

Some reactions to Bybee 2001 ch. 6, perhaps not rising to the level of counteranalysis**(1) What's the prosodic take on Spanish $s \rightarrow h$?***Argentinean Spanish (earlier stage):*

$$\begin{array}{c} _ \# \# C \\ _ C \end{array} \text{ vs. } \begin{array}{c} _ \# \# V \\ _ // \end{array}$$

Looks like an utterance-span rule/constraint:

$$s \rightarrow h/\emptyset / \left(\begin{array}{c} U \\ \dots _ C \dots \end{array} \right) \quad \text{or} \quad *(\dots s C \dots)_U$$

Cuban Spanish (later stage):

$$\begin{array}{c} _ \# \# C \\ _ C \end{array} \text{ vs. } \begin{array}{c} _ \# \# V \\ _ // \end{array} \text{ vs. } _ //$$

Add a word-juncture, utterance-span rule/constraint, weaker than the above:

$$s \rightarrow h/\emptyset / \left(\begin{array}{c} U \\ \dots \left(\begin{array}{c} wd \\ \dots _ \end{array} \right) \left(\begin{array}{c} wd \\ \dots \end{array} \right) \dots \end{array} \right) \quad \text{or} \quad *(\dots (\dots s)_w (\dots)_w \dots)_U$$

Depending on one's theory of how optional rules and variably-ranked constraints work, one might predict an additive effect for the $_ \# \# C$ environment, which is now subject to two rules promoting debuccalization. But in this case, rate of $s / _ C$ is already so low that $s / _ \# \# C$ can't be much lower.

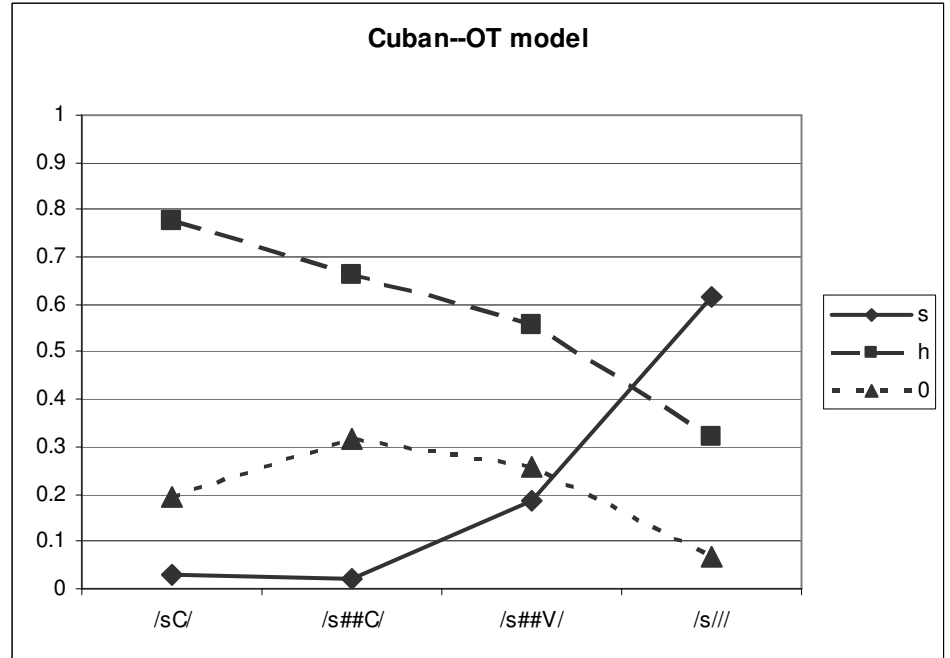
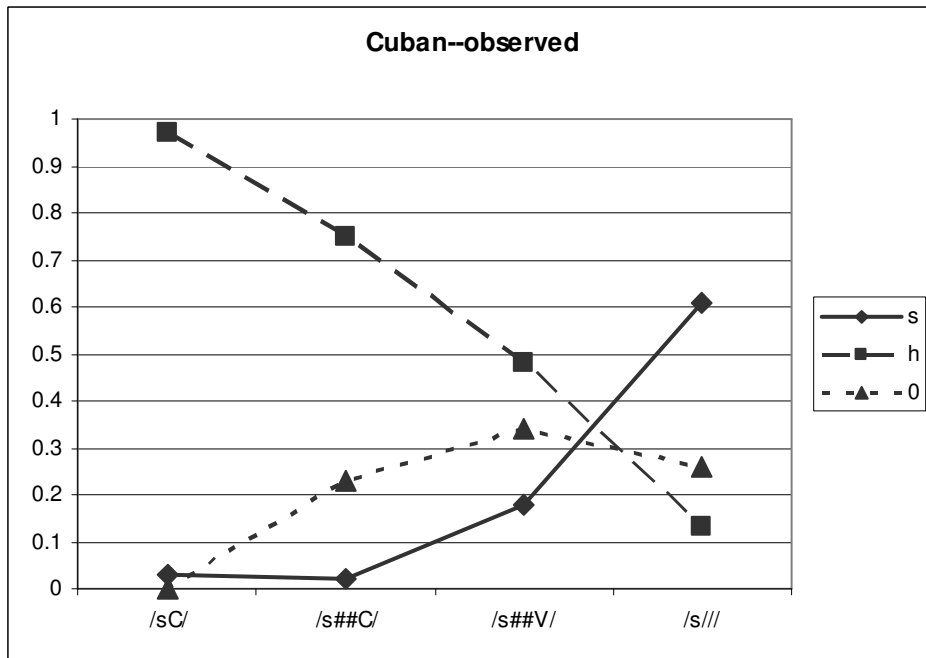
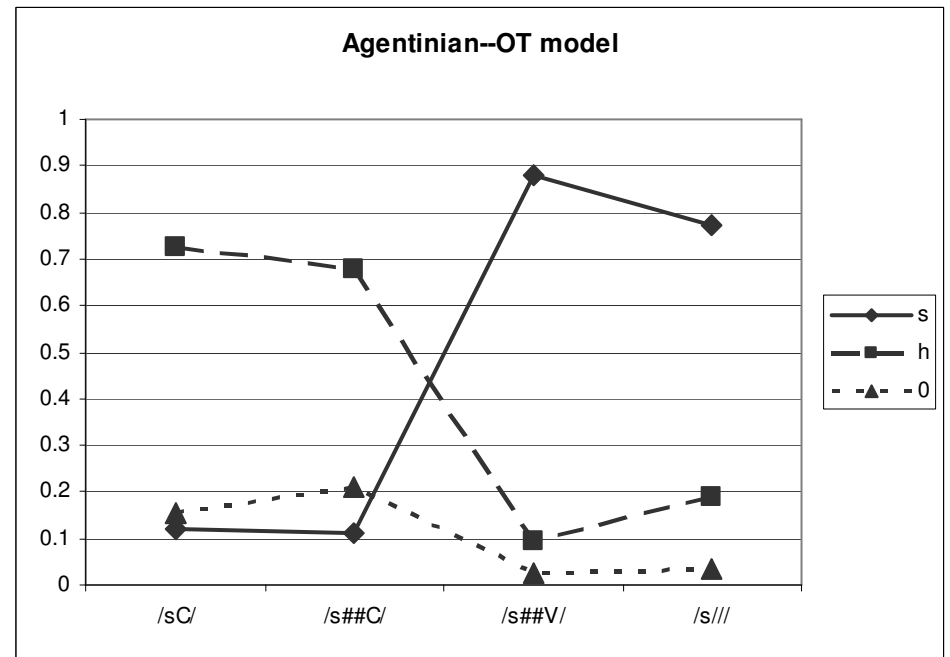
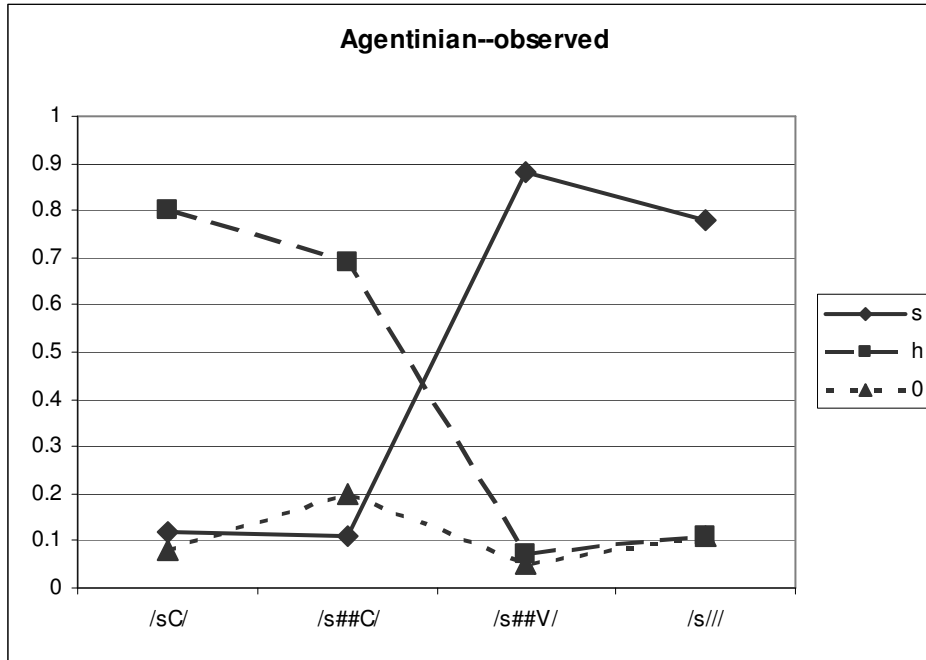
(2) Boersmian stochastic constraint ranking, using Hayes & al.'s OTSoft

With these constraints, it's easy to model the rates of s . The trade-off between h and \emptyset is harder, though. Bybee (at least in the summary—I haven't read the original paper) doesn't have a story either.

(3) Comparison of grammars

<i>Argentinean</i>		<i>Cuban</i>	
104.684	*(...sC...)U	*(...sC...)U	101.132
		*s##X	99.356
101.950	MAX-C	MAX-C	98.620
101.298	MAX(supraglott)		
		*h##X	96.424
		*h	96.288
99.610	*sNonPrevocalic	*sNonPrevocalic	95.860
99.596	*s##C		
99.348	*h		
98.688	*s##X	MAX(supraglott)	94.908
98.628	*h##X		
	...	*s##C	90.124
	...		
-3,038.246	*h##C	*h##C	-10,910.692
-13,564.456	*hC	*hC	-37,700.564

(4) Comparison of results—next page



(5) Assessment—does the prosodic approach buy us anything here?

Not really, IMO. Bybee's offering an explanation of why any rules should refer to the word juncture (and other-domain junctures), which was just a stipulation for Selkirk: the word juncture is "a location in which a portion of a word comes in contact with a variety of phonetic contexts" (p. 143) and thus is subject to phonetic variation, with possible phonologization.

But in these examples, syntactic-word juncture = prosodic-word juncture. What about cases where there's a mismatch? Does the prosodic approach buy anything there?

Assume that the application of certain rules at certain morpheme junctures has led the analyst to posit p-word junctures there.

- stem-stem boundary in compound: plausible that a morpheme could participate in more compounds (and thus occur in more environments) than it does affixed words
- prefix vs. suffixes: Say that the rule applies at the prefix-stem juncture, but not the stem-suffix juncture (are there any such rules??). If there's a Bybeean explanation, it would have to be true that if the potential target is...

(pseudo-Spanish)

(i)	... before the boundary (<i>de</i> ∅+ <i>cafeinado</i> , but <i>atmos</i> + <i>dad</i>)	each prefix combines with more stems than each stem combines with suffixes (plausible)
(ii)	...after the boundary (<i>re</i> +∅ <i>ducir</i> , but <i>pomposi</i> + <i>dad</i>)	each stem combines with more prefixes than each suffix combines with stems (implausible)

And what about the unnatural pattern, where the rule applies only at the stem-suffix juncture? Then, if the target is...

(iii)	... before the boundary (<i>des</i> + <i>cafeinado</i> , <i>atmo</i> ∅+ <i>dad</i>)	each stem combines with more suffixes than each prefix combines with stems (implausible)
(iv)	...after the boundary (<i>re</i> + <i>ducir</i> , <i>pomposi</i> +∅ <i>ad</i>)	each suffix combines with more stems than each stem combines with prefixes (plausible)

So the straight prosodic story, with a left-edge preference, predicts that (i) and (ii) should be good. The straight Bybeean story predicts that (i) and (iv) should be good.