The relative and the absolute: the Tunica stress conspiracy revisited

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Summary Kisseberth (1970b) distinguishes rules in Tunica (Haas 1940) that are subject to a constraint penalizing adjacent stresses from rules that are not subject to this constraint. This distinction appears on the surface to be particularly suited to a straightforward analysis within Optimality Theory (OT; Prince & Smolensky 1993): NoClash is ranked above constraints responsible for the rules that are subject to it and below constraints responsible for the rules that are not. The full range of relevant facts in Tunica suggest that NoClash is only crucially dominated and violated lexically, however; postlexically, NoClash is undominated and there are no adjacent stresses on the surface. A full analysis is presented within Stratal OT (Bermúdez-Otero 1999, Kiparsky 2000).

Background In his analysis of syncope rules in Tunica (Haas 1940), Kisseberth (1970b) argues for a general distinction between *relatively obligatory* and *absolutely obligatory* rules. (See also Kisseberth 1970a: 305 and Kisseberth 1972: 223*ff*.) With respect to an output constraint that unifies a set of rules involved in a 'conspiracy', relatively obligatory rules are those that are subject to the constraint and absolutely obligatory rules are those that are not subject to it. The immediate output of an absolutely obligatory rule may thus violate the constraint while the immediate output of a relatively obligatory rule may not (i.e., the constraint blocks the relatively obligatory rule).

There are two syncope rules in the analysis. Internal syncope deletes unstressed, morpheme-final but word-internal vowels, *even if* the immediate output contains a stress clash between the syllables flanking the deleted vowel; internal syncope is thus *absolutely obligatory* with respect to a constraint against stress clash. The resulting stress clashes are subsequently repaired by a destressing rule.

hára+ʔáki $\overset{\text{I-SYNC}}{\longrightarrow}$ hár+ʔáki $\overset{\text{DESTR}}{\longrightarrow}$ hár+ʔaki 'she sang'

External syncope, on the other hand, deletes unstressed, word-final vowels, *except when* the output of this deletion results in a stress clash between the syllables flanking the deleted vowel; external syncope is thus *relatively obligatory* with respect to the constraint against stress clash.

yúru##ʔámarʔɛhɛ $\longrightarrow$ yúru##ʔámarʔɛhɛ 'not long enough'
($\overset{\text{E-SYNC}}{\longrightarrow}$ *yúr##ʔámarʔɛhɛ $\overset{\text{DESTR}}{\longrightarrow}$ *yúr##ʔamarʔɛhɛ)

The Problem On the face of it, the distinction between relatively and absolutely obligatory rules appears to provide further evidence for the constraint-ranking explanation of conspiracies in OT: if the output constraint is $\mathbb{C}$, the markedness constraint responsible for the relatively obligatory rule is $\mathbb{R}$, and the markedness constraint responsible for the absolutely obligatory rule is $\mathbb{A}$, then the ranking $[\![\mathbb{A} \gg \mathbb{C} \gg \mathbb{R}]\!]$ would describe a situation in which $\mathbb{R}$ is 'subject to' (i.e., outranked by) $\mathbb{C}$ while $\mathbb{A}$ is not. Satisfaction of $\mathbb{A}$ may thus lead to violation of $\mathbb{C}$, but satisfaction of $\mathbb{R}$ cannot.

In the account of Tunica, $\mathbb{C}$ is NoClash. The problem is that there are in fact no adjacent stresses on the surface in Tunica; NoClash is not violated by grammatical surface forms. This indicates that NoClash is undominated in Tunica and thus that it cannot be crucially dominated by any constraint such as $\mathbb{A}$. The absolutely obligatory internal syncope rule only produces violations of NoClash *in its immediate output*; these violations are later repaired by destressing. A full analysis of the relevant facts of Tunica thus appears to require a serial derivation.

Our Solution We recast Kisseberth's (1970b)'s analysis of Tunica in terms of Stratal OT, which provides the necessary tools to satisfy both the constraint-ranking needs and the serial derivation needs of the analysis. Specifically, we propose that internal syncope is absolutely obligatory with respect to NoClash because NoClash is crucially dominated lexically, while external syncope is relatively obligatory with respect to NoClash because NoClash is undominated postlexically.

The 'internal' vs. 'external' distinction is on its own a strong indication that the two syncope rules apply at different levels. Their basic similarity but differential behavior with respect to NoClash

can be accounted for by ranking the constraint responsible for syncope above NoClash at the lexical level but below NoClash at the postlexical level, as shown in the following tableaux.

Internal syncope

L

	hára+ʔáki	Sync	NoClash
a.	hára+ʔáki	*!	
b. ☞	hár+ʔáki		*

P

	hár+ʔáki	NoClash	Id(str)
a.	hár+ʔáki	* !	
b. ☞	hár+ʔaki		*

External syncope

	yúru##ʔámarʔɛhɛ	NoClash	Id(str)	Sync
a. ☞	yúru##ʔámarʔɛhɛ			*
b.	yúr##ʔámarʔɛhɛ	* !		
c.	yúr##ʔamarʔɛhɛ		* !	

The analysis of internal syncope is shown on the left. At the lexical ('**L**') level, the constraint responsible for syncope (here called Sync) outranks NoClash and thus forces deletion of morpheme-final vowels even between stressed vowels. The syncopated output of this level is the input to the postlexical ('**P**') level; Sync is no longer at issue, and NoClash is free to be satisfied by deletion of one of the stresses in clash, violating a lower-ranked stress faithfulness constraint (Ident(stress)). The analysis of external syncope is shown on the right, where the relevant inputs are strings of words and are therefore only evaluated at the postlexical level. At this level, NoClash and Ident(stress) both dominate Sync and so syncope is blocked between stressed vowels.

Consequences I conclude with discussion of a hypothesis stated in Kiparsky (2013), that two levels in Stratal OT may only be distinguished by the promotion of constraints to undominated status in the later level. Given that NoClash violations introduced lexically are ultimately repaired postlexically, this hypothesis appears at least not to be contradicted by the analysis proposed here.

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