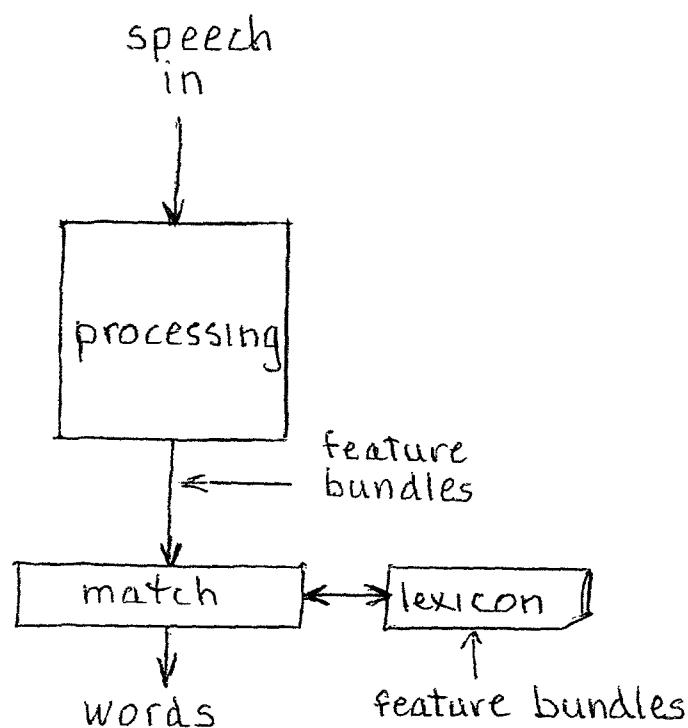


Identifying words in running speech



At the top, three syllable structures are shown:

- sudden: σ / o r / σ / o r
- help: σ / o / σ / r

Below the structures is a table showing feature representations for each word. The columns represent the phonemes /s/, /ʌ/, /d/, /ə/, /n/, /h/, /ɛ/, /l/, and /p/. The rows represent various linguistic features.

	s	ʌ	d	ə	n	h	ɛ	l	p
Vowel	+			+			+		
Glide						+			
Consonant	+		+		+			+	+
Stressed	+			-			+		
Reducible		-	+				-		
Continuant	+			-			-	-	
Sonorant				+			+	-	
Strident	+							-	
Lips								+	
Tongue blade	+		+		+			+	
Tongue body									+
Round									-
Anterior	+		+		+			+	
Lateral							+		
High		-		-			-		
Low		-		-			-		
Back		+		+			-		
Tense		-					-		
Spread Glottis						+			
Nasal	+				+				
Stiff vocal folds		-						+	

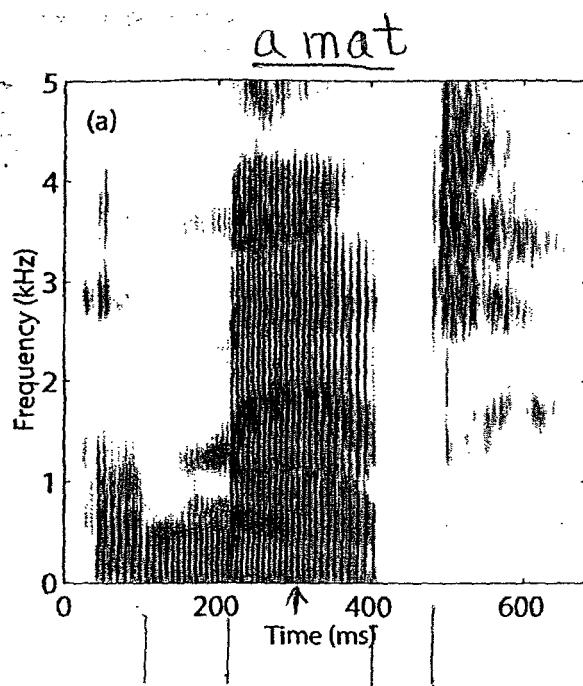
Lexical representations for the words sudden and help.

The syllable structure of each word is schematized at the top (σ = syllable, o = onset, r = rime).

Example: identifying a simple word.

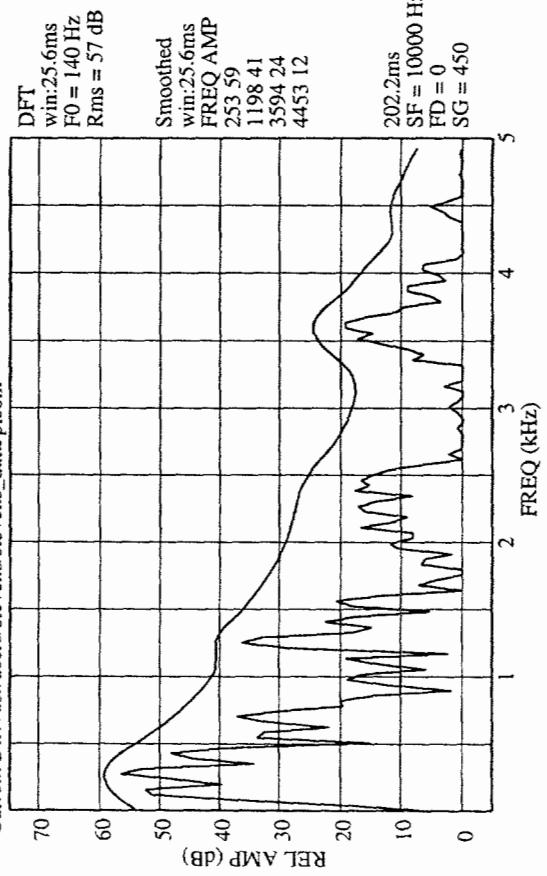
Find landmarks

Look around the landmarks

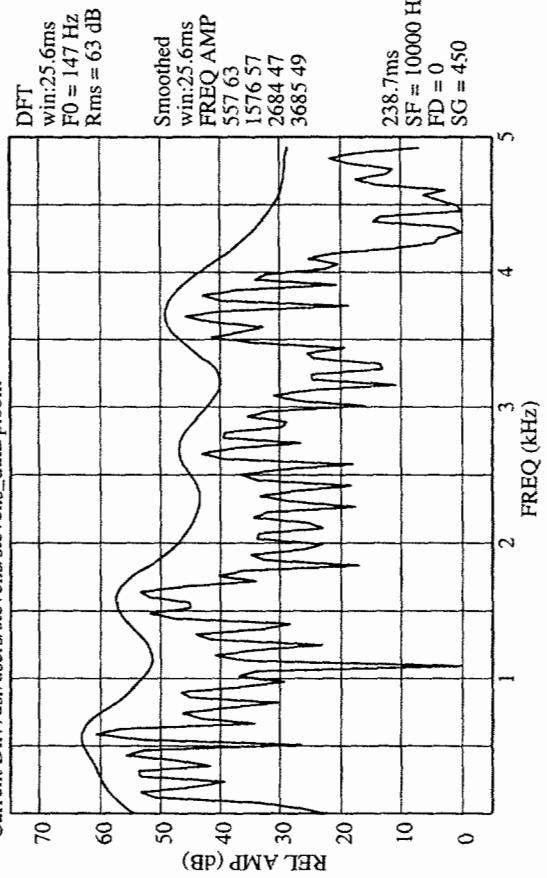


landmarks

Thu Apr 2 15:50 2004
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Current Dir: /usr/users/stevens/stevens_data/pisoni



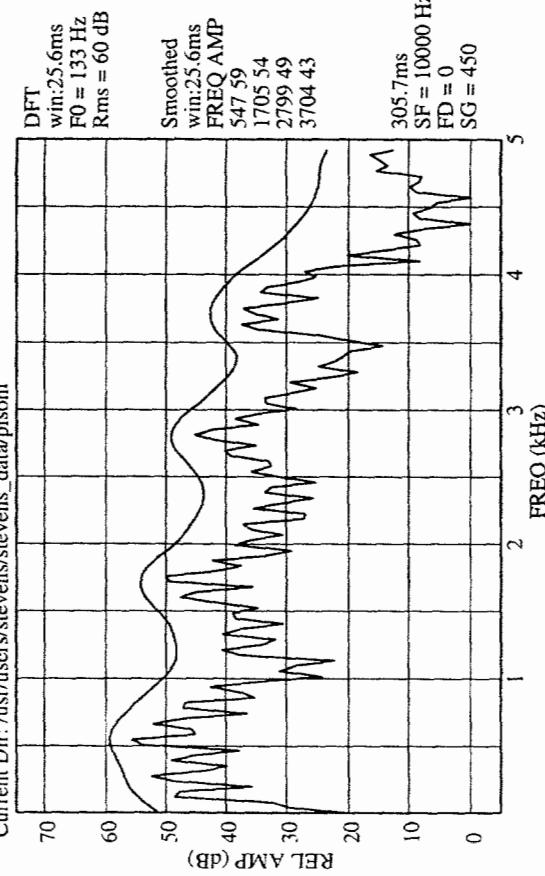
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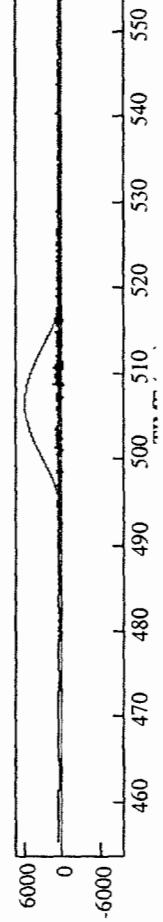
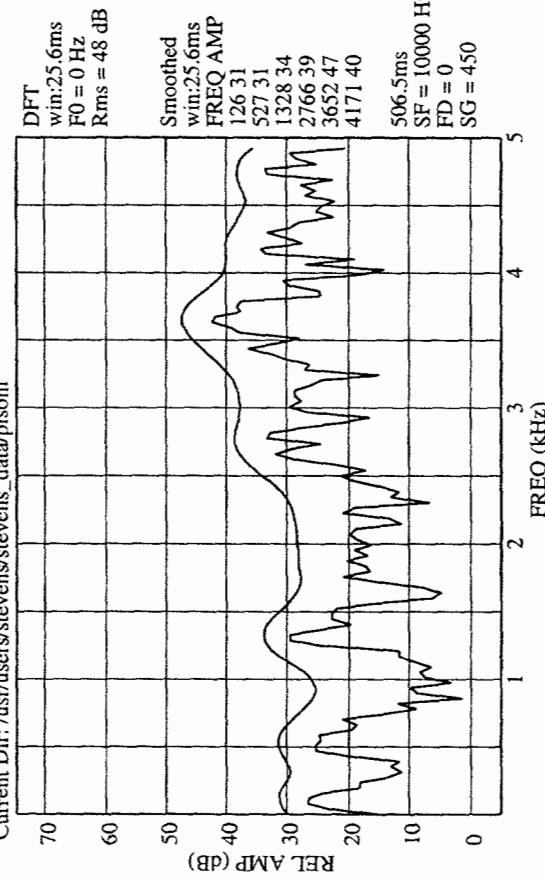
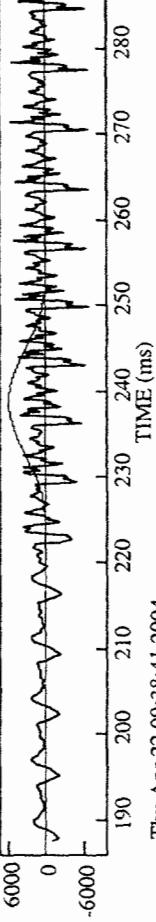
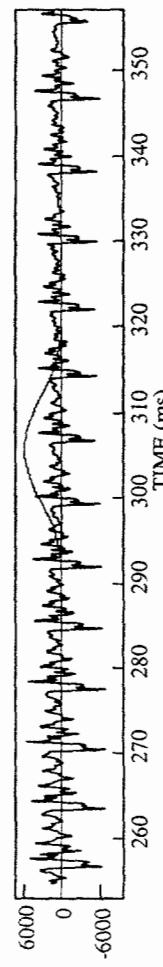
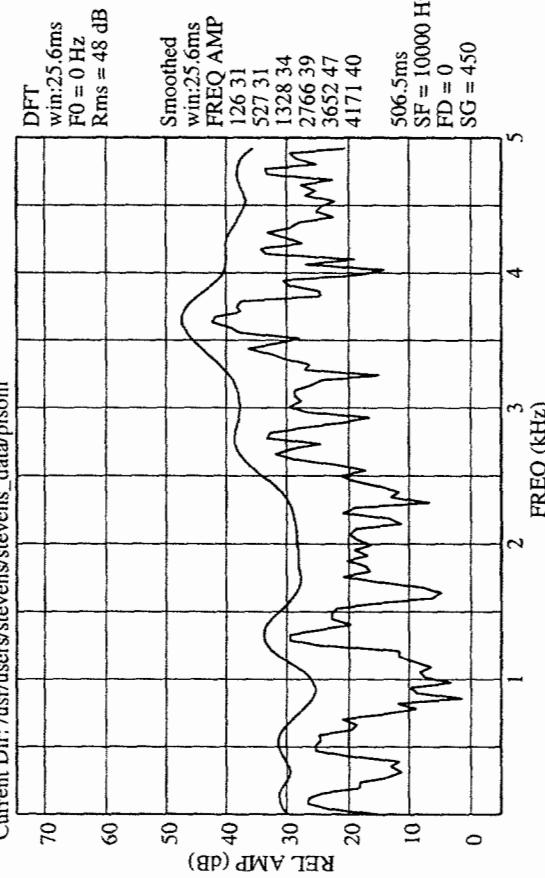
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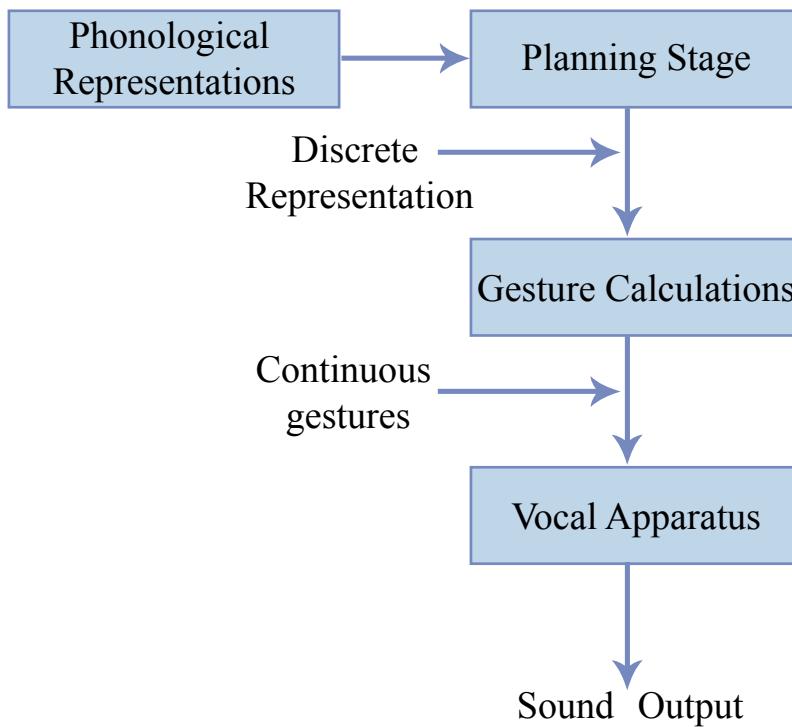
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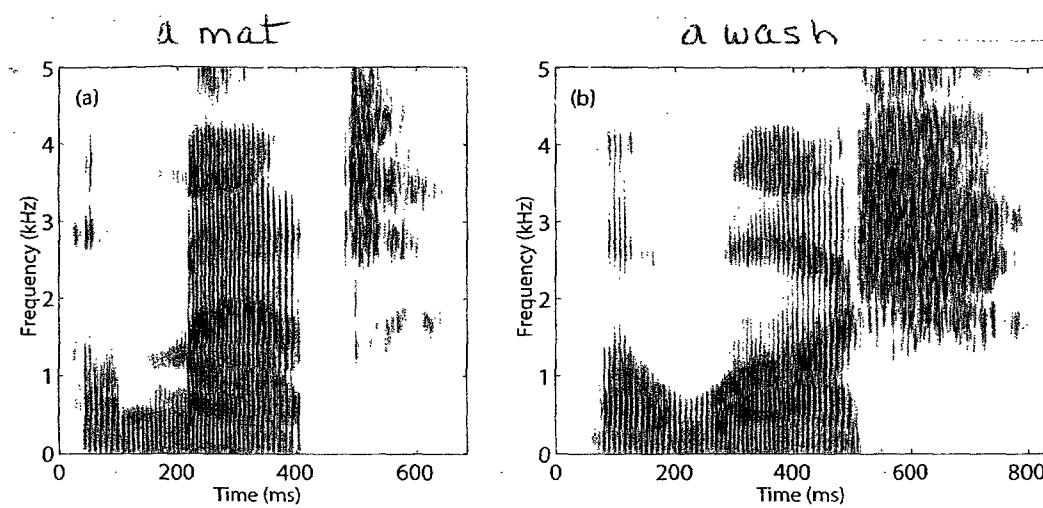
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Simple Model



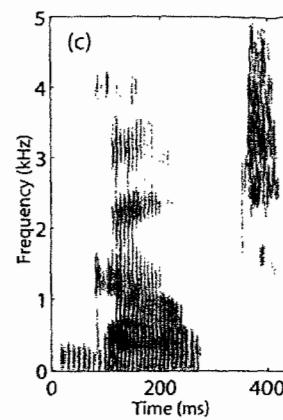
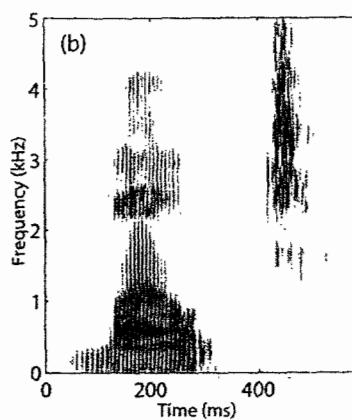
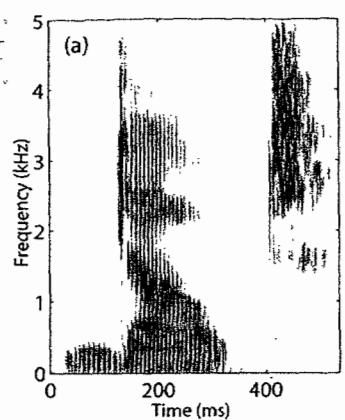
A Planning Stage is added to the basic component in the Figure before.



date

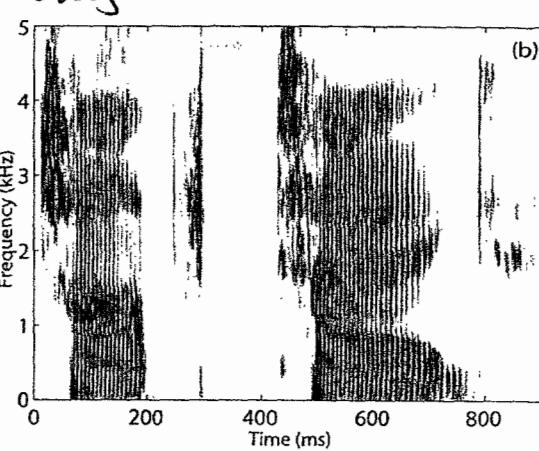
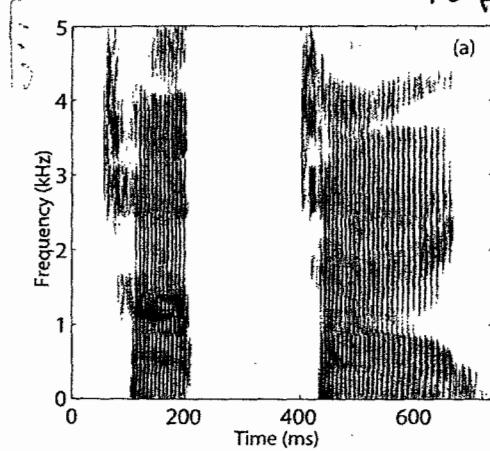
boat

goat

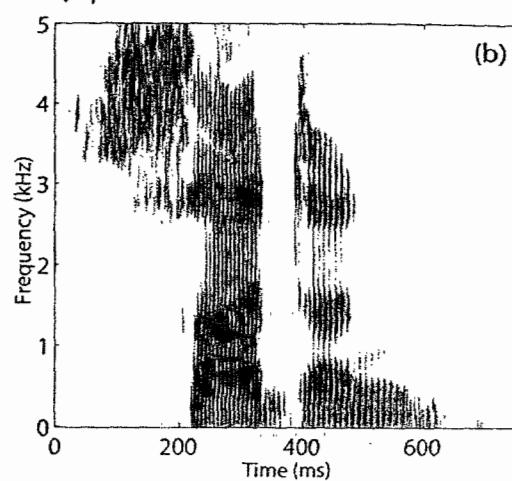
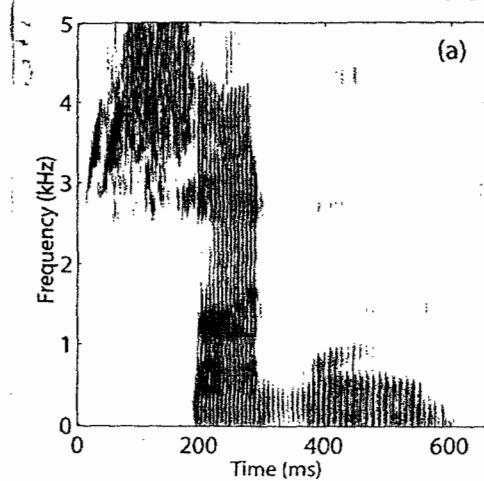


Top

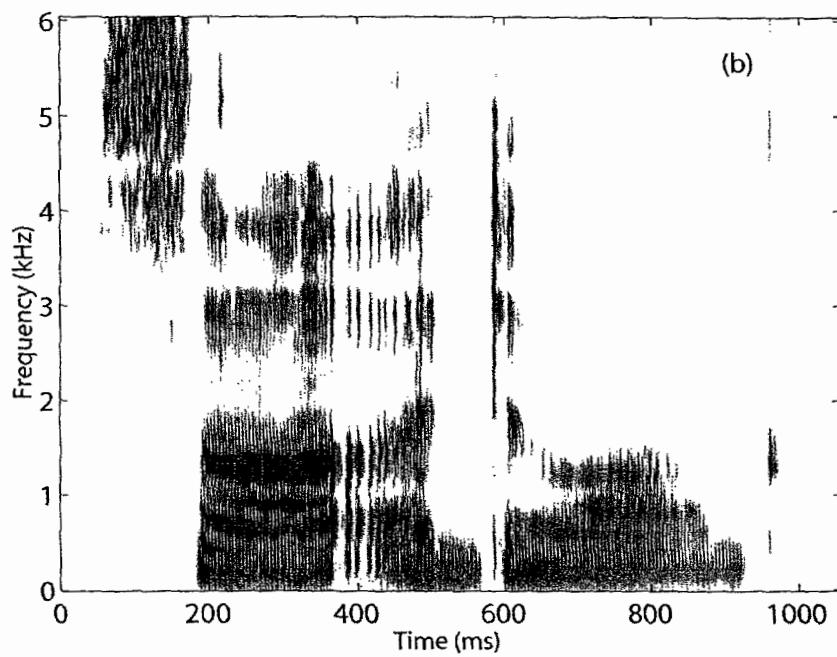
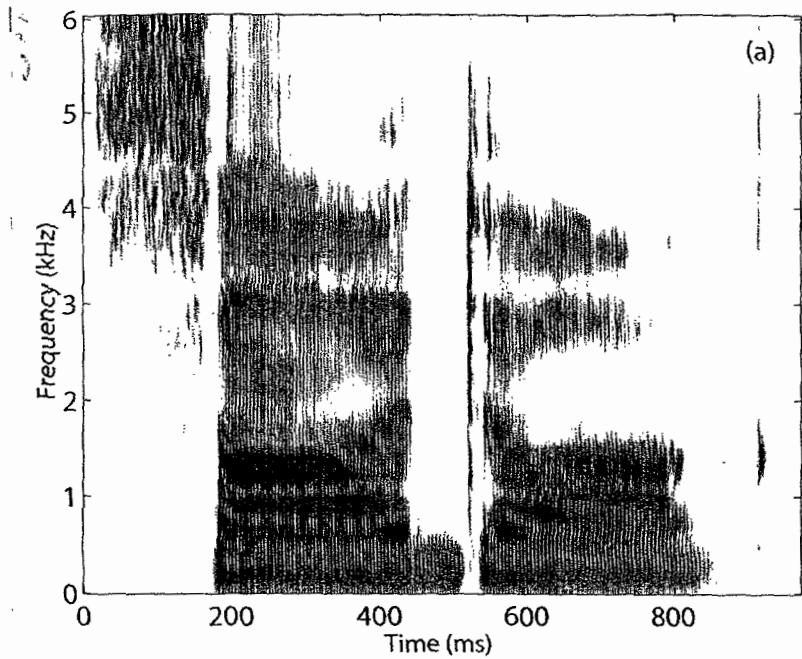
tag



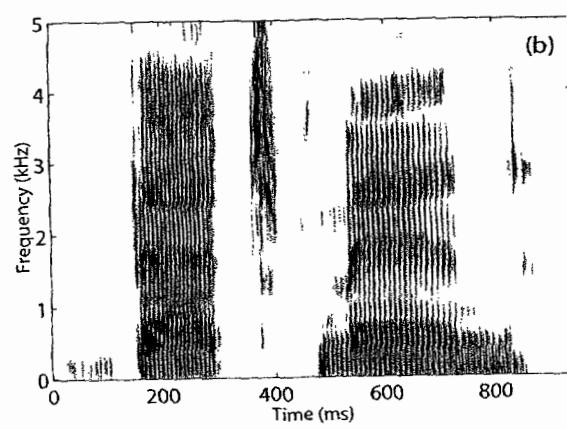
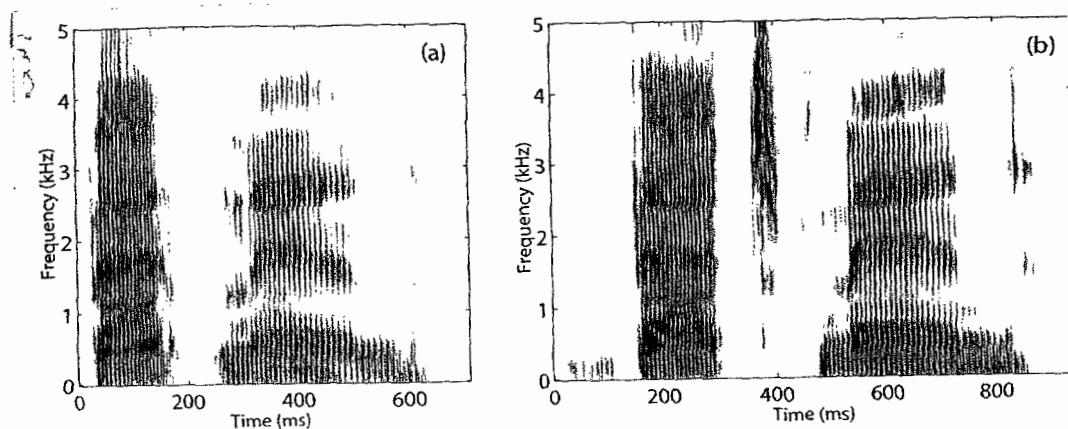
sudden



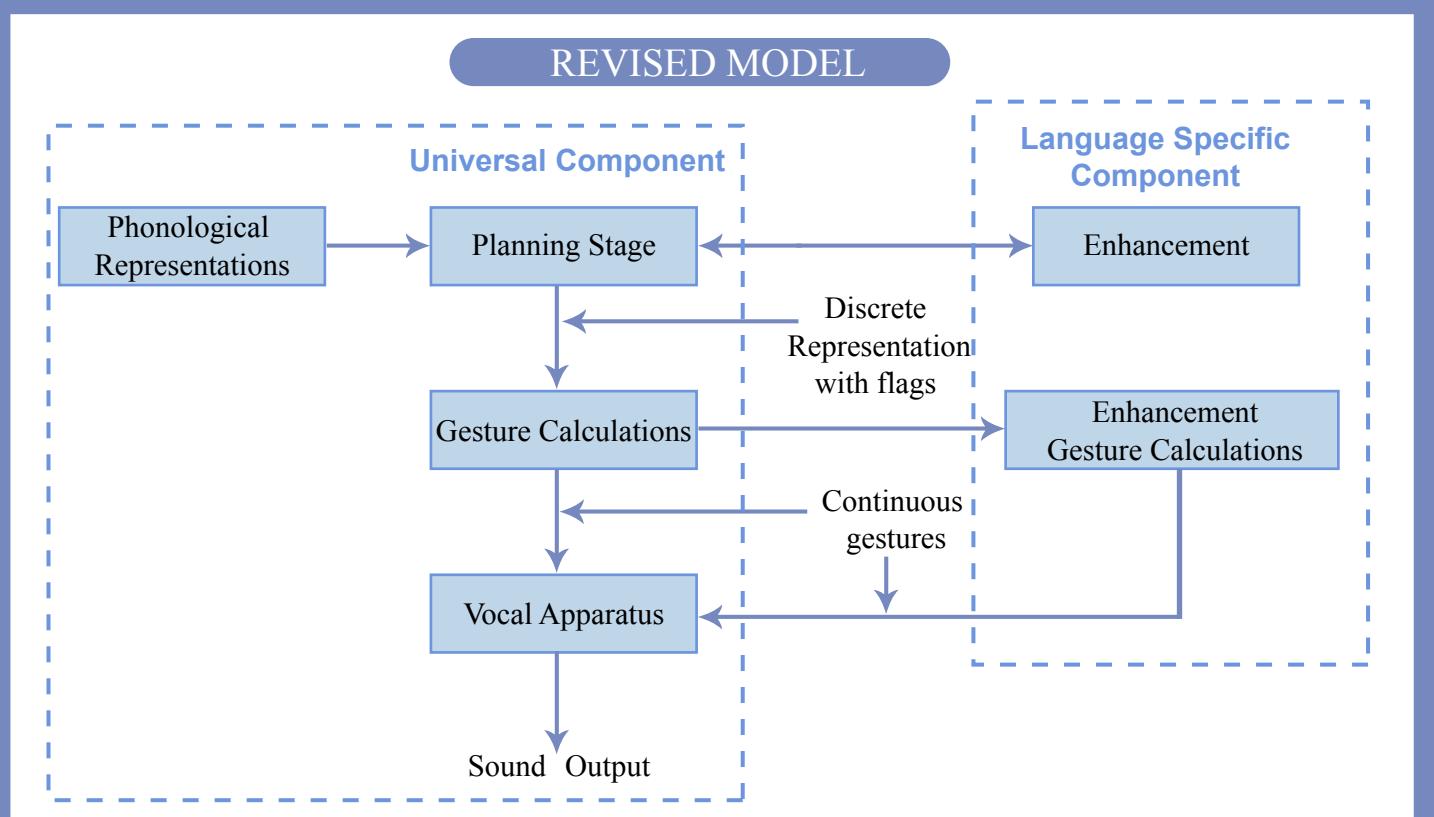
-6- saw a dog



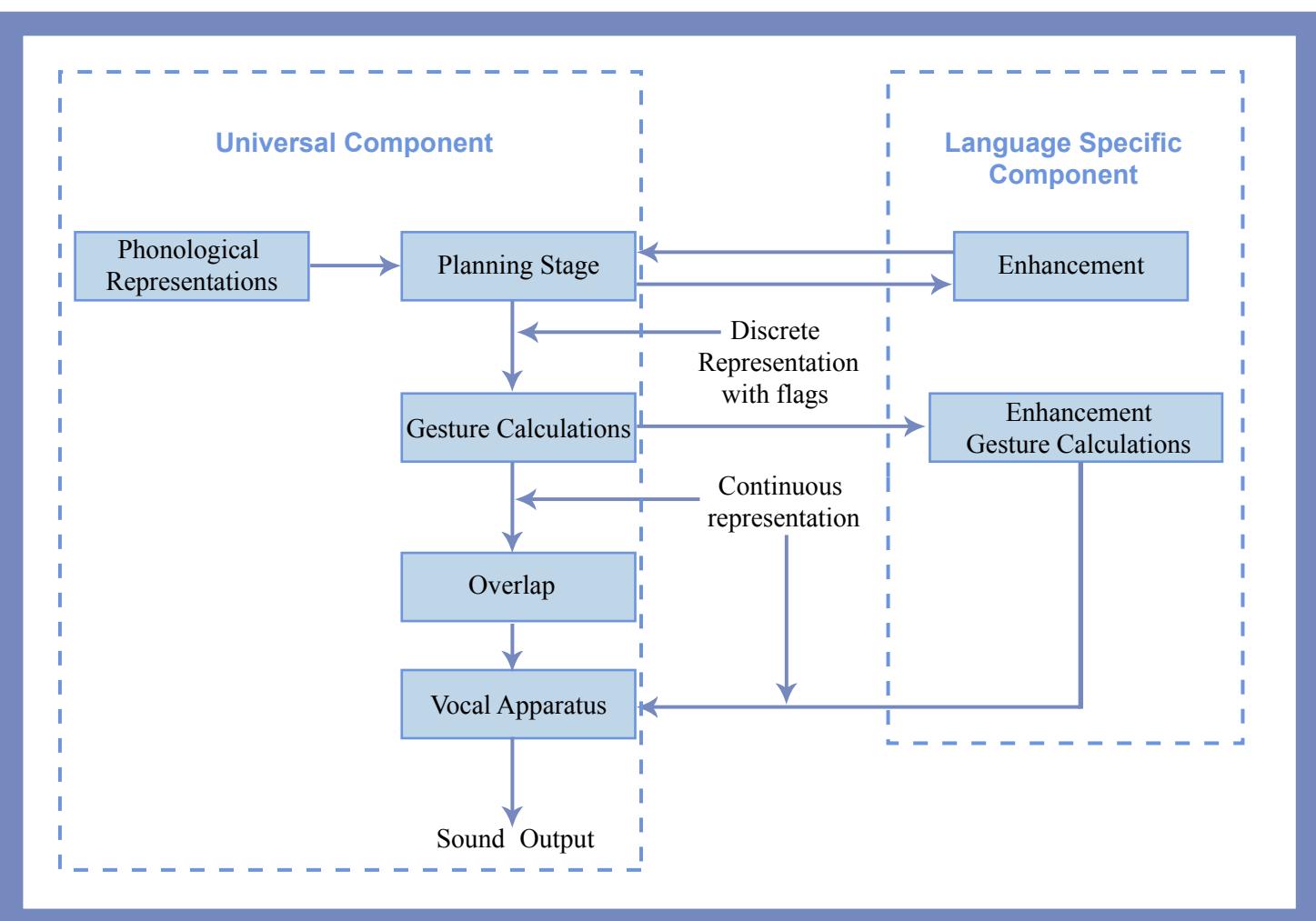
Saw a dog



bat man



Enhancement and Enhancement Gesture Calculations are added to the 'Simple Model' figure. The Enhancement component augments Planning Stage representations by flagging relevant features. Enhancement gestures are calculated for these flagged features.

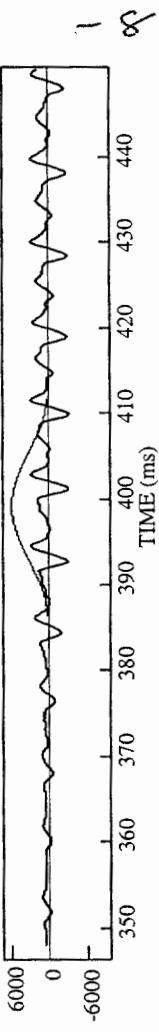
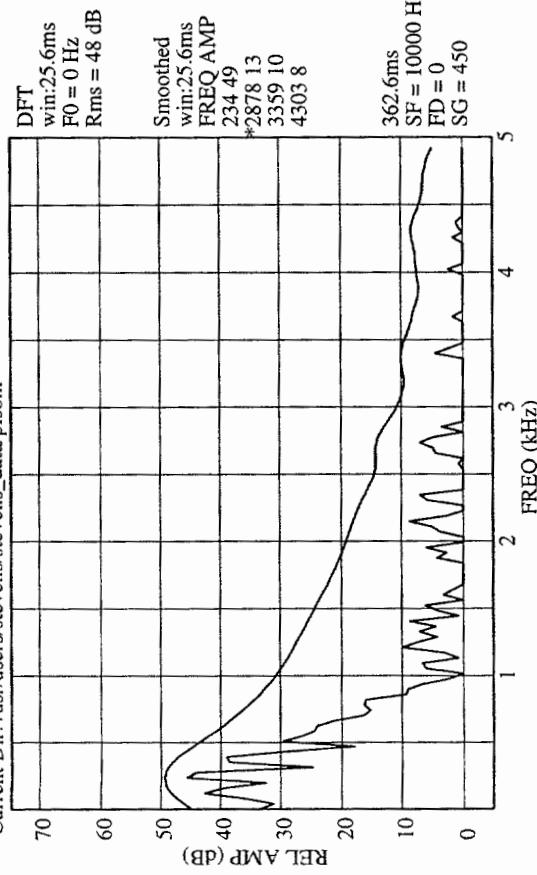


sudden

Thu Apr 22 09:51:04 2004

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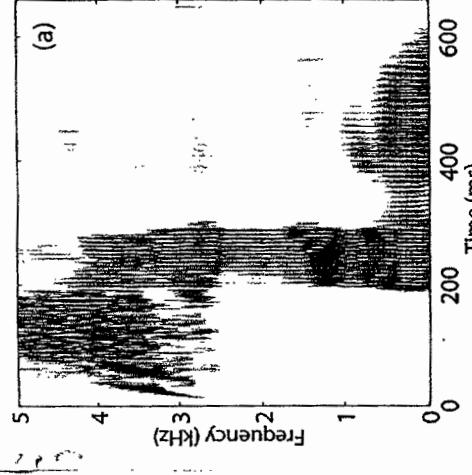
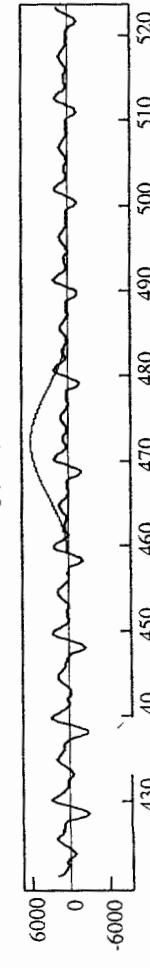
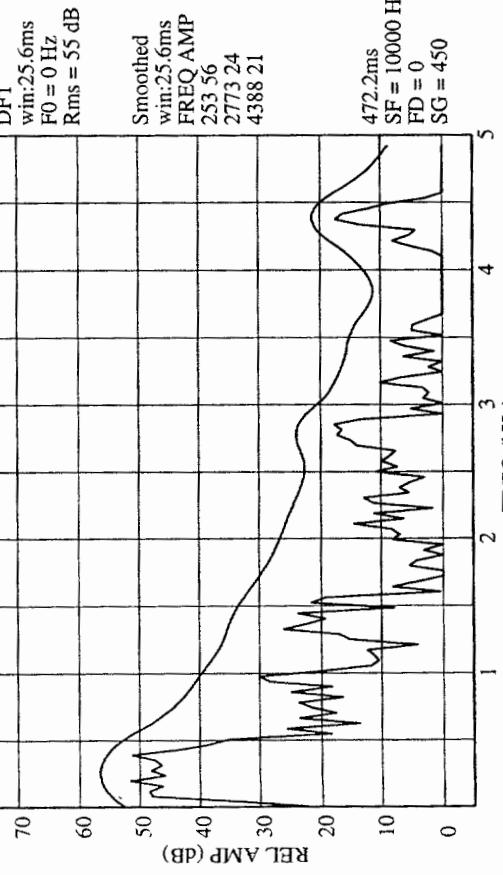
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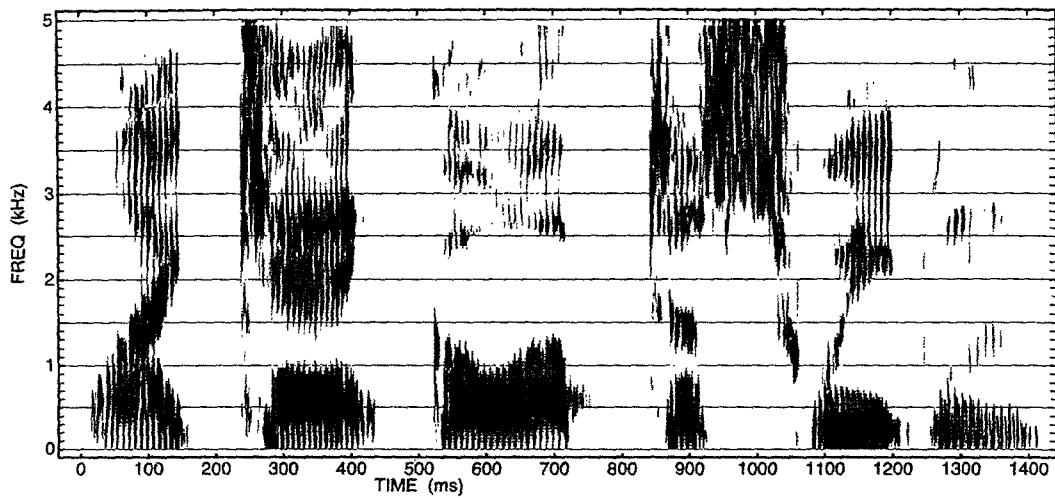


Figure 10.5 Spectrogram of the sentence *I can't go up to Sweden* (male speaker), illustrating modifications of consonants when they occur in a sequence of two or more consonants. The text discusses the sequences /nt#g/ (400 to 550 ms), /p#t/ (700 to 850 ms), /sw/ (1000 to 1150 ms), and /d#n/ (1200 to 1270 ms).

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Developing a cohort of words and reexamine the signal

