

# LINGUISTICS 891: Phonetics-Phonology Interface

## Spring 2010

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### **Class Schedule / Location:**

**Wednesday**

**3:00 – 5:50pm**

**Wells Hall C309**

### **COURSE GOALS:**

This course is intended to introduce students to issues related to the Phonology-Phonetics Interface. As will be seen, there are many different perspectives on the phonology-phonetics interface. A major aim of the course is to try to identify the points of similarity and divergence between the disparate perspectives, and to the extent possible, suggest new experiments/ideas that might lead to a clarification of the issues that are currently being debated in the literature.

### **REQUIRED MATERIAL:**

- All required material will be provided to you in the form of PDF's uploaded on to Angel.
- Additional materials may be a) distributed in class, b) posted on the course website on ANGEL, and/or c) placed on reserve in the library.

### **COURSE REQUIREMENTS:**

#### **• Attendance**

Students are expected to attend all classes. Attendance will be taken on a regular basis. It is important to attend all classes since materials that are not covered in the textbook maybe be presented. Please be sure to get the notes from any class you may miss. Some materials maybe be sent via email, but you should also check with me or a classmate regarding material you may have missed.

#### **• Reading**

Students are expected to do all the assigned readings. It is best to read each chapter/paper by the day a particular topic begins.

#### **• Participation**

a) Students are expected to attend all classes and participate in the discussions, as this will determine how keenly one has read the material. If you know that you cannot attend a class for a legitimate reason (e.g. illness), and you let me know **IN ADVANCE**, points will not be deducted from your participation grade. If you do not show up, you will receive 0% for participation.

b) You maybe be asked to turn in two or more questions or comments regarding the materials covered. This is a good chance to bring up questions that were not adequately covered in class, or to make suggestions about material that you would be interested in going over in more depth. Failure to turn in this assignment will result in a 30% reduction in your participation grade for the week in question.

- **Homework (assignments to be sent by e-mail or posted on the website)**

*Group Work*

The final project/paper for the course will be a group project involving 2-3 students. If a group member is not participating, I encourage you to let me know AS SOON AS POSSIBLE. If there are conflicts within a group, I am open to regrouping.

*Individual Work*

Each student is expected to submit a one page summary for each of the papers that is presented in class. Summaries must be typed and turned at the beginning of class. If you are absent, you may e-mail the assignment or leave it in my mailbox in the linguistics dept. (A, Floor 6, Wells Hall).

*Presentations*

Students are expected to sign up for presentations of the papers in the syllabus. A part of the final grade is allocated for the presentation of the material. Presentations will include a discussion of the main thesis/topic of the paper followed by the arguments as laid out in the paper, along with their merits and demerits. NOTE: The presentations are not to be a direct paragraph-by-paragraph description of the paper.

- **Grading**

<b>Presentations</b>	<b>30%</b>
<b>Summaries</b>	<b>35%</b>
<b>Final Project</b>	<b>25%</b>
<b>Participation</b>	<b><u>10%</u></b>
	<b>100%</b>

If you cannot submit the required work on time, you must discuss this with me at least ONE CLASS PERIOD BEFORE the test. If there is an emergency after this, and you cannot contact anyone in person, send me an e-mail explaining the nature of the emergency and how you can be contacted to discuss the matter.

## COURSE SCHEDULE:

This schedule is subject to slight variation, so if you miss a class, be sure to check with me or a classmate. It is most helpful to do the readings for a given topic BEFORE the first class dealing with that topic. This will make the lectures easier to follow, and you will be in a better position to ask questions about things that might not be clear to you.

WEEK	DATE	TOPIC
1	13 <sup>th</sup> Jan.	<i>Discussion of Syllabus – Course Organisation – Paper Discussion</i>
2	20 <sup>th</sup> Jan.	<b>Trivial Interface:</b> Chomsky & Halle (1968). The Sound Patterns of English. (Chap. 1 & 7) Keating (1988). Phonology Phonetics Interface.  Extra readings: Halle (1983). On Distinctive features and their Articulatory Implementation.
3	27 <sup>th</sup> Jan.	<b>No Interface:</b> Ohala (1990). There is no interface between phonology and phonetics. Browman and Goldstein (1995). Dynamics and Articulatory Phonology. Pisoni & Levi (2007). Representations and representational specificity in speech perception and spoken word recognition.  Extra readings: Pierrehumbert (2000). Exemplar dynamics: Word frequency, lenition and contrast; Pierrehumbert (2002). Word-specific Phonetics.
4		<b>Non-trivial Interface:</b> Zsiga (1997). Gestures, and Igbo Vowels: An Approach to the Phonology-Phonetics Interface. Durvasula (2009). Understanding Nasality. (Chap. 1)
5	10 <sup>th</sup> Feb.	<b>Coarticulation:</b> Beckman & Pierrehumbert (1986). Intonational Structure in Japanese and English. Keating (1988). Underspecification in Phonetics.
6	17 <sup>th</sup> Feb.	<b>Coarticulation:</b> Keating (1990). The Window Model of Coarticulation Articulatory Evidence. Bell-Berti (1995). Anticipatory and Carryover Effects: Implications for Models of Speech Production. Keating (1996). Phonology-Phonetics Interface.  Extra Readings: Kent & Minifie (1977) Coarticulation in Recent speech production Models.
7	24 <sup>th</sup> Feb.	<b>Coarticulation &amp; Timing:</b> Sagey (1988). On the Ill-formedness of Crossing Association Lines. Byrd (1996). A Phase Window Framework for Articulatory Timing.
8	3 <sup>rd</sup> Mar.	<b>Motor Control:</b> Fowler (1995). Speech Production. Rosenbaum (1991). Motor Control.  Extra Readings: Fowler (2003). Speech Production and Perception. Fowler & Saltzman (1993). Coordination and Coarticulation in Speech Production. Saltzman (1995). Dynamics and Coordinate Systems in Skilled Sensorimotor Activity.

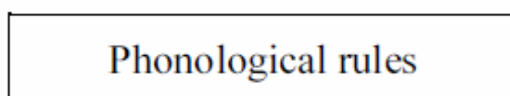
9	10 <sup>th</sup> Mar.	<i>No Classes – Spring Break</i>
10	17 <sup>th</sup> Mar.	<b>Speech Perception:</b> Diehl, Lotto & Holt (2003). Speech Perception.  <b>Discussion of Topics for Final papers/projects.</b>
11	24 <sup>th</sup> Mar.	<b>Speech Perception:</b> Fitzpatrick & Wheeldon (2000). Phonology and Phonetics in Psycholinguistic Models of Speech. Nevins & Braun (2008). The Role of Underlying Representations in L2 Brazilian English.  Extra Reading: Calabrese (2008). Acoustic Inputs and Phonetic illusions: A linguist's perspective on the neuro-psychological bases of speech perception.
12	31 <sup>st</sup> Mar	<b>Acoustic vs. Articulatory Targets:</b> Blumstein and Stevens (1981).The search for invariant correlates of phonetic features. Kingston (2007). The Phonetics-Phonology Interface. Durvasula (2009). Understanding Nasality. (Chap. 2)
13	7 <sup>th</sup> Apr.	<b>Categoricity vs. Gradience:</b> Port (1996). The discreteness of phonetic elements and formal linguistics : response to A. Manaster Ramer. Jongman (manuscript). Incomplete Neutralisation. Durvasula (2009). Understanding Nasality. (Chap. 5)  Extra Readings: Hale, Reiss, & Kissock (2006). Microvariation, Variation, and the Features of UG.
14	14 <sup>th</sup> Apr.	<b>Syllables in Production and Perception:</b> Browman_Goldstein (1988). Some Notes on Syllable Structure in Articulatory Phonology. Kabak & Idsardi (2005). Speech Perception is not Isomorphic to Phonology: The Case of Perceptual Epenthesis.  Extra Readings: Goldstein, Nam, Saltzman & Chitoran (2008).Couples Oscillator Planning Model of Speech Timing and Syllable Structure. Pierrehumbert (1994). Syllable structure and word structure: a study of triconsonantal clusters in English.
15	21 <sup>st</sup> Apr.	<b>Phonology vs. Phonetics:</b> Myers (2001). Boundary disputes: the distinction between phonetic and phonological sound patterns. Sole (2003). Controlled and Mechanical Properties in Speech.  Extra Reading: Bermudez-Otero (2008). Diachronic Phonology.
16	28 <sup>th</sup> Apr.	<b>Final presentations and final paper submission.</b>

**Background:**

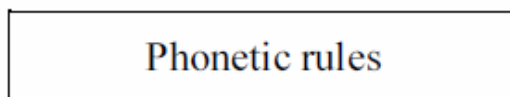
(1) The interface - from (Bermudez-Otero 2009)

*The classical modular feedforward architecture of phonology*

*Lexical representation*  
(categorical)



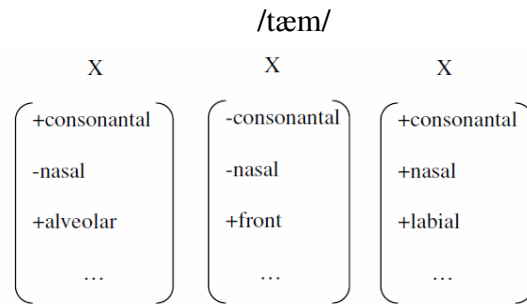
*Phonological representation*  
(categorical)



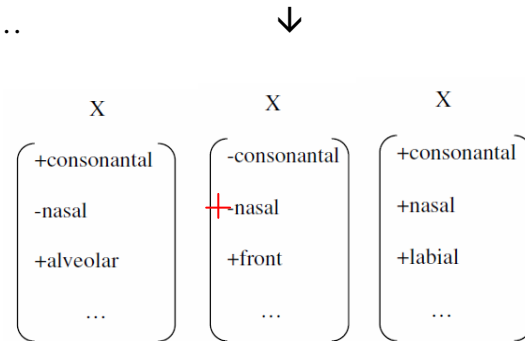
*Phonetic representation*  
(gradient)

(2) Interface Representations for “tam”

UR:



Phonological Processes: V Nasalisation...



Surface Representation:

↓

[tæ̃m]

Phonology-Phonetics Interface

↓

Gradient Articulatory production

