relevant metrical, segmental and morphological conditions are properly identified, it turns out that derivedness is irrelevant. This in turn further weakens the case for derivations in phonological theory.

## Bibliography

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