THEORETICAL PHONETICS
Study Guide
for second year students

Учебно-методическое пособие для вузов

Составители:
О.О. Борискина
Н.В. Костенко

Воронеж 2007

Утверждено научно-методическим советом факультета романо-германской филологии от 12.12.2006 протокол №10

Рецензент: А.А. Кретов

Учебно-методическое пособие подготовлено на кафедре английской филологии Факультета романо-германской филологии Воронежского государственного университета.

Рекомендуется для студентов 2-го курса дневного и вечернего отделений.

Для специальностей 031201 (022600) «Теория и методика преподавания иностранных языков и культур», 031202 (022900) «Перевод и переводоведение», 031000(520300) «Филология».

Contents

To the Student

The Study Guide has three aims: (1) to help Russian learners of English specializing in Cross-cultural Communication organize their Self-study sessions by learning and using the fundamental principles of Phonetics and the Phonological system of the English language (as lingua franca), and by understanding the basic segmental and suprasegmental linguistic phenomena involved in constructing spoken English, (2) to provide access to different scholars' opinions on phonetic phenomena in excerpts of *Selection of Reading Materials* Packet which are not otherwise available, and (3) to develop practical segmental and prosodic analysis skills through fluency-oriented tasks, leading to better performance in interactive situations and in decision-making about the diagnosis and treatment of pronunciation and spelling issues in TESL/TEFL.

Course Description

More specifically, the Course of Theoretical and Applied Phonetics introduces students to the International Phonetic Alphabet and other popular transcription systems, to the syllabic structure of English, the distribution of stress within a word, the consonant and vowel systems and the suprasegmentals, such as intonation in the broad sense of the word and rhythm.

The course is taught through lectures, class discussions, practical tasks, laboratory sessions, oral presentations, dramatic readings of literature excerpts (reciting poetry), essays and project work.

The course is intended:

• to build upon the students' knowledge of English grammar (spelling and punctuation) with relevance to phonetic phenomena;

• to facilitate the students' ability to approach discourse-oriented objectives with regard to key concepts of Phonetics;

• to increase interest, motivation and raise the confidence of the students in applying the concepts of Theoretical Phonetics to a variety of practical tasks, including language teaching;

• to highlight information management and conversation management functions of suprasegmental phonetics which may reveal the speaker's social identity, the speaker-listener relationship, degree of interest or involvement in the discourse: reticence, assertiveness, concern, sarcasm, surprise, etc.

GRADING

To successfully complete the course, students are required:

• to participate in class discussions (20 % of the final grade) demonstrating an appropriate level of understanding of the considered issues and an ability to reinforce arguments with illustrations;

• to complete laboratories (20 % of the final grade);

• to complete a <u>final assignment</u> (20 % of the final grade) which involves transcribing a recording of a 50-word authentic conversation in English on a tape, and analysing all the phonetic phenomena (modifications, suprasegmentals, type and style of English) found in it, specifying intonation groups, prominent and tonic syllables and the intonation patterns used. The

speech can be extracted from any kind of source (television shows, radio shows, movies, conversations between / among native speakers of English, etc.) and from any type of English (British, American, Australian, etc.);

• to sit a <u>final examination</u> (40% of the final grade) which consists of two parts: (1) a written essay of two of the theoretical aspects of the course; (2) the analysis of natural speech phenomena on a heard text. Below you can see Final Examination Example and a list of the theoretical aspects of the course.

Контрольно-измерительный материал №12

1. Manifestation of intonation and its linguistic functions.
Basic intonation patterns of Modern English.

2. Listen to the utterance on the tape and comment on the phonetic phenomena in connected speech (sound modifications, sentence stress, intonation, etc.), the type and style it represents.

Theoretical Aspects of the Course

1. Phonetics as a branch of linguistics. Applications of phonetics.
2. Aspects of the sound matter of language.
3. Components of the phonetic system of language.
4. English is a non-phonetic language. International Phonetic Alphabet.
5. National and regional pronunciation variants of English.
6. British and American pronunciation models. Most distinctive features of BBC English and Network English.
7. The articulatory classification of English vowels.
8. The articulatory classification of English consonants.
9. Phoneme as many-sided dialectic unity of language. Types of allophones. Distinctive and irrelevant features of the phoneme.
10. The system of vowel phonemes in English. Problem of diphthongs.
11. The system of consonant phonemes in English. Problem of affricates.
12. Modifications of English consonants in connected speech. Assimilation. Elision.
13. Modifications of English consonants in connected speech. Assimilation. Accomodation.
14. Modifications of vowels in connected speech. Reduction. Accomodation.
15. Linking patterns.
16. Theories on syllable division and formation.
17. The structure and functions of syllable in English.
18. Word stress in English. Its nature and function.
19. The degrees and the position of word stress.
20. Intonation and prosody: definition, functions, components, spheres of application.
21. Intonation and prosody: intonation patterns.
22. The framework for intonation.

23. Stress-time nature of Spoken English
24. Phonostylistics. Types and styles of pronunciation in English.

Part 1 English Speech Sounds

Issues to Study and Discuss:
1. Sound-symbol Correspondence in English. The Role of the Phonemic Alphabet.
2. Articulatory Classification of English Consonants.
3. Articulatory Classification of English Vowels.
4. Problematic Sounds.

Tasks

Task1. What kind of knowledge would enable you to pronounce a word properly?
Could you (as a non-native speaker of English) rely on English spelling conventions to pronounce / read an unknown word properly?
How do you pronounce the "a" in "banana"? the "c" in "success"? the "th" in "Theresa", "Theseus" and "Thames"?
Would you dare to read the word "Ghoti"?; to transcribe it?

How would you spell [ʃ]?
Look through the funny observations of Bill Bryson and give examples of "untruly and unpredictable language" _Ref. [Bryson,1990, SRM, pp.49-54]._
Would you call the English alphabet regular in the way it symbolizes the sounds of the language? Back up your opinion.
Make a conclusion about sound-symbol correspondence system in English and the role of a phonetic/ phonemic alphabet as a set of special symbols by means of which sounds may be represented.

Task 2. Although the English version of the Roman alphabet is the primary source of symbols for transcribing English consonant phonemes, this alphabet has only twenty one consonant letters. What additions have been made and why?

Task 3. The International Phonetic Alphabet (IPA) first introduced by D. Jones is probably familiar to you. However, it is not the only system used by phoneticians. To familiarize yourself with some other commonly used phonetic /phonemic alphabets, see _Ref. [Celce-M.,1996, SRM, pp. 65-66]._
What is your conclusion about the similarities and differences found in the alphabets?
Dwell on the <u>broad</u> versus <u>narrow</u> transcription.

Task 4. What are the main principles of classifying consonants? Are there any differences when considering the problem among Russian, British and American linguists? Make a list of the marked points of differences and fix the results in a table. *Ref.* *[Соколова, 2004, pp.60-65; Соколова, 2003, pp.24-31].*

Task 5. What is a sonorant? There has traditionally been a lot of debate about this class of consonants or vowels? Why do some of the British and American phoneticians refer some of the sonorants to the class of semivowels? Does the term **liquids,** used by American phoneticians, appeal to you? Why?

Task 6. Comment on the parameters below, illustrating them with examples. Sonorants vary:
- in the manner of articulation;
- in the place of articulation;
- in the position of the soft palate;
- in the direction of the air stream.

Task 7. What nasal consonant is most likely to pose a challenge to Russian learners of English? Why?
Do you know how English stops are correctly pronounced in English? Right! They are often unreleased in final position. Read the words and phrases below following the example.
Example: mop/bob (lips remain closed); peck/peg (back of the tongue remains on velum).

pick/pig	hot/cod
back/bag	tot/tod
cap/cab	shop/rob

Wow! The buttons look like they're going to po<u>p</u>!
Yeah, it's just not going to fi<u>t</u>.
I'm going to take it ba<u>ck</u>.
In fact, there are other problematic consonant sounds. To eliminate possible mistakes, study the recommendations given in the textbooks *Ref.* *[Соколова,2003, pp.32-66.; Merkulova,2002, pp.46-47].*

Task 8. Further practice: *Ref.* *[Hancock, 2004, pp.14-18, 32-42; Trim, 2002, pp. 12-45].*

Task 9. What is a <u>vowel</u>? Examine its characteristics and define how vowel sounds differ from their consonant counterparts. Many linguists claim that the description of vowels is much more elusive than that of consonants. Why?

Task 10. Study the information about basic principles of classifying vowels and answer the following questions:
1. What is the most common vowel sound in English?

2. How are English vowels classified on the articulatory and acoustic levels?

3. What does stability of articulation specify? How are vowels subdivided according to this principle? Is the situation seen similarly by different phoneticians?

4. What classifying principle do you think different vowel charts share? Compare the IPA vowel chart and the North American English vowel chart(s). Are there any differences? If yes, how can you account for them? *Ref. [Celce-M., 1996, SRM, pp.63-64].*

5. Why is vowel length not considered a minimal distinctive feature? What factors does it depend on? Use a specific vowel sound to illustrate your answer.

6. Fill in the gaps in the following conclusion:

"…phonological analysis of articulatory features of English vowels allows us to consider the following two characteristics functionally relevant:

a)_____b)_____. The rest of the features mentioned above, that is _____, _____, and _____ are indispensable constituents of vowel quality." *Ref. [Соколова, 2004, pp. 78-86; Соколова, 2003, pp. 85-89; Bryson,1990, SRM, pp. 49-54].*

Task 11. As noted, vowels can be difficult both for the teacher to describe and for the student to master. This is partially because the articulatory characteristics of vowels cannot be pinned down as precisely as those of consonants. A second reason why vowels can be so difficult is due to the relative complexity of the English vowel system – especially if compared to the vowel system of your native language.

1. What do you consider to be the greatest challenges in teaching vowels?

2. Are there typical difficulties for native speakers of your language?

Task 12. Further practice: *Ref. [Hancock,2004, pp.30-48, 142].*

Task 13. Vowels as well as consonants have no meaning of their own but they can render communicative meaning.

A: Study some vowel interjections with communicative meaning in English and transcribe them.

VOWELS WITH COMMUNICATIVE MEANING IN ENGLISH

Written	Pronounced	Used to express	In response to/(situation)
Ahhh!	[ɑ]	Satisfaction, relaxation	(You step into a nice hot tub./You take a sip of refreshing iced tea on a hot day.)
Aw.	[ɔ:]	Sympathy, disappointment	"My dog just died."
Ow!	[aw]	Pain	(A door slams on your finger.)
Oh?	[ow]	Mild surprise, interest	"The new Woody Allen movie is opening tonight."

Oh.	[ow:]	Comprehension	"You have to plug it in before it'll work."
Uh-oh.	[?ʌ? - ow]	Trouble	(You're driving over the speed limit and you see a police car in your rear-view mirror.)
Ooh!	[uw:]	Disgust / Excitement	"Look! There's a fly in your soup!"
Oops!	[uwps]	Recognition of problem	(You spill your coffee while pouring.)
Aha!	[əha]	Discovery	(You finally understand the math problem you've been working on.)
Huh?	[hʌ] (nasal)	Lack of understanding	(You don't hear what someone says to you, or you think you heard incorrectly.)
Boo!	[buw]	Frightening someone	(You sneak up behind someone and want to scare him or her.)
Uh-uh.	[?ʌ?ə] (nasal)	No	"Have you ever read this book?"
Uh-huh	[ənʌ] (nasal)	Yes	"Can I call you?"

B: Practice using these simple interjections as an efficient means of conveying emotions and feelings.

A	
What would you say if … 1) you sat down to relax in a big comfortable chair after standing all day? 2) you didn't hear what one of your friends just said to you? 3) you saw your teacher coming toward you and you had skipped his class twice this week? 4) you dropped the coin while paying in the shop? 5) your boyfriend had just dumped you? 6) your friend had swallowed a bug? 7) the examiner had caught you cheating in the test?	**Respond to this:** *Example:* Ahh!
B	
What situations cause the following responses? *Example:* 1) You quietly walked up behind a friend to scare her? 2) _____ 3) _____ 4) _____ 5) _____	**Responses** Boo! Oops! *or* Uh-oh! Aw. Huh? Ooh!

Task 14. In three of these words the underlined part is pronounced similarly; in the fourth word the underlined part is pronounced differently. Find the fourth word.

Example:

st<u>ea</u>k	br<u>ea</u>k	***cl<u>ea</u>n***	gr<u>ea</u>t
1. l<u>a</u>zy	l<u>a</u>pel	l<u>a</u>bel	l<u>a</u>bourer
2. <u>wh</u>ile	<u>wh</u>ich	<u>wh</u>o	<u>wh</u>ite
3. c<u>o</u>me	r<u>o</u>ll	c<u>o</u>mb	gr<u>o</u>w
4. bl<u>oo</u>d	pr<u>o</u>ve	r<u>u</u>de	s<u>ou</u>venier
5. <u>h</u>our	<u>h</u>onest	<u>h</u>eir	<u>h</u>ospital
6. d<u>ea</u>lt	dr<u>ea</u>mt	h<u>ea</u>l	j<u>ea</u>lous
7. sl<u>o</u>gan	m<u>o</u>tor	t<u>o</u>tal	pr<u>o</u>per
8. <u>s</u>ugar	ca<u>ss</u>ette	fa<u>sh</u>ion	pa<u>ss</u>ion
9. all<u>ow</u>	d<u>ou</u>bt	b<u>ou</u>ght	sc<u>ou</u>t
10. repl<u>a</u>ce	purch<u>a</u>se	surf<u>a</u>ce	pal<u>a</u>ce
11. ab<u>s</u>ent	re<u>c</u>ent	de<u>sc</u>ent	pre<u>s</u>ent
12. prom<u>ise</u>	dev<u>ice</u>	surpr<u>ise</u>	real<u>ise</u>
13. l<u>i</u>able	l<u>i</u>ved	rev<u>i</u>val	f<u>i</u>nal
14. hou<u>ses</u>	fa<u>ces</u>	hor<u>ses</u>	pla<u>ces</u>
15. p<u>u</u>dding	p<u>u</u>t	p<u>u</u>ll	p<u>u</u>ncture
16. sover<u>eig</u>n	fount<u>ai</u>n	determ<u>i</u>ne	rout<u>i</u>ne
17. b<u>ear</u>d	w<u>or</u>d	h<u>ear</u>d	th<u>ir</u>d
18. gh<u>o</u>st	h<u>o</u>stage	l<u>o</u>st	fr<u>o</u>sty
19. b<u>u</u>ry	fr<u>ie</u>ndly	pr<u>e</u>tty	pl<u>ea</u>sant
20. <u>ch</u>orus	<u>ch</u>erish	<u>ch</u>aos	<u>sch</u>olarship
21. cr<u>ea</u>ture	d<u>e</u>cent	l<u>ea</u>gue	m<u>e</u>nace
22. m<u>ea</u>sure	dr<u>ea</u>dful	tr<u>ea</u>sure	br<u>ea</u>the
23. dan<u>g</u>er	an<u>g</u>el	an<u>g</u>er	ma<u>g</u>ic
24. tr<u>i</u>vial	r<u>i</u>val	m<u>i</u>nor	s<u>ig</u>n
25. n<u>a</u>ture	ch<u>a</u>nge	gr<u>a</u>vity	b<u>a</u>sis
26. di<u>s</u>cipline	vi<u>s</u>ion	<u>c</u>ylinder	mu<u>sc</u>le
27. off<u>ice</u>	prom<u>ise</u>	serv<u>ice</u>	expert<u>ise</u>
28. s<u>ui</u>table	bisc<u>ui</u>t	g<u>ui</u>lty	b<u>ui</u>lding
29. pat<u>i</u>ent	cre<u>sc</u>ent	an<u>ci</u>ent	ma<u>chi</u>ne
30. phy<u>s</u>ical	m<u>y</u>thology	rhy<u>th</u>mic	p<u>sy</u>chological

Task 15. A: Contribute to "Words commonly mispronounced by Russian learners of English". Does it influence understanding? Is there internationally or scientifically recognized cure for mispronounciation? How would you treat it?

<u>Words commonly mispronounced by Russian learners of English</u>
Hotel, effort, country, onion, worry, ...

B: How would you treat the following?
a) a student constantly pronounces "cart" as [kat], "part" as [pat], etc.

substituting the English [a:] for the Russian [a];
b) a student pronounces "campus" as [´kæmpus];
c) a student cannot distinguish "pill" and "peel" and pronounces [pil] for both;
d) a student pronounces [mu:f] instead of [mu:v]; [set] instead of [sed]; [dis] instead of [ðis].

Task 16. Go to "Introspecting About Your Own Language Learning"(p. 47).

SOUND SYSTEMS AND ORTHOGRAPHIC SYSTEMS
LABORATORY ONE

Exercise I-A
You will be given a word in context, and then you will hear a statement about how many phonemes the word has. Listen to the word as it is pronounced on the tape, and indicate whether the statement made about the number of phonemes it has is TRUE or FALSE. Two examples have been done for you.
Example 1: *Pen* has 3 phonemes. TRUE.   *Pen* has 3 phonemes.
Example2: *Snow* has 4 phonemes. FALSE. *Snow* has 3 phonemes.

   1. _____   6. _____
   2. _____   7. _____
   3. _____   8. _____
   4. _____   9. _____
   5. _____   10. _____

Exercise I-B
Again, you will be given a word in context. Listen to the word as it is pronounced on the tape, and write down the number of phonemes in that word. Two examples have been done.
Example 1: *tag*   3 phonemes
Example 2: *fish*   3 phonemes

   1._____   6. _____
   2._____   7. _____
   3._____   8. _____
   4._____   9. _____
   5._____   10. _____

Exercise I-C
As I say each number, please write in the blank next to each word the number of phonemes that the word has. Then, listen for the answer. We'll do one word at a time. One example has already been filled in.
Example 1: *dogs*   4 phonemes
1. please _____   6. caught _____
2. wrong _____   7. thought _____
3. shoe _____   8. tray _____

4. daily _____   9. themselves_____

5. cats _____   10.reflex_____

Exercise I-D

For each word that you hear, please write down the sequence of phonemes according to whether they are consonants or vowels. The standard convention for writing <u>consonant</u> is a capital *C*, and for writing <u>vowel</u>, capital *V*. Two examples have been done.

Example 1:   *pray* – CCV

 The sequence of phonemes is CONSONANT, CONSONANT, VOWEL

1._____   6._____

2._____   7._____

3._____   8._____

4._____   9._____

5._____   10._____

Exercise 1-E

	Contrastive Distribution	Complementary Distribution
Example 1: The initial consonant of *dime* and the initial consonant of *time*	v	
Example 2: The initial consonant of *top* and the second consonant of *stop*		v
1. The final consonant of *blot* and the final consonant of *block*.		
2. The initial consonant of *gin* and the second consonant of *spin.*		
3. The initial consonant of *tell* and the medial consonant of *letter*.		
4. The final consonant of *sin* and the final consonant of *sing*		
5. The initial consonant of *dare* and the initial consonant of *there*.		
6. The initial consonant of *lift* and the final consonant of *fool*.		

On the tape, you will hear pairs of sounds referred to in pairs of words. Please indicate whether you think these sounds are in contrastive or complementary distribution in English by putting a check mark in the appropriate column.

Exercise I-F

After each item number, there are several phonemes in Alternative IPA symbols. The vowel symbols have already been ticked. Listen to the word that is pronounced on the tape. Write the word down, and then circle all the consonant

phonemes that are present in the word you have heard. Then listen for the numbers of the columns containing the correct answers. In the two examples, ALL the correct phonemes have already been ticked.

bone	b ✓	ow ✓	n ✓	e
ship	ʃ✓	s	i✓	p✓
1.	c	k	æ✓	p
2.	k	c	ey✓	p
3.	r	i✓	ng	ŋ
4.	ʃ	z	ʒ	uw✓
5.	sh	ʃ	s	uw✓
6.	th	ð	i✓	s
7.	ʃ	s	ow✓	w
8.	ey✓	gh	t	θ
9.	t	θ	iy✓	θ
10.	m	ɛ✓		s

Words: *cap, cape, ring, zoo, shoe, this, so, eight, teeth, mess*

Exercise I-G
Listen to the words as they are pronounced on the tape and, using the information you have learned from the previous exercise, transcribe into Alternative IPA symbols the first phoneme — the initial phoneme — in each of the words. Please cover the answers with a piece of scrap paper until you hear the word "answer."

	ANSWERS
Example 1: *street*	answer: /s/
1.	1. /f/ phone
2.	2. /r/ wrong
3.	3. /w/ wine
4.	4. /k/ closet
5.	5. /s/ psychology
6.	6. /g/ garbage
7.	7. /z/ xylophone
8.	8. /b/ below
9.	9. /θ/ thing
10.	10. /ʃ/ sure

FEEDBACK SHEET
LABORATORY ONE   Name _____

1. Number of phonemes
   a)   b)   c)   d)   e)

2. Transcribe the final phoneme

a)   b)   c)   d)   e)

3. Transcribe the initial phoneme

1)   2)   3)   4)   5)

6)   7)   8)   9)   10)

4. Transcribe the final phoneme

11)   12)   13)   14)   15)

16)   17)   18)   19)   20)

5. Transcribe the medial phoneme

21)   22)   23)   24)   25)

26)   27)   28)   29)   30)

Please comment on the following aspects of the lab:

- **Speed … pace –**
- **Clarity –**
- **Difficulty –**
- **Usefulness –**

Your Suggestions:

_____

SOUND SYSTEMS AND ORTHOGRAPHIC SYSTEMS
LABORATORY TWO
ExerciseII-A
VOICE VS. VOICELESSNESS
Indicate whether the initial consonant in each word is voiced or voiceless.
[+ vo] = voiced
[– vo] = voiceless
Example 1: + vo
Example 2: – vo

1._____   6._____
2._____   7._____
3._____   8._____
4._____   9._____
5._____   10._____

Exercise II-C

[+ vo] vs. [– vo] - FINAL CONSONANTS

(Speakers of languages in which final consonants are always voiceless, such as Dutch, German, Polish, and Russian, may tend to de-voice final consonants when speaking English.)

Write the alternative IPA symbol for the final consonant in each word that you hear. Then decide whether a speaker who pronounces the final consonants as voiceless would pronounce the word you have heard the same way or differently. If the pronunciation would be different, write the consonant that would be substituted in the third column.

	Final consonant	Consonant substituted
Example 1: *different*	/g/	/k/
Example 2: *same*	/k/	/k/

Exercise II-D

VOICED VS. VOICELESS AND ASPIRATED VS. UNASPIRATED STOPS

	voiced	voiceless	aspirated	unaspirated
Ex.1:				
Ex.2:				
Ex.3:				
Ex.4:				
Ex.5:				
Ex.6:				
1				
2				
3				
4				
5				
6				

WORDS: *Ex1. Bai Ex2. Bhai Ex 3. Tali Ex4. Thali Ex5. Do Ex 6. Dho*
1.Tali 2.Do 3.Thali 4.Dho 5.Bhai 6.Bai.

Question:
If a non-native speaker of English pronounces the initial stop of _pet_ without aspiration, how might this word be understood by some native speakers of English if there are not sufficient contextual cues to prevent such a misunderstanding?

Exercise II-E
PLACE OF ARTICULATION
As you hear each term, please fill it in next to the appropriate definition.
1) articulated with the two lips close together or touching;
2) articulated with the lower lip touching the upper teeth;
3) articulated with the tip of the tongue close to or touching the upper teeth, or between the upper and lower teeth;
4) articulated with the tip or blade of the tongue close to or touching the ridge behind the upper teeth;
5) articulated with the front of the tongue close to or touching the hard palate;
6) articulated with the back of the tongue close to or touching the soft palate;
7) articulated in the opening between the vocal cords;
8) articulated with the blade of the tongue close to or touching the place where the ridge behind the upper teeth meets the hard palate;
9) articulated with the tongue raised toward the center of the roof of the mouth.

Exercise II-F
Indicate whether the consonant in each utterance is BILABIAL, LABIODENTAL, or VELAR

	BILABIAL	LABIODENTAL	VELAR
Ex.1			
Ex.2			
1			
2			
3			
4			
5			
6			
7			
8			
9			

Exercise II-G
Indicate whether the consonant in each utterance is DENTAL, ALVEOLAR, or GLOTTAL.

	DENTAL	ALVEOLAR	GLOTTAL
Ex.1			
1			
2			
3			
4			
5			
6			
7			
8			

Exercise II-H
Indicate whether the consonant in each utterance is PALATAL, ALVEOLO-PALATAL, or CENTRAL

	PALATAL	ALVEOLO- PALATAL	CENTRAL
1			
2			
3			
4			
5			
6			
7			
8			

Exercise II-I
Indicate whether the consonant in each utterance is a STOP, a NASAL, a LIQUID, or a SEMI-VOWEL.

	STOP	NASAL	LIQUID	SEMI-VOWEL
Ex.1:				
Ex.2:				
1				
2				
3				
4				
5				

6				
7				
8				
9				
10				
11				
12				

Exercise II-J

Indicate whether the initial consonant in each utterance is a FRICATIVE, a SIBILANT, or an AFFRICATE.

	FRICATIVE	SIBILANT	AFFRICATE
Ex.1			
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Exercise II-K

Listen to the articulatory information. Then write the phonemic symbol-using Alternative IPA symbols – that represents the sound that has been described.

    Ex.1 /m/   Ex.2 /s/

1._____   5._____   9._____   13._____

2._____   6._____   10._____   14._____

3._____   7._____   11._____   15._____

4._____   8._____   12._____   16._____

Answers: 1. /k/, 2. /d/, 3. /v/, 4. /l/, 5. /p/, 6. /θ/, 7. /f/, 8. /tʃ/, 9. /ʒ/, 10. /w/,

11. /ð /, 12. /ŋ/, 13. /r/, 14. /ʃ/, 15./h/, 16. /j/

Exercise II-L

Write the Alternative IPA symbol for the initial consonant in each of the following words and then list the articulatory features for that consonant.

	symbol	+/– voice	Place of articulation	Manner of articulation	Answers
Ex.1	/tʃ/	–	alveolo-palatal	affricate	/tʃ/
1					/t/
2					/z/
3					/v/
4					/g/
5					/n/
6					/ θ /
7					/ʃ/
8					/j/
9					/b/
10					/f/
11					/ʤ /
12					/w/
13					/ð̃/
14					/l/
15					/r/

Exercise II-M

Each of the following sets contains one inappropriate consonant. That is, three of the consonants in each set share an articulatory feature that the fourth does not. Underline the symbol that does NOT belong to the set, and give the articulatory feature that it does not share with all three others.

> Ex.1 /m n v ŋ/   fricative
> Ex.2 /p b d g/   voiceless
> 1. /t s n g / _____   3. /g ŋ s k / _____
> 2. /b z d g / _____   4. / f v d ŋ / _____

_____

FEEDBACK SHEET
LABORATORY TWO   Name _____

A. Exercise II-M continued

> 5. /m ʃ p b / _____ ;   all the others are _____
> 6. / ʃ z s g / _____ ;   all the others are _____

7. /p θ k t / _____; all the others are _____

8. / g h k ŋ / _____; all the others are _____

B. Complete the following chart with the appropriate articulatory information – or missing symbol.

Phoneme	Voice	Place of articulation	Manner of articulation
[ʤ]			Affricate
	Voiced	Labiodental	
	Voiceless	Glottal	
[ŋ]			

C. Situation: A non-native speaker who does not aspirate initial voiceless stops says to a native speaker of English: 'I think the guy in the brown coat is Ted.' What is the native speaker likely to hear this as?

_____

Please comment on the following aspects of the lab:

- **Speed … pace –**
- **Clarity –**
- **Difficulty –**
- **Usefulness –**

    Your Suggestions:

_____

SOUND SYSTEMS AND ORTHOGRAPHIC SYSTEMS
LABORATORY THREE

Exercise III-A
NUMBER OF VOWEL PHONEMES
Write down how many vowel phonemes there are in each of the following words. Vowels produced with movement of the articulators are each counted as one phoneme, even though there may be two letters in their symbols.

Example 1: 2   Example 2: 3

1._____   6._____

2._____   7._____

3._____   8._____

4._____   9._____

5._____   10._____

WORDS: Ex. 1. nation   Ex. 2. national   1. summary   2. paragraph
 3. tough   4. book   5. radio   6. congress   7. congregation   8. protean
9. protein   10. although

Exercise III-B

As you hear each word, circle the IPA phonemes needed to transcribe it, <u>as pronounced</u>. The dialect used may not necessarily be your own. Use Alternative IPA symbols.

Ex.1.	**/b/**	**/r/**	/i/	/ea/	**/e/**	**/d/**
Ex.2. IPA-1	**/b/**	**/r/**	**/i/**	/iy/	/e/	**/d/**
Ex.2. Alt IPA	**/b/**	**/r/**	/i/	**/iy/**	/e/	**/d/**
1	/t/	/e/	/i/	/iy/	/e/	/k/
2	/t/	/ey/	/e/	/ay/	/æ/	/k/
3	/t/	/i/	/ey/	/ay/	/ai/	/k/
4	/v/	/ow/	/aw/	/au/	/ə/	/l/
5	/w/	/aw/	/ɔ/	/a/	/ow/	/ʃ/
6	/w/	/æ/	/ɔ/	/a/	/o/	/ʃ/
7	/r/	/ə/	/uw/	/o/	/u/	/f/
8	/r/	/u/	/uw/	/ow/	/u/	/f/

WORDS: *Ex.1.bread; Ex.2.breed; 1. tick 2. take 3.tyke 4.vowel 5.wash [ɔ] 6. wash [a] 7. roof [u] 8. roof [uw]*

Exercise III-C

PLACE: HIGH VS. MID VS. LOW

Please indicate whether the vowel in each word is HIGH, MID or LOW on the vertical axis of a vowel grid. Then fill in the IPA symbol for that vowel, using Alternative IPA.

Example 1: mid /ey/   Example 2: high /uw/

1._____   6._____   11._____

2._____   7._____   12._____

3._____   8._____   13._____

4._____   9._____   14._____

5._____   10._____   15._____

Answers:

1. high	6. high	11. mid
2. low	7. mid	12. mid
3. mid	8. mid	13. low
4. mid	9. low	14. low
5.high	10.low	15.low

Exercise III-D

PLACE: FRONT VS. CENTRAL VS. BACK

Please indicate whether the vowel in each word is FRONT, CENTRAL or BACK on the HORISONTAL axis of a vowel grid. Then fill in the IPA symbol for that vowel, using Alternative IPA.

Example 1: central / ə /   Example 2: central /aw/

1._____   6._____   11._____

2._____   7._____   12._____

3._____   8._____   13._____

4._____   9._____   14._____

5._____   10._____   15._____

Answers:
1. back	6. back	11.central
2. front	7. central	12.front
3. front	8. front	13.central
4. central	9. front	14.back
5. back	10.back	15.central

Exercise III-E
MANNER: TENSE VS. LAX
Indicate whether the vowel in each of the following names is TENSE or LAX and then transcribe the appropriate IPA vowel symbol, using Alternative IPA.

1._____   2._____   3._____   4._____   5._____

6._____   7._____   8._____

Answers: 1.tense 2.lax 3.lax 4.lax 5.tense 6.tense 7.tense 8.lax

Exercise III-F
DIPHTHONG VS. MONOPHTHONG
A diphthong is a vowel produced with movement of the tongue and lips. Under this definition, the American English vowels /ay/, /aw/, and /ɔy/ are considered diphthongal. The vowels /iy/, /ey/, /ow/, and /uw/ are also produced with movement of the tongue and lips, but the movement is less pronounced than for /ay/, /aw/, and /ɔy/. For this reason, in our system, only /ay/, /aw/, and /ɔy/ will be consistently referred to as diphthongs. These three vowels are also referred to as the primary diphthongs.

Example 1: diph. /ɔy/   Example 2: monoph. /i/

1._____   2._____   3._____   4._____   5._____

6._____   7._____   8._____   9._____

10._____   11._____   12._____   13._____

Answers: 1./e/ 2./ay/ 3./aw/ 4./ɔy/ 5./i/ 6./ay/ 7./æ/ 8./a/ 9./aw/ 10/ə/ 11./ɔy/ 12./u/ 13./ɔ/

Question 1: What articulatory features do the vowels /iy/, /ey/, /ow/, /uw/ share?
Question 2: For the examples in this exercise and for the tense vowels, how is the feature of movement captured by the Alternative IPA symbols?

Exercise III-G
Note: a fronting diphthong glides towards the tongue position at the end of /iy/, the highest front vowel; a retracting diphthong glides towards the tongue position at the end of /uw/, the highest back vowel.
For each item, you will hear an articulatory description. Fill in the blank in the transcription with the appropriate vocalic symbol, using Alternative IPA and then translate the word.
Example 1: /lɑks/ locks or lox   Example 2: /luwks/ Luke's

1. [l ks] _____   6. [ʧ k] _____

2. [sl p] _____   7. [ʧ k] _____

3. [b k] _____   8. [s] _____

4. [b k] _____   9. [g t] _____

5. [sl p] _____   10. [r f] _____

Answers: 1. /u/ looks 2. /i/ slip 3. /æ/ back 4. /ay/ bike 5. /iy/ sleep
6. /e/ check 7./ɔ/ chalk 8. /aw/ south 9. /ow/ goat 10. /ə/ rough

Exercise III-H
Listen to the vowel phonemes on the tape and fill in the missing feature in the articulatory description.
Example 1: low back fronting diphthong
Example 2: low central vowel

1. high _____ tense vowel   7.mid_____lax vowel
2.mid front _____vowel   8.mid _____ tense vowel
3._____front tense vowel   9._____ front vowel
4. high _____ tense vowel   10._____back lax vowel
5._____central retracting diphthong   11.low central _____ diphthong
6. high front_____ vowel

Answers: 1. front 2. lax 3. mid 4. back 5. low 6. lax 7. central 8. back
9. low 10. high 11. fronting

FEEDBACK SHEET
LABORATORY THREE   Name _____

A. Write out complete phonemic transcriptions (using Alternative IPA symbols) for the full words represented by the following abbreviations.

1. Mr.
2. Mrs.
3. Ms.
4. St.
5. Ave.
6. Jr.
7. lb.

B. Please fill in the vowel chart below. Use Alternative IPA symbols. Please do not copy from the class handout, but feel free to consult the articulatory information contained in the lab. Primary diphthongs are underlined.

	FRONT	CENTRAL	BACK
HIGH	/ /		/ /
	/ /		/ /
	/ /		/ /
MID	/ /	/ /	
	/ /		
LOW			/_/
	/_/_/_/	/ /	
	/ /		

_____

Please comment on the following aspects of the lab:
- **Speed … pace –**
- **Clarity –**
- **Difficulty –**
- **Usefulness –**

Your Suggestions:

Part 2 The Functional Aspect of Speech Sounds

Issues to Study and Discuss:

1. Phoneme and Allophones:
    1.1 Definition of the phoneme and its functions.
    1.2 Types of allophones.
    1.3 Relevant and irrelevant features of the phoneme.
2. Main Trends in Phoneme Theory.
3. Methods of Phonological Analysis.

Tasks

Task1.   Study the definitions of the phoneme and the allophone. Which of them have you found user-friendly? scientifically relevant? *Ref. [Соколова, 2004, pp. 41-42; Соколова, 2003, 22-23]*.

Task 2.   Fill in the gaps and decide what function of the phoneme you consider to be primary (of bigger, of minor importance)? *Ref. [Соколова, 2004, pp. 41-43]*.

Firstly, the phoneme is a functional unit. The opposition of phonemes in the same phonetic environment _____, e.g. *ban – man, fill – feel, try – dry*. Sometimes the opposition of _____ serves to distinguish _____, e.g. *He was heard badly. – He was hurt badly*. Thus we may say that the phoneme can fulfil _____ function.

Secondly, the phoneme is material, _____ and _____. That means it is realized in speech in the material form of _____. The phonemes _____ the material form of morphemes, so this function may be called _____.

Thirdly, the phoneme performs _____ function, because the use of the right allophones and other phonetic units facilitates normal _____ for the hearers.

Task 3. Compare the words *spit* and *pit*. How would you transcribe the sounds represented by the letter *p*? What makes you pronounce these sounds differently? Are they different phonemes? Are these sounds related? If you switched the sounds, would the meaning of the words change?

Task 4. Aspirated VS. Not-aspirated;   Voiced VS. Devoiced
What does the occurrence of aspiration with English voiceless stop consonants [p, t, k] depend on? Compare these phonemes with the Russian phonemes [п, т, к].
What allophones of the phonemes [p], [t], [k] are used in the following words: *port, post, top, tone, dark, took, peal, test, stake, kin, skate, repeal, akin, spot, detest, opal, appall, tower, cake, opus, oppose, record, recórd, cave, gave,*

ochre, occur, rapid, rapidity, mechanical, cooking, potato, big, add, job, nib, bag, eggs, languages, twelve, swap, queen, глаз, бег, рад, порт, ток, кот, поле, конь, топь.

What should a non-native speaker of English mispronounce to change the meaning of the following statements?

The guy in the brown coat is Ted.
To succeed at the interview you should put on a jacket and <u>tie.</u>

Task 5.   One way to think of the concepts of the phoneme and the allophone is to think of the various allophones of a particular phoneme as all belonging to the same family. *A phoneme* is a family of similar sounds – *allophones* - which a language treats as being "the same". Comment on this idea, proofreading this definition if necessary. Illustrate your answer with "the family of the phoneme [t]". Will you make use of the terms *principal/subsidiary* allophones in your answer?

Task 6.   How do you understand the opposition *phonetic* versus *phonological*? Are native speakers most likely to be phonetically naive or phonologically naive? Why? Do you agree that the distinction between phonemes and allophones is language specific? Prove your answer.

Task 7.   How are the notions of *invariant*, *distinctive* or *relevant features*, *non-distinctive* or *irrelevant* features connected with L.V. Shcherba's classification of *phonological* and *phonetic errors*? What errors do you think cause a breakdown in communication? Result in nonnative pronunciation?
Locate a description of typical difficulties for the group of Russian learners that you work with or anticipate working with. What insights will you gain into the vowel/consonant challenges that this group experiences to eliminate possible phonological or phonetic mistakes?

Task 8. What main trends in phoneme theory are known to you?

Task 9.   Read the information about methods of phonological analysis in the textbook <u>*Ref.*</u> *[Соколова, 2004, pp. 51-59]* and talk about:
a) the distributional method of analysis: how it works; its aim; its pros and cons;
b) the semantic method of analysis: how it works; its aim; its pros and cons;
c) your understanding of the basic concepts of phonological analysis: contrastive distribution, complementary distribution, minimal pairs, free variation, phonetic similarity.

Task 10.   Identifying the number of phonemes for a given language is not an easy matter. There may be problems connected with the phonemic status of sounds. In the English consonant / vowel system it is first of all, the problem of stops / fricatives / affricates, the problem of the schwa [ə] / diphthongs / long VS. short vowels.

Choose the relevant option.

1. Compare the number of affricates singled out by Soviet and foreign phoneticians. How can you explain the evident difference?

2. Dwell on Trubetskoy's technique to define the articulatory indivisibility of sound complexes. How does it help answer the question whether [ʧ, ʤ] are monophonemic entities or biphonemic clusters?

3. What other criteria turned out to be helpful to solve the problem in question?

4. It is well known that the phoneme [ə] is "the most common vowel sound in English" *(Bryson, 1990),* "the most frequently heard of all the English vowels" (Prator, 1985) and also forms "the core of unstressed vocalism in English (Соколова, 2004). How can you account for it? Is it due to the phonemic status of this phoneme? Other reasons?

5. Find minimal pairs for the neutral sound [ə] to prove its status of an independent phoneme in the English vowel system.

6. The problem of the phonemic status of the neutral sound [ə] has a morphological aspect. How is it treated by different linguistic schools? *Ref. (Соколова, 2004, pp. 90-100).*

Task 11. Go to "Introspecting About Your Own Language Learning"(p. 47).

<u>**Part 3**</u> **Phonetic Modifications of Sounds in Discourse**

Issues to Study and Discuss:
1. Linking of Words in Connected Speech:
   1.1 Basic linking patterns.
   1.1.1 The linking [r].
   1.1.2 The intrusive [r].
2. Modifications of Consonants in Connected Speech:
   2.1 Assimilation.
   2.2 Accommodation.
   2.3 Elision.
3. Modifications of Vowels in Connected Speech:
   3.1 Reduction
   3.2 Accommodation

<u>**Tasks**</u>

Task 1. To master fluency and listening comprehension in a foreign language a language learner should know how sounds behave in actual speech / discourse. *Ref. [Соколова, 2003, pp.66-76, 122-132, 279-281].* Fill in the gaps to make the text about sound adjustments sound true.

Sounds in actual speech / discourse are _____ pronounced by themselves. To pronounce a word consisting of more than one sound it is necessary to _____ the sounds together in the proper way.

In English there are two principal ways of linking two adjacent speech sounds: I. Merging of stages. II. Interpenetration of stages. The type of junction depends on the _____ of the sounds that are joined together. As all English sounds come under the classification of consonants and vowels we may speak of joining:

(a) _____ as in the word [mi:] *me*;

(b) _____as in the word [ɔn] *on*;

(c) _____as in the word [blɔu] *blow:*

(d) _____ as in the word [ri´æliti] *reality.*

When sounds _____ in actual speech / discourse they undergo _____. The modifications are observed both _____ and _____. There exist several types of _____, some of which are common to all or many languages, while others are characteristic of individual languages. An English learner should be familiar with the following types of sound modifications:_____.

Linking

Nonnative English speech often sounds to native speakers as very abrupt, "choppy" or aggressive. The ability to speak English "smoothly" entails the use of underline linking (or liaison), which is the connecting of the final sound of one word or syllable to the initial sound of the next.

Task 2. Study the following basic environments in which linking regularly occurs and formulate the rules governing the type of phonetic phenomenon. Contribute to the lists of phrases.

Linking Consonant to Vowel

1. Se<u>nd it</u>, ca<u>mp out</u>, co<u>st a</u> lot, le<u>ft arm</u>, we<u>pt over</u>, pu<u>shed up</u>, hol<u>d on</u>, fin<u>d out</u>, ada<u>ptab</u>le.

Example: Send it
Send it sounds like *sen-dit. Rule1*: When a word ends in two consonants and the next begins with a vowel, the final consonant sounds like the initial consonant of the following word. This phenomenon is sometimes referred to as <u>resyllabification.</u>

Is [t] aspirated in <u>resyllabification</u>?

2. Pu<u>sh up,</u> sho<u>p it</u>, co<u>me in</u>, ta<u>ke off</u>, le<u>t us,</u> di<u>d you</u>? i<u>s it</u>? kee<u>p up,</u> bla<u>ck a</u>nd grey.
   Rule 2: _____

Think of verb ending to follow the linking patterns in the following phrases.

_____ it in.	_____ at me.
_____ it down.	_____ out.
_____ up.	_____ on it.

Linking Vowel to Vowel

1. Pla<u>y a</u> game, ti<u>e it</u> up, be<u>e a</u> sport, emplo<u>y a</u> professional, r<u>e a</u>ction, hi<u>gh</u>
<u>er</u>
w<u>e a</u>ren't coming, tr<u>y it</u> again.

Rule 3: When a word ending in _____, or _____ is followed by another word beginning with _____, the two words are connected by a [i] glide.

2. Throu<u>gh it</u> all, sl<u>ow an</u>d steady, h<u>ow are</u> you? grad<u>u a</u>te, c<u>o a</u>lition, let's g<u>o on</u>, try t<u>o u</u>nderstand.

Rule 4: When a word ending in _____, or _____ is followed by another word beginning with a _____, the two words are connected by a [u] glide.

3. Sp<u>a o</u>wners, s<u>aw Ann</u>, vani<u>lla ice</u> cream, Asi<u>a an</u>d Africa, medi<u>a e</u>vent, the la<u>w of</u> the sea.

Rule 5: _____ or _____ do not end in a glide but move smoothly from one vowel to the other. In this environment or after the schwa [ə] speakers of some dialects tend to join V + V sequences with _____ .

4. Her<u>e and</u> there, late<u>r on</u>, fo<u>r a</u> minute, the Towe<u>r of</u> London, a glass o<u>r a</u> cup.

Rule 6: When a word has the letter _____ in its spelling and ends in sounds _____, it is connected to another word beginning with a vowel by _____. If the above mentioned sounds are preceded by the letter [r] as in *bearer, horror, error* there generally does not appear _____.

Linking Consonant to Consonant

1. Ho<u>t d</u>og, bac<u>k d</u>oor, sou<u>p b</u>owl, re<u>d t</u>ie, pe<u>t c</u>at,
ba<u>d j</u>udgment, sic<u>k ch</u>ild, grap<u>e j</u>am, bi<u>g ch</u>urch, re<u>d ch</u>erry.

Rule 7: When a stop is followed by _____ or _____, the first stop is not released.

2. Kee<u>p p</u>racticing, les<u>s s</u>erious, ho<u>t t</u>ea, commo<u>n n</u>ames, Ju<u>ne n</u>ight,
sell<u>s s</u>eashells, classroo<u>m m</u>anagement.

Rule 8: If the consonants (whether a stop or not) are _____, they are not articulated separately, but rather as one sound, which is somewhat lengthened.

3. Pass^your plate. Where's^your fork? Where did^you hide your spoon? Eat^your soup.

Rule9: When the consonants /_____ / are followed by /___/ in an unstressed syllable, the two sounds combine to form a palatalised consonant.

Task 3. Identify the linking pattern in the following phrases.
1. This story is difficul<u>t to</u> understand.
2. Ta<u>ke care</u> of the pennies, and the pounds will ta<u>ke care</u> of themselves.
3. Stand u<u>p, p</u>lease.
4. Which do you prefer: oran<u>ge j</u>uice or oran<u>ge j</u>elly?

5. There is not mu<u>ch ch</u>eese on the plate.
6. Don't bl<u>ame M</u>ary.
7. She is not familiar wi<u>th th</u>at story.

Task 4. **A:** Add a noun to the colour terms below. Choose words that follow the patterns described in task 2:

red <u>tape</u>	purple <u>lake</u>
black _____	green _____
white _____	pink _____
violet _____	gold _____

B: Match the items in columns 1, 2, and 3 to make meaningful contexts and identify what linking pattern the following phrases illustrate.

Column 1	Column 2	Column 3	Pattern
Do			
Try		Up	
Play	It	Now	
Say		Again	
Tie			
Slow		Down	

Assimilation

Task 5. What types of assimilation are singled out by the Russian phoneticians? *Ref. [Соколова, 2003, pp.68-84; Соколова, 2004, pp.71-78].* Fill in the chart below.

Direction	Degree of completeness	Degree of stability	Example

Task 6. Follow the example to analyse the phonetic phenomena below in terms of the degree of assimilation; the direction of assimilation; the stability of assimilation and the type of discourse. Can you make your contribution to the list of assimilation patterns.

Example: Swi<u>ss ch</u>alet   [s] + [ʃ] = [ʃ]

When the word's final [s] and the word's initial [ʃ] meet in colloquial discourse we hear [ʃ].

1. hor<u>ses</u>hoe   [ ] + [ ] = [ ]
2. <u>his sh</u>irt, one'<u>s sh</u>adow   [z] + [ʃ] = [ ]
3. goo<u>d b</u>oy   [t, d] + [b] = [ ]
4. goo<u>d g</u>irl   [t, d] + [ ] = [ ]
5. a<u>t p</u>eace   [t, d] + [ ] = [ ]
6. pe<u>t k</u>itten   [t, d] + [ ] = [ ]
7. i<u>ss</u>ue   [s] + [j] = [ ]
8. Pa<u>ss y</u>our plate   [s] + [ ] = [ ]

9. pleasure   [z] + [j] = [ ]
10. Does your mother know?   [z] + [ ] = [ ]
11. stature   [t] + [j] = [ ]
12. Is that your dog?   [ ] + [j] = [ ]
13. She lets your dog in.   [ts] + [j] = [ ]
14. procedure   [d] + [j] = [ ]
15. Would you mind moving?   [ ] + [j] = [ ]
16. Do not you want your girl friend
to be smart?   [ ] + [j] = [ ]

Accommodation
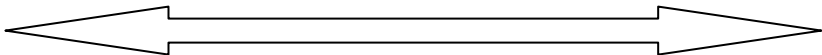
Task 7. To understand the nature of accommodation, answer the following questions. *Ref. [Соколова, 2003, pp.68-84;Соколова, 2004, pp.71-78; Hewings, 1993, pp.49-58].*

1. What is accommodation?
2. What features of the articulation of a consonant/a vowel may be affected by accommodation?
3. What are the similarities/differences between accommodation and assimilation?
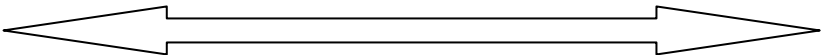
Task 8. Study the basic sound environment of [l], and formulate the rules, governing [l] gradation from alveolar light (or clear) [l] to velarised dark [ɫ]. Contribute to the lists of phrases.

Different Qualities of [l]				
Lightest[l] ⟸⟹ Darkest [ɫ]				
- ly suffix clusters	Initial position	Initial clusters	Final clusters	Final position
timely	Lee, Lou	clear	fill, fall	fault
dearly	lip, look	glib	pill, pull	bulk
badly	late, loss	blink	well, wool	holes

Task 9. Study the table to answer: What articulatory changes do the allophones of the phonemes [e], [i], [æ], [ə:] undergo when they are preceded or followed by nasal sonorants? In what environment are the vowels pronounced longer? Can we speak about gradations for vowel nasalization?

Degrees of Nasalization		

Least ⟵⟶ Greatest

Initial nasal nasal	Final nasal	Initial and Final
maid	aim	main
met	ten	men
gnat	tan	man
note	home	gnome

Task 10. Many learners of English tend to release and aspirate final stops too heavily: for example, *book* [k^h], *hit* [t^h], *spot* [t^h]. To overcome this tendency it's necessary to understand how vowel length is connected with pronunciation of final voiceless/voiced consonants. Study the basic sound environments, in which accommodation regularly occurs and formulate the rules, governing it. Can you make your contribution to the list of accommodation patterns?

Vowels before Consonants in Final Position

1. ⟵⟶

[p]	cap		[b]	cab
[t]	hit		[d]	hid
[k]	kick		[g]	big
[f]	fife		[v]	five
[s]	bus		[z]	buzz
[ʃ]	bush		[ʒ]	rouge
[θ]	cloth, myth		[ð]	clothes
[ʧ]	hitch		[ʤ]	huge

Rule 1: Vowels are _____ when they are followed by the _____, the fricatives _____ and the _____ than by their _____ counterparts [_____].

2.

buS	[bʌs]	buzz [bʌ:z]
saFe		save [v]
plaCe		plays [z]
teeTH		teethe [ð]

Rule 2: The _____ and the _____are articulated with greater length and force in final position than their voiced counterparts _____.

Task 11. Explain the mechanism of assimilation and accommodation in:

   a) step aside, don't argue, beggar.

When [p, b, t, d, k, g] and _____ meet _____, the consonants are orally exploded.

   b) *step near, don't kneel, beg me, make noise, statement, kitten, button, didn't, shouldn't.*

When [p, b, t, d, k, g] are followed by [_] or the syllabic consonant [_], the consonants are nasally exploded.

   c) *kettle, glue, ladle, pebble, cattle, fiddle, dental.*

When [p, b, t, d, k, g] are followed by the syllabic consonant [_], the consonants are laterally exploded.

Elision VS. Epenthesis

Task 12. What do phoneticians of different schools and trends call *the "missing out" of a consonant or a vowel, or both as a means of simplifying the pronunciation of a word or a rhythmic group? What is the most typical environment for elision? Ref. [Celce-M., 1996 SRM, pp. 54-68]*

Task 13. Can you differentiate historical elision from contemporary elision in the words and phrases below?

write, know, castle, must be, gnat, twenty, lamb, Wednesday, West side, knee, Christmas, chocolate, prohibition, tell them, tell her, talk, knight, inhibition, restaurant, reasonable, iron, often, knife, listen, damn it, interesting, mystery, prehistoric, listless, windmill.

Task 14. Transcribe the word combinations below the way you would pronounce them in a formal speech and in an everyday situation (rapid colloquial speech). Which of the given items may be called discourse-sensitive, situation-sensitive and situation-indifferent? Provide your own illustrations of Elision-changed forms and analyze the nature of change *Ref. [Hewings, 1993, pp.57-58; Mortimer, 2002, pp.61-62].*

Example: the word *sounds* would rather be pronounced as [saundz] in a Formal situation*,* whereas in Rapid speech it would sooner be pronounced as [saunz], since the consonants [t] and [d] tend to be dropped between other consonants.

Word combinations	Formal situation	Rapid speech
sounds	[saun**d**z]	[saunz]
aspects		
parade		
perhaps		
family		
beverage		
winter		
because		
about		
bread and butter		

tell her *last year* *suspended from* *cold lunch* *just now* *should have taken* *sandwich* *handsome* *handbag* *landscape* *landlord* *grandma* *rock and roll* *bread and butter* *up and down* *handkerchief,* *horseshoe,* *newspaper,* *gooseberry*		

Task 15. How do vowels behave in unstressed syllables? Compare the laws of reduction in the English and in the Russian languages *Ref. [Соколова, 2003, pp.122-124; Mortimer, 2002, pp.4-25].*

English	Russian

Task 16. Listen to the utterance (conversation fragment) on the tape and comment on sound modifications in it. Record yourself and compare your recording with the authentic tape. *Ref. [Bradford, 2002, pp.16-56].*

Task 17. Go to "Introspecting About Your Own Language Learning"(p. 47).

Part 4 Word Stress

Issues to Study and Discuss:
1. Definition of Stress.
2. Types of Word Stress.
3. Place and Degrees of Word Stress.
4. Fixed and Free Word Stress.
5. Functions of Word Stress.
6. Accentual Tendencies in English.

Tasks

Task1. What factors create the effect of stress in a word? What type of word stress do you think English accentual structure belongs to? *Ref. [Соколова, 2003, pp. 138-146]*

Task2. What factors determine the place and different degrees of word stress? *Ref. [Jones, 2002, pp. 33-36].* Some word stress conventions in Modern English are the result of different tendencies. Illustrate
- the recessive tendency;
- the rhythmical tendency;
- the retentive tendency.

Task 3. Study the main accentual patterns. Interpret and illustrate them with the words given below. Which types would you rate as widely spread and most typical of the English language? *Ref. [Соколова, 2003, pp. 138-146; Соколова, 2004, pp. 121-134].*

The numerous variations of English word stress are systematized in the typology of accentual structures of English words worked out by G.P. Torsuyev. He classifies them according to the number of stressed syllables and their degree.
The main accentual patterns are:
1. ['__ __]. This accentual type marks both simple and compound words. The accentual structures of this type may include two and more syllables, e.g.

_____
2. ['_ '_]. The accentual type is commonly realized in compound words, most of them are with separable prefixes, e.g._____

3. ['_' _ '_] and 4. ['_' _ '_ '_]. The accentual types are met in initial compound abbreviations _____
4. ['_ ,___]. The type is realized both in simple and compound words, very common among compound words, e.g. _____
5. [, _'___]. The accentual type marks a great number of simple words and some compound words as well. In simple words the stresses fall onto:
1) the prefix and the root: _____
2) the root and the suffix: _____
3) the prefix and the suffix: _____

The words to choose from: father, radio-active, hot-tempered, absent-minded, non-stop, get up, switch off, fourteen, beefsteak, make up, recover, email address, hotel, country, police, balance, UNESCO, interaction, hospitality, disobey, hair-dresser, substructure, possibly, rewrite, USA, mother-in-law, gas-pipe, USSR, magazine, disorganization, centralization, assimilation, qualification, pronunciation, consideration.

Task4. Complete the text, choosing the relevant option.

English word stress is purely / mainly / not only dynamic. The word stress in English is fixed / free. The occurrence of the word stress is / is not limited to a particular syllable in a polysyllabic word. The word stress in English is / is not shifting. It performs / does not perform the semantic function of differentiating lexical units, parts of speech, grammatical forms. In English word stress is / is not used as a means of word-building. Usually (although there are some exceptions), the stress of a verb / noun is on the last syllable, and that of a verb / noun is on the first syllable. The rhythmic structure of an isolated word always / never / may not coincide(s) with that of a phrase. The tempo of speech influences / does not influence the accentual pattern of words.

Task 5. Compare English and Russian word-stress conventions. What do they share? Where do they differ? *Ref.* *[Соколова, 2003, pp. 138-146].*

Task 6. A. What function of stress helps to differentiate parts of speech in English? Can the difference between secondary stress and absence of secondary stress in the words below be an obstacle in communication?
Discourse *noun* - a long and serious speech or piece of writing on a particular subject;
discourse on/upon *verb* - to talk for a long time about a particular subject;
discourse marker - *a word* used in conversation, for showing a change in the way the conversation is developing or showing the other speaker how you are reacting to what they are saying. Typical discourse markers include 'well', 'oh', and 'OK'.
(c) Macmillan Publishers Ltd. 2002.

B. Underline the stressed syllable in pairs of words below. How does the meaning change with the change of word stress?
Example: to susPECT (meaning: to have an opinion);
a SUSpect (meaning: a person under suspicion);
to preSENT (meaning: to give, to introduce);
a PREsent (meaning: a gift).

to conflict, a conflict	to contest, a contest	to contract, a contract
to convert, a convert	to convict, a convict	to incline, an incline
to insult, an insult	to object, an object	to permit, a permit
to produce, a produce	to project, a project	to protest, a protest
to rebel, a rebel	to recall, a recall	to reject, a reject
to research, a research	to concert, a concert	to survey, a survey

C. Practice reading the following sentences with special attention to the difference in the word stress of noun and verb.
1. You need to insert a paragraph here on this newspaper insert.
2. How can you object to this object?
3. I'd like to present you with this present.
4. The manufacturer couldn't recall if there'd been a recall.
5. The religious convert wanted to convert the world.
6. The political rebels wanted to rebel against the world.
7. The mogul wanted to record a new record for his latest artist.
8. She makes a good delegate. She knows how to delegate authority.
9. Due to the drought, the fields didn't produce much produce this year.
10. Unfortunately, City Hall wouldn't permit them to get a permit.

Task 7. Find the odd-man-out in the line and comment on the reason why it is different from the others.
*Example: tribute   **distress**   festival   envelope.*
***'Distress'** is an odd-man-out in the line. It is different from the others, because the second syllable is stressed whereas in three other words the first syllable is stressed.*

1.	person	permanent	personal	persuade
2.	surgeon	surprise	surplus	surface
3.	cylinder	recycle	bicycle	mystery
4.	ceremony	compose	calculate	caravan
5.	complete	company	comment	comical
6.	comedy	command	comfortable	compass
7.	commentary	alert	legal	model
8.	register	regular	request	reference
9.	famous	curious	suspicious	numerous
10.	voluntary	compulsory	necessary	stationary
11.	comfortable	remarkable	profitable	sensible
12.	energy	dignity	variety	poverty
13.	contrast	conflict	contain	conduct
14.	provide	present	permit	perfect
15.	extract	express	export	escort
16.	request	record	refund	refill
17.	project	profit	protest	progress
18.	conflict	conduct	conclude	content
19.	advice	desert	problem	refuse
20.	insult	perform	convert	perfect

Task 8. What function of stress helps listening comprehension? Give evidence.

Task 9. Go to "Introspecting About Your Own Language Learning"(p. 48).

<u>**Part 5**</u> **Intonation in Discourse**

Issues to Study and Discuss:
1. Intonation VS. Prosody VS. Suprasegmental Features of Language.
2. Approaches to the Study of Intonation.
3. Functions of Intonation:
   3.1 Conversation management function of intonation.
   3.2 Information management function of intonation.
   3.3 Social functions of intonation.
4. The Framework for Intonation:
   4.1 Prominence. Sentence stress.
   4.2 Pitch of the voice, melody, tone.
   4.3 Rhythm; stress-time nature of spoken English; strong and weak forms.
   4.4 Temporal characteristics (duration, tempo, pausation).
   4.5 Timbre (voice quality).
5. Intonation patterns.

<u>**Tasks**</u>

<u>**Task1.**</u> Is the term *Intonation* internationally recognized?
What approach to the study of intonation appeals to you?
<u>Ref.</u> [Соколова 2003, pp.47-211; Celcia-M., 1996, SRM, pp. 54-68; Леонтьева, 1988, SRM, pp. 69-77]

<u>**Task2.**</u> Compare the North American school *(M. Celce-M., C. Prator)* and the British school *(D. Jones)* in their understanding of intonation.
Intonation is pitch variations, or speech melody. It manifests itself in the delimitative function within a sentence and at its end. The pitch of the voice with which a voiced sound is pronounced is called its intonation. In connected speech the voice-pitch is continually rising and falling. These variations produce intonations which may be described as "tunes", or 'patterns' or 'contours' *(D. Jones,2002)*.
If pitch represents the individual tones of speech, then intonation can be thought of as the entire melodic line. Intonation involves the rising and falling of the voice to various pitch levels during the articulation of an utterance *(M. Celce-M., 1996)*.
Intonation is the tune of what we say. Intonation is the combination of musical tones *(C. Prator, 1985)*.

<u>**Task3.**</u> What are the CORE components of intonation according to the Moscow Phonetic School?
• Proofread the definition of intonation in the broad sense.
Intonation is a complex unity of segmental and non-segmental, or prosodic features of language: 1. melody; 2. pitch of the voice; 3. word stress, sentence

stress, accent and prominence; 4. temporal characteristics (duration, tempo, pausation); 5. loudness; 6. rhythm; 7. timbre (voice quality); 8. the emotional colouring of the voice; 9. the pace of speech.

• Fill in the gaps. What function of intonation do you consider to be primary / of bigger / of minor importance?

<u>*Ref.*</u> *[Соколова, 2003, pp.147-148; Леонтьева,1988, SRM, p.69-77].*

Intonation helps

(1) _____;
for example, by telling the listener what the speaker thinks is important in a sentence;   (2) _____
(for example, *new* versus *old* information); (3) to oil the wheels of social interaction (i.e. _____).

Task4. Which suprasegmental features are rule-governed and relatively discourse-indifferent and which are discourse-sensitive and speaker's intention-dependant?

Task5. How can you give extra prominence to an element of discourse in English?
What circumstances govern the placement of prominence?
• Fill in the gaps and demonstrate how the assignment of prominence depends on the discourse and situational context.
Prominence in English is used to (1) _____
(2)_____ (3)_____
• Identify the prominent element in each statement. Explain your choice.
1. Thank you.   5. It's getting late.
2. I'm sure she will.   6. He's my uncle.
3. It's raining again.   7. He's an Accountant.
4. She's in the dining room.   8. She told me about it.

Task 6. What words are typically prominent in English? <u>*Ref.*</u> *[Леонтьева,1988, SRM, pp.69-77]* _____
What words are typically <u>nonprominent</u>? _____
Why do you think repeated words are rarely prominent? _____
Do question words in English generally receive prominence?_____
Do question words in Russian generally receive prominence?_____

Task 7. Practice predicting and assigning prominence. Add additional emphasis via volume, length, and/or pitch.
Waitress: Are you ready to order?
Customer 1: Yes, I think so.
Waitress: What will you have?
*Customer 1:*I think I'll have enchiladas. Chicken enchiladas.
Waitress: Chicken enchiladas. And for you, sir?
Customer2: I'd like curry. Vegetable curry.

Waitress: Vegetable curry. OK. And how about dessert?
Customer 1: Mm. Let me see. Maybe some pie. Apple pie.
Waitress: Apple pie. And for you?
Customer 2: I'd like cherry pie.
Waitress: OK. One apple pie and one cherry pie. Thank you.

Task 8. What words would you make prominent in part A and part B? What words in part B contrast with words in part A? What words in part B offer new information?
1.   A: Do you have it in dark blue?
         B: No, sorry, only light blue.
2.   A: Are you feeling better?
         B: Oh, yes, much better.
3.   A: Should we meet at one?
         B: Can we make it a quarter after one?
4.   A: And the winning number is 5-4-9.
         B: That's my number.
5.   A: Is he an artist?
         B: Actually, a very good artist.
6.   A: Did you say Tom was in the front yard?
         B: No, the back yard.

Task 9. Mark the sentence-stressed words in the following sentences. After you have found the words, practice reading the sentences aloud.
• John is coming over tonight. We are going to work on our homework together.
• Ecstasy is an extremely dangerous drug.
• We should have visited some more castles while we were travelling through the back roads of France.
• Jack bought a new car last Friday.
• They are looking forward to your visiting them next January.
• Exciting discoveries lie in Tom's future.
• Would you like to come over and play a game of chess?
• They had to work hard last few months on their challenging experiment.
• Shakespeare wrote passionate, moving poetry.
• As you might have expected, he has just thought of a new approach to the problem.

Task 10. How do you understand *pitch* and *tone*? <u>Ref.</u> *[Соколова, 2003, pp.366-374; Celce-M., 1996, SRM, pp. 54-68].* Complete the information file with types of tones relevant to ELL.
•   According to R. Kingdon the most important nuclear tones in English are: Low Fall, High Fall, Low Rise, High Rise, and Fall-Rise.
The meanings of the nuclear tones are difficult to specify in general terms. Roughly speaking, _____ of any level and range expresses certainty, completeness, independence and giving new information.

_____, on the contrary, expresses uncertainty, incompleteness or dependence. It may also suggest that what is said is seen as old information, something already known. _____ can be used in various ways to ask for repetition or for confirmation. _____ may combine the meaning of assertion, certainty with the meaning of dependence, incompleteness. At the end of a phrase it often conveys a feeling of reservation; that is, it asserts something and at the same time suggests that there is something else to be said. At the beginning or in the middle of a phrase it is a more forceful alternative to the rising tone, expressing the assertion of one point, together with the implication that another point is to follow.

_____, as its name suggests, consists of _____ in pitch followed by _____. If the nucleus is the last syllable of the intonation group the fall and rise both take place on one syllable. Unemphatic STATEMENTS in English normally have a _____.

- Support your answer to the following questions:

What intonation tone do **WH-QUESTIONS** follow? _____

What intonation tone do **YES/NO QUESTIONS** follow? _____

What intonation tone do **TAG QUESTIONS** follow? _____

What intonation tone do **ALTERNATIVE QUESTIONS** follow? _____

Practice in pairs:

He: Ready?

She: No!

He: Why?

She: Problems.

He: Problems?

She: Yes.

He: What?

She: Babysitter.

TAG QUESTIONS: SURE OR UNSURE?

- Your name's George, isn't it?
- You wanted to go, didn't you?
- We should offer to help, shouldn't we?
- It's going to rain tomorrow, isn't it?

A: The library's supposed to be right around the corner here, isn't it? I can't seem to find it!

B: Actually, it's on the next corner. You have to go one more block and it's on your left.

Would you answer the following *YES/NO* questions with *RISING TONE?*

A: Are you tired?   B: Do I look tired?

A: Are you ready?   B: Is it time to leave already?

A: Should I close the window?   B: Are you cold?

A: Have you seen my keys?   B: Did you lose them again?
A: Could I borrow a dollar?   B: Do you need it now?
A: Wasn't that a great movie?   B: Did you really like it?

Ask for repetition or clarification
Do you have Mary's PHONE number?
Ted likes the BLUE one best.
I can't find the CAR keys.
I'm taking my vacation in NoVEMber.

ALTERNATIVE CHOICE QUESTIONS VS. Yes – No QUESTIONS
Are you coming Friday or Saturday?
Can you meet us at 8 or 9?
Would you like beer or wine?
Are you going to Spain or Portugal?

Task 11. Further practice: _Ref._ _[Соколова, 2003, pp. 210-211, pp. 366-374; Hancock, 2004, pp. 72-129; Bradford, 2002, pp.10-62]._

Task 12. According to D. Crystal (Crystal, 2003, p.248), there are nine ways of saying _Yes_ as an answer to the question _Will you marry me?_ Will you try?
1. Low fall. The most neutral tone; a detached, unemotional statement of fact.
2. Full fall. Emotionally involved; the higher the onset of the tone, the more involved the speaker; choice of emotion (surprise, excitement, irritation) depends on the speaker's facial expression.
3. Mid fall. Routine, uncommitted comment; detached and unexcited.
4. Low rise. Facial expression important; with a 'happy' face, the tone is sympathetic and friendly; with a 'grim' face, it is guarded and ominous.
5. Full rise. Emotionally involved, often «disbelief or shock, the extent of the emotion depending on the width of the tone».
6. High rise. Mild query or puzzlement; often used in echoing what has just been said.
7. Level. Bored, sarcastic, ironic.
8. Fall-rise. A strongly emotional tone; a straight or 'negative' face conveys uncertainty, doubt, or tentativeness; a positive face conveys encouragement or urgency.
9. Rise-fall. Strong emotional involvement; depending on the face, the attitude might be delighted, challenging, or complacent.

Task 13. How do prominence and intonation affect the meaning of an utterance? Each of the following sentences might be pronounced in three different ways. Match the meaning of each version to the interpretation on the right. Pay special attention to intonation and stress!

Original sentence	Intended meaning
1. What do you think?	
a. What do YOU think?	i. *I already know what he thinks.*
b. WHAT do you think?	ii. *Should we do it or not?*
c. What do you THINK?	iii. *I'm sorry, I didn't hear what you*
2. She didn't take the car.	*said.*
a. She DIDn't take the car.	i. *Someone else must have.*
b. She didn't take the CAR.	ii. *So stop accusing her!*
c. SHE didn't take the car.	iii. *She must have gone on foot, or by*
3. He thought the film was good.	*bus . . .*
a. He thought the film was GOOD.	i. *But the music was awful!*
b. He thought the FILM was good.	ii. *She didn't, though.*
c. HE thought the film was good.	iii. *Oh really? The critics hated it!*

Task14. Pronounce the statements with LOW RISING / HIGH RISING intonation. What does a low rise in this situation suggest? What may a high or sharp rise suggest?

1. A: I'm going to California next week.	B: Where?
2. A: We're moving to New York next month.	B: When are you moving?
3. A: I bought that rug in Mexico.	B: Where?
4. A: I tried to call you last night.	B: When?
5. A: Richard left a present for you.	B: What?
6. A: My mother works in an office.	B: What does she do?
7. A: I have an appointment on Tuesday.	B: When is your appointment?
8. A: Someone I work with gave me this cassette.	B: Who?

Task15. What may cause difficulty in processing the speaker's message?

Task16. How can speech be segmented? *Ref. [Соколова, 2003, pp. 149-210; Hancock, 2004, pp. 92-95].* Decide what is TRUE or FALSE about
- the thought (sense) group / intonation unit
- the intonation pattern / intonation contour

A single utterance may include multiple intonation units. An intonation unit is a piece of utterance, a continuous stream of sounds. Each intonation unit (1) is set off by pauses before and after, (2) contains one prominent element, (3) has an intonation contour of its own, and (4) has a grammatically coherent internal structure. (5) The discourse context influences the choice of intonation contour. (6) Pitch and prominence can be said to have a symbiotic relationship with each other in English, and the interrelationship of these phenomena determines the intonation contour of a given utterance. English has a number of **intonation patterns** which add conventionalized meanings to the utterance: question, statement, surprise, disbelief, sarcasm, teasing, etc.

The structure of an intonation unit: the head is all that part of a unit that extends from the first stressed syllable up to the tonic syllable. The pre-head is composed of all the unstressed syllables in a unit preceding the first stressed syllable. The tail comprises all the syllables coming after the head.

Task17. Follow a step-by-step procedure developed by Herzen University phoneticians *(Merkulova, 2002, pp. 76-77)* to perform a phonetic analysis of a sentence:
1. Define the communicative type of the sentence and thus its typical intonation pattern.
2. Split the sentence into sense-groups. Mark pauses between sense-groups with one vertical line and put two vertical lines to mark the end of the sentence.
3. Define the prominent elements of each sense-group and put a tone mark before the stressed syllable of the prominent word.
4. See if there is an emphasized word in the sentence and mark it with a special rise.
5. Put down stress marks before all stressed syllables.
6. Transcribe the sentence.
7. Mark different phonetic phenomena using the following symbols:
    a) ‿ — to show the linking of two vowels or a consonant and a vowel;
    b) tr — to show all kinds of assimilation (lateral plosion, nasal plosion, etc.).
8. Read the sentence, beating rhythm. To avoid mistakes, one may start reading from the end of the sentence, and add the preceding words or sense-groups one by one.
For example, let us analyse the sentence *"This is a nice house which seems unexpectedly little"* and perform its step-by-step analysis.

a. The sentence is a statement. Its typical intonation pattern is a gradually descending scale.
b. *This is a nice house | which seems unexpectedly little ||*
c. This is a nice \house | which seems unexpectedly \little||
d. This is a nice \house | which seems unex↑pectedly \little||
e. 'This is a 'nice \house | which 'seems 'unex↑pectedly \little||

f. 'ðis iz ə 'nais \haus | witʃ si:mz 'ʌniks↑pektdli \litl ||

g. 'ðis‿is‿ə 'nais \aus | witʃ si:mz‿'ʌni̲k̲s↑pe̲ktdli \litl ||
- The sentences below are to be transcribed in phonetic symbols, marked for rhythm and intonation, and then read.
1.   We have time enough to finish.
2.   We have fifteen minutes.
3.   Will you have an appetizer?
4.   I'll take the regular dinner.
5.   Will you bring us our coffee later?
6.   You know it as well as I do.
7.   Shall we wait here or outside?

8.   Which comes first, the chicken or the egg?
9.   Have you ever played roulette or blackjack?
10. It's open today, tomorrow and the day after tomorrow.
11. Children often eat hamburgers; adults usually prefer steaks.
12. As you said, it's a very nice place.
13. It's getting hotter, isn't it?
14. The busses don't run on Sunday, do they?
15. Dinner is served at six o'clock, isn't it?
16. Good morning, Ms. Peterson. How are you feeling?
17. If it rains, we'll call off the whole thing.
18. You'll agree that it's the truth, won't you?
19. We are studying composition, pronunciation, and grammar.
20. There are two ways of accomplishing it: by kindness, or by threats.
21. He translates from English to French, and from French to English.
22. Which syllable is accented?
23. Ms. Kim, will you open the door?
24. The story begins long ago. They were riding in an old car. The car began to cross the river. The bridge had been washed away. The children were in the back seat. They were talking at the tops of their voices. No one could hear anything. One of the children fell out.

Task 18. Read the dialogue, paying special attention to the intonation patterns and how these help to communicate the meaning.

NO PANCAKES FOR YOU!
A: Get me some pancakes.
B: We DON'T **SERVE** PANcakes.
A: Three eggs and a short stack of pancakes.
B: We **DON'T** SERVE pancakes.
A: What do you mean? Everybody serves pancakes.
B: **WE** don't serve PANcakes.
A: For the last time ... bring me some pancakes and eggs.
B: We **DON'T** SERVE **PAN**cakes

Task 19. Read the dialogue according to the information given. Use prominence and intonation to express the different meanings.

Situation 1: Both A and B are male. They are friends and are approximately the same age. A is pleased to hear that his friend is back from his trip.
Situation 2: Both A and B are female. A is B's mother. She's a bit upset that her daughter hasn't bothered to call her since returning from her trip.
Situation 3: A is male; B is female. A and B have been in a serious relationship for over a year now. He's slightly older than she is, and tends to be the jealous type. He's furious that she didn't call him immediately upon her return from her trip.

Dialogue

A: So you're back from your trip?

B: Yes, I got back two days ago.

A: Nice of you to call. I hadn't expected to hear from you so soon.

B: Oh well, I thought I'd just call and see how you were doing.

A: Fine, just fine.

• Analyse and make an individual recording of the following Diagnostic Passages for evaluation. While you are recording, forget about pronunciation and concentrate on the meaning of what you are saying.

A: DIAGNOSTIC PASSAGE FOR ANALYZING INTONATION

1. Have you ever visited New York or Washington? 2. They are certainly interesting cities, aren't they? 3. Did you go there by plane or some other way? 4. In Washington you can see the White House, the Capitol, and the Supreme Court Building. 5. You don't like Washington better than New York, do you? 6. I must say, John, that New York is livelier. 7. Which one is livelier? 8. New York, because of its nightclubs and sporting events. 9. Did you pick out your hotel there, or did a travel agent do it? 10. Do you expect to fly East on your next vacation? 11. No, my friend, the West is the place for me.

B: DIAGNOSTIC PASSAGE FOR ANALYZING INTONATION

(1) When a student from another country comes to study in the United States, he has to find out for himself the answers to many questions, and he has many problems to think about. (2) Where should he live? (3) Would it be better if he looked for a private room off campus or if he stayed in a dormitory? (4) Should he spend all of his time just studying? (5) Shouldn't he try to take advantage of the many social and cultural activities which are offered? (6) At first it is not easy for him to be casual in dress, informal in manner, and confident in speech. (7) Little by little he learns what kind of clothing is usually worn here to be casually dressed for classes. (8) He also learns to choose the language and customs that are appropriate for informal situations. (9) Finally he begins to feel sure of himself. (10) But let me tell you, my friend, this long-awaited feeling doesn't develop suddenly, does it. (11) All of this takes will power.

Task 20. Compare _Ref._ *[Celce-M., 1996, SRM, pp. 54-68; Соколова,2003, pp. 192-199]*, to form your opinion on the following questions:

1. What are some of the major contrasts between suprasegmental features of the Russian and the English languages?

2. What features should / might / must be ignored / be given extra focus / deserve particular attention in ELT / ELL?

3. How do you distinguish between the intonation of isolated sentences and the intonation of segments in extended discourse?

4. Is punctuation a reliable guide to intonation?

5. Would reading done by a faster speaker be different from that of a slower speaker? How?

6. What can you say about the communicative value of intonation in English?

7. How do you understand 'fluency'?

Task 21. For oral presentations and dramatic reading of literature excerpts see *[Соколова, 2003, pp.320-380]*.

Task 22. Go to "Introspecting About Your Own Language Learning" (p. 48).

INTROSPECTING ABOUT YOUR OWN LANGUAGE LEARNING
Part 1
- What difficulties with English consonant or vowel sounds do you encounter?
- Are these difficulties common for Russian learners of English? If so, what causes them?
- What strategies and techniques do you use to improve production of English sounds?
- What kind of consonant articulation problems could be helped by practice with mirror?
- What top priorities would you select to help Russian learners of English to gain control of consonant / vowel production?
- Does the knowledge of paradigmatic relations between sounds of the vowel or the consonant systems help master sound production? How? Does it help diagnose and cure mispronouncing? Does it help to manage spelling issues in ELL? How?
- Develop a sound treatment exercise, relevant for Russian learners of English?

Part 2
- Do you think certain consonant / vowel difficulties cause a greater breakdown in communication than others?
- Are there any vowel or consonant distinctions you have difficulty making?
- Is it important to consider positional variation and restrictions when learning / teaching English sounds? Back up your opinion.
- How would you treat the following contrasts: [w – v]; [z – ð]; [s – θ]; [p^h – p]; [e – æ]; [ɔ – ɔ:]; [ə – e]; [ə: – e/ɔ]?
- In fact, there are other problematic sounds. To eliminate possible mistakes, study the recommendations given in *[Соколова, pp.32-66]* and consider the guiding principles of possible pronunciation contrasts that follow:
  a) Identify your problem areas.
  b) Find lexical/grammatical contexts with frequent natural occurrences of the problem sounds.
  c) Draw on these contexts to develop activities for analysis and listening that will assist understanding and recognition of the target sounds.
  d) Using the context you have chosen, develop a progression of controlled, guided and communicative tasks that incorporate the sounds for practice.

Part 3
- Are you able to link words appropriately?
- Does the knowledge of sintagmatic relations between vowel and consonant sounds in discourse help master sound production?
- May lack of awareness of the English discourse linking rules bring about misunderstanding in cross-cultural communication, low self-esteem, lack of confidence, frustration in ELL?
- What, in your opinion, contributes more to a learner's language proficiency: sound articulation accuracy or command of phonetic modifications in discourse?
- How would you rate mispronouncing as the cause of misunderstanding in cross-cultural communication?
- Do you find differences in articulatory transitions between English and Russian significant? Illustrate these differences in case of aspiration, palatalization and labialization?

Part 4
- What difficulties with word stress in English do you encounter?
- Do you find differences in degrees of word stress between English and Russian significant?
- How do you obscure unstressed vowels in English?
- Does the knowledge of word stress nature and accentual tendencies in Modern English help manage misstressing?
- What strategies and techniques do you use to cure misstressing of English words?
- Does misstressing contribute to misunderstanding in cross-cultural communication, low learner's self-esteem, lack of confidence and frustration in ELL?

Part 5
- Many ESL/EFL teachers think that prosody is a more important part of pronunciation than consonants and vowels. What do you think?
- What difficulties with Intonation in English do you encounter?
- Do you find any of the English prosodic features difficult to manage?
- Are you able to reduce unstressed function words in discourse?
- Does the study of prosodic features may help you eliminate Russian accent? How?
- What fluency-oriented tasks may lead to better performance in interactive situations?
- What authentic discourse samples would you suggest to teach prosody?
- Draw up Your Pronunciation Development Profile. It will enable you to measure your progress with your speaking habits in extended discourse.

SELECTION OF READING MATERIALS
Bryson Bill. Mother Tongue

What is the most common vowel sound in English? [i], [e], [ɛ], [æ], [ɑ], [o], [u], [u], [ʌ], [ai], [aw], [ɔi].

In fact, it is none of these. It isn't even **a standard vowel sound**. It is the colourless murmur of the schwa, represented by the symbol [ə] and appearing as one or more of the vowel sounds in words without number. It is the sound of *i* in *animal,* of *e* in *enough,* of the middle *o* in *orthodox,* of the second, fourth, fifth, and sixth vowels in *inspirational,* and of at least one of the vowels in almost every multisyllabic word in the language. It is everywhere.

This reliance of ours on one drab phoneme is a little odd when you consider that English contains as lush a mixture of phonics as any language in the world.

But on the other hand we possess a number of sounds that other languages find treacherous and daunting, most notably the "*t*" sound of *the* and *think,* which is remarkably rare in the world at large, or the "*l*" sound that Orientals find so deeply impossible. ("*Bruddy hairo!*" means "*Bloody hell*".)

If there is one thing certain about English pronunciation it is that there is almost nothing certain about it. No other language in the world has more words spelled the same way and yet pronounced differently. Consider just a few:

road - broad	five - give	early - dearly	steak - streak
ache - moustache	low - how	doll- droll	scour - four
grieve - sieve	paid - said	break - speak	heard - beard

In some languages, such as Finnish, there is a neat **one-to-one correspondence between sound and spelling.** A *κ* to the Finns is always 'k'.

But in English pronunciation is so various - one might say random - that not one of our **twenty-six letters** can be relied on for constancy. Either they clasp to themselves a variety of pronunciations, as with the *c* in *race, rack,* and *rich,* or they sulk in silence, like the *b* in *debt,* the *a* in *bread,* the second *t* in *thistle.*

In combinations they become even more unruly and unpredictable, most famously in the letter cluster *ough,* which can be pronounced in any of eight ways - as in *through, though, thought, tough, plough, thorough, hiccough,* and *lough* (an Irish-English word for lake or loch, pronounced roughly as the latter).

Two words in English, *hegemony and phthisis,* have nine pronunciations each. But perhaps nothing speaks more clearly for the absurdities of English pronunciation than that the word for the study of pronunciation in English, *orthoepy,* can itself be pronounced two ways.

Every language has its quirks and all languages, for whatever reason, happily accept conventions and limitations that aren't necessarily called for. In English, for example, we **don't have words** like *fwost* or *zpink* or *abtholve* because we never normally combine those letters to make those sounds, though there's no reason why we couldn't if we wanted to. We just don't. Chinese takes this matter of self-denial to extremes, particularly in the variety of the language

spoken in the capital, Peking. All Chinese dialects are monosyllabic - which can itself be almost absurdly limiting - but the Pekingese dialect goes a step further and demands that all words end in an 'n' or 'ng' sound. As a result, there are so few phonetic possibilities in Pekingese that each sound must represent on average seventy words. Just one sound, 'yi', can stand for 215 separate words. Partly the Chinese get around this by using rising or falling pitches to vary the sounds fractionally, but even so in some dialects a falling 'i' can still represent almost forty unrelated words. **We use pitch in English to a small extent**, as when we differentiate between 'oh' and 'oh?' and 'oh!' but essentially we function by relying on a pleasingly diverse range of sounds.

Almost everyone agrees that **English possesses more sounds than almost any other language,** though few agree on just **how many** sounds that might be. The British authority Simeon Potter says there are **forty-four distinct sounds** - twelve vowels, nine diphthongs (a kind of gliding vowel), and twenty-three consonants.

The International Phonetic Alphabet, perhaps the most widely used, differentiates between **fifty-two** sounds used in English, divided equally between consonants and vowels, while the *American Heritage Dictionary* lists **forty-five** for purely English sounds, plus a further half dozen for foreign terms. Italian, by contrast, uses only about half as many sounds, a mere twenty-seven, while Hawaiian gets by with just **thirteen.** So whether the number in English is forty-four or fifty-two or something in between, it is quite a lot. But having said that, if you listen carefully, you will find that there are many more than this.

The combination 'ng', for example, is usually treated as one.

The English tend to compress and mangle words at simply breathtaking speed. In normal conversation we speak at a rate of about 300 syllables a minute. To do this we force air up through the larynx -and, by variously pursing our lips and **flapping** our tongue **around** in our mouth rather in the manner of a freshly landed fish, we **shape** each passing puff of air into a series of loosely differentiated plosives, fricatives, gutturals, and other minor atmospheric disturbances. These emerge as a more or less continuous blur of sound. People don't talk like this, theytalklikethis. Syllables, words, sentences run together like a watercolour left in the rain. To understand what anyone is saying to us we must separate these noises into words and the words into sentences so that we might in our turn issue a stream of mixed sounds in response. If what we say is suitably apt and amusing, the listener will show his delight by emitting a series of uncontrolled high-pitched noises, accompanied by sharp intakes of breath of the sort normally associated with a seizure or heart failure. And by these means we converse. Talking, when you think about it, is a very strange business indeed.

And yet we achieve the process effortlessly. We absorb and interpret spoken sounds more or less instantaneously. If I say to you, *'Which do you like better, peas or carrots?'* it will take you on average less than a second - the length of an eye blink - to interpret the question, consider the relative merits of the two vegetables, and formulate a reply. We repeat this process hundreds of times a

day, generally with such speed that often we have our answer ready before the person has even finished the question.

As listeners we can distinguish between the most subtle gradations of emphasis. Most people, if they are reasonably attentive, can clearly detect the difference between *that's tough* and *that stuff* between *I love you* and *isle of view,* and between *grey day* and *Grade A* even though the phonics could hardly be more similar. Sometimes, however, precise diction proves elusive, particularly when there is no direct eye contact. (It is remarkable the extent to which we read lips - or at least facial expressions.) Every newspaper person has his or her favourite story involving slip-ups resulting from **misheard dictation**.

Despite these occasional drawbacks, listening is something we do remarkably well. Speech, by contrast, is a highly inefficient process. We are all familiar with the feeling of not being able to get the words out fast enough, of mixing up sounds into spoonerisms, of stumbling over phonetically demanding words like *statistics* and *proprietorial.* The fact is that we will never be able to speak as quickly as we can hear.

Hence the tendency to slur. There has been a clear trend over time to make our pronunciations less precise, to let letters lapse into silence or allow sounds to merge and become less emphatic. This happened with *–ed* endings. In Chaucer's day, *helped* was pronounced not 'helpt' but 'hel-pud', with the two syllables clearly enunciated. By Shakespeare's time, poets could choose between the two to suit their cadence - writing *helped* to indicate the historic pronunciation or *help'd* to signify the modern one.

Such pronunciation changes are a regular feature of language. Sometimes they occur with the speed of centuries, sometimes with seemingly hell-for-leather haste. They appear from time to time in all languages for reasons that no one really understands.

In England the Great Vowel Shift, as it is generally and somewhat misleadingly called, happened later, roughly around the time of Chaucer. No one knows why this vowel shift happened. As Charlton Laird has succinctly put it: *'For some reason, Englishmen started shoving tense vowels forward in their mouths. Then they stopped. And they have remained stopped. Nobody knows why they started or why they stopped.'* For whatever reasons, in a relatively short period the long vowel sounds of English (or tense vowels as Laird called them) changed their values in a fundamental and seemingly systematic way, each of them moving forward and upward in the mouth. There was evidently a chain reaction in which each shifting vowel pushed the next one forward: the 'o' sound of *spot* became the 'a' sound *of spat,* while *spat* became *speet, speet* became *spate,* and so on. The 'aw' sound *of law* became the 'oh' sound *of close,* which in turn became the 'oo' sound *of food.* Chaucer's *lyf* pronounced 'leef, became Shakespeare's *life,* pronounced 'lafe', became our *life.* Not all vowel sounds were affected. The short *e* of *bed* and the short *i* of *hill,* for instance, were unmoved, so that we pronounce those words today just as the Venerable Bede said them 1,200 years ago.

Since obviously there is no one around who heard English as it was spoken in the time of Chaucer and Caxton, how do we know all this? The answer is that for the most part we cannot know for sure. Most of it is based on supposition. But scholars can get a good idea of what English must have sounded like by looking at the rhymes and rhythms of historic verse and by examining the way words were spelled in letters and other snatches of informal writing. In this respect we owe a huge debt to bad spellers. It is from misspellings in letters of the seventeenth, eighteenth, and nineteenth centuries that we can be pretty certain that *boiled* was pronounced *byled,* that *join* was *gine,* that *merchant* was *marchant,* and so on. From the misspellings of Queen Elizabeth we know that *work* was once pronounced 'wark', *person* was 'parson', *heard* was 'hard', and *defer* was 'defar', at least at court. In the same period, short vowels were often used interchangeably, so that *not* was sometimes written *nat* and *when* sometimes appeared as *whan.* Relics of this variability include *strap* and *strop, taffy* and *toffy, God* and *gad.*

Rhymes too tell us much. We know from Shakespeare's rhymes that *knees, grease, grass,* and *grace* all rhymed (at least more or less) and that *clean* rhymed with *lane.* (The modern pronunciation was evidently in use but considered substandard.) Shakespeare also made puns suggesting a similar pronunciation between *food* and *ford* and between *reason* and *raising.* The *κ* in words like *knight* and *knave* was still sounded in Shakespeare's day, while words like *sea* and *see* were still pronounced slightly differently - *sea* being something roughly halfway between *see* and *say* - as were other pairs involving *ee* and *ea* spellings, such *as peek* and *peak, seek* and *speak,* and so on. All of this is of particular interest to us because it was in this period that America began to be colonized, so it was from this stock of pronunciations that American English grew. For this reason, it has been said that Shakespeare probably sounded more American than English. Well, perhaps. But in fact if he and his compatriots sounded like anything modern at all it was more probably Irish, though even here there are so many exceptions as to make such suggestions dubious.

It is probable, though less certain, that words such as *herd, birth, hurt,* and *worse,* which all today carry an identical [ə:] sound - and which, entirely incidentally, is a sound that appears to be unique to English - had slightly different pronunciations up to Shakespeare's day and perhaps beyond. All of these pronunciation changes have continued up until fairly recent times. As late as the fourth decade of the eighteenth century Alexander Pope was rhyming *obey* with *tea, ear* with *repair, give* with *believe, join* with *divine,* and many others that jar against modern ears. The poet William Cowper, who died in 1800, was still able to rhyme *way* with *sea. July* was widely pronounced 'Julie' until about the same time. *Gold* was pronounced 'gould' until well into the nineteenth century (hence the family name) and *merchant* was still often 'marchant' long after Webster's death.

Sometimes changes in pronunciation are rather more subtle and mysterious. Consider, for example, changes in the stress on many of those words that can function as either nouns or verbs - words like *defect, reject, disguise,*

and so on. Until about the time of Shakespeare all such words were stressed on the second syllable. But then three exceptions arose - *outlaw, rebel,* and *record* - in which the stress moved to the first syllable when they were used as nouns (e.g. we re'bel against a 'rebel; we re'ject a 'reject). As time went on, according to one authority,the number of words of this type was doubling every hundred years or so, going from 35 in 1700 to 70 in 1800 and to 150 by this century, spreading to include such words as *object, subject, convict,* and *addict.* Yet there are still a thousand words which remain unaffected by this 400-year trend, among them *disdain, display, mistake, hollow, bother,* and *practice.* Why should this be? No one can say.

What is certain is that just as English spellings often tell us something about the history of our words, so do some of our pronunciations, at least where French terms are concerned. Words adopted from France before the seventeenth century have almost invariably been **anglicized,** while those coming into the language later usually retain a hint of Frenchness. Thus older *ch-* words have developed a distinct 'tch' sound as in *change, charge,* and *chimney,* while the newer words retain the softer 'sh' sound of *champagne, chevron, chivalry,* and *chaperone. Chef was* borrowed twice into English, originally as *chief with* a hard *ch* and later as *chef* with a soft *ch.* A similar tendency is seen in *-age,* the older forms of which have been thoroughly anglicized into an 'idge' sound *(bandage, cabbage, language)* while the newer imports keep a Gallic 'azh' flavour *(badinage, camouflage).* There has equally been a clear tendency to move the stress to the first syllable of older adopted words, as with *mutton, button,* and *baron,* but not with newer words such as *balloon* and *cartoon.* Presumably because of their proximity to France (or, just as probably, because of their long disdain for things French) the British have a somewhat greater tendency to disguise French pronunciations, pronouncing *garage* as 'gar-ridge', *fillet* as 'fill-ut', and putting a clear first-syllable stress on *café, buffet, ballet,* and *pâté* (Some Britons go so far as to say 'buffy' and 'bally').

Spelling and pronunciation in English are very much like **trains on parallel tracks,** one sometimes racing ahead of the other before being caught up. An arresting example of this can be seen in the slow evolution of verb forms in the sixteenth and seventeenth centuries that turned ***hath*** **into** ***has*** **and** ***doth*** **into** ***does.*** Originally *-th* verbs were pronounced as spelled. But for a generation or two during the period from (roughly) 1600 to 1650 they became pronounced as if spelled in the modern way, even when the spelling was unaltered. So, for example, when Oliver Cromwell saw *hath* or *chooseth,* he almost certainly read them as 'has' or 'chooses' despite their spellings. Only later did the spellings catch up.[3]

Often, however, the process has worked the other way around, with pronunciation following spelling. Many people today **pronounce that** *t* **in** ***often*** **because it's there** (even though they would never think to do it with *soften, fasten,* or *hasten)* and I suspect that a majority of people in the English-speaking world would be surprised to learn that the correct (or at least historic) pronun-ciation *of waistcoat* is 'wess-kit', *of victuals* is 'vittles', *of forehead* is forrid', and

of comptroller is 'controller' (the one is simply a fancified spelling of the other). In all of these the sway of spelling is gradually proving irresistible.

Quite a few of these spelling-induced pronunciation changes are surprisingly recent. At the time of the American Revolution, *husband* was pronounced 'husban', *soldier* was 'sojur', and *pavement* was 'payment', according to Burchfield. Until well into the nineteenth century, *zebra* was pronounced 'zebber', *chemist* was 'kimmist', and *Negro,* despite its spelling, was 'negger' (hence the insulting term *nigger).* Burchfield goes on to point out that until the nineteenth century *swore* was spoken with a silent *w* (as *sword* still is) as were *Edward* and *upward,* giving 'Ed'ard' and 'up'ard'.

Much of this would seem to fly in the face - indeed, *does* fly in the face - of what we were saying earlier, namely that pronunciations tend to become slurred over time. Although that is generally true, there are constant exceptions. Language, never forget, is more fashion than science, and matters of usage, spelling, and pronunciation tend to wander around like hemlines. People say things sometimes because they are easier or more sensible, but sometimes simply because that's the way everyone else is saying them. *Bounteous,* for instance, was in Noah Webster's day pronounced 'bountchus' - a clear case of evolutionary slurring - but for some reason purists took exception to it and *bountchus* quickly became a mark of ignorance. It is for the same reason precisely that in modern England it is considered more refined to pronounce *ate* as 'et'.

But without doubt the most remarkable example of pronunciation change arising purely as a whim of fashion was the sudden tendency in eighteenth-century upper-class southern England to pronounce words like *dance, bath,* and *castle* with a broad *a,* as if they were spelled *dahnce, bahth,* and *cahstle.* In the normal course of things, we might have expected the pronunciations to drift back. But for some reason they stuck (at least they have so far), helping to underscore the social, cultural, and orthoepic differences between not only Britons and Americans but even between Britons and Britons. The change was so consequential and far-reaching that it is not so much a matter of pronunciation as of dialect.

Celce-Murcia M. Teaching Pronunciation: a Reference for Teachers of English to Speakers of Other Languages.

Although English grammar limits the syntactic possibilities of an utterance, prosodic elements interact with syntax to convey a range of meaning and speaker's intent in spoken discourse.

Although there are variations possible in areas based on such factors as rate of speech and dialect (word stress, sentence stress, rhythm, and adjustments in connected speech), these phenomena are largely rule-governed and not particularly sensitive to discourse and speaker's intent. The features of pronunciation that are quite sensitive to the discourse context and the speaker's intention are prominence and intonation. In particular, we focus on the pro-

ductive use of these features to segment speech and highlight important information.

Just as individual utterances can be divided into words and these words into syllables, so too the larger stream of speech can be broken into smaller units. The term *thought group* refers to a discrete stretch of speech that forms a semantically and grammatically coherent segment of discourse. When we think about where a speaker can logically pause in the stream of speech, we can separate an utterance into thought groups. Although written discourse provides some markers for these divisions or pauses (i.e., commas, semicolons, periods, dashes), in spoken discourse a speaker may pause at points where such punctuation does not always occur in a written transcription of the utterance.

Similarly, the term *intonation unit* describes this same segment of speech but refers also to the fact that this unit of speech has its own intonation contour or pitch pattern (Gilbert 1983; Schuetze-Coburn 1993) and typically contains one prominent element. A single utterance or sentence may include several intonation units, each with its own prominent element and contour.

To summarize, each typical intonation unit (or thought group):
1. is set off by pauses before and after
2. contains one prominent element
3. has an intonation contour of its own
4. has a grammatically coherent internal structure

There is no foolproof way to divide an utterance into intonation units. In rapid speech, intonation units may be fairly long; in slower speech, they may be shorter, and breaks between units will therefore be more frequent. Where the utterance divisions fall will also depend on the individual speaker, with some speakers producing fewer breaks than others. Finally, such divisions are dependent on the performance context. Public speakers, for example, tend to pause frequently to make their message clearer or more emphatic, as in a political statement:

I promise / to serve / my fellow citizens / to the best / of my ability.

By contrast, if in another context the speaker is communicating urgency, the intonation units may be longer and the speech may contain fewer breaks:

I promise that I'll get you the back-ordered merchandise /just as soon as it arrives in the warehouse.

There are two additional points to be made regarding intonation units. First, too many pauses (and therefore intonation units) can slow speech down and create too many prominent elements, causing the listener difficulty in processing and comprehending the overall message. Second, blending and linking occur within intonation units, but not across unit boundaries. For example:

Dave: *Do you remember (/) when we used to stay up all night (/) studying for exams?*

Howard: *Do I ever! / Finals week was such a killer / that we all drank coffee (/) by the ton.*

In this dialogue the slashes indicate possible ("/") and obligatory "/" intonation unit boundaries. Dave's question could be uttered as one long rapid

thought group or as two or three more measured groups; if the latter, there could be as many as three intonation units. Howard has an obligatory intonation unit boundary after the first three words and another after *killer*. The intonation unit boundary between *coffee* and *by the ton* is optional; it depends on how much special prominence is given to *by the ton*.

In fact, the discourse context generally influences which stressed word in a given utterance receives **prominence** - that is, which word the speaker wishes to highlight! There are three circumstances governing the placement of prominence. The first is when the speaker places prominence on new information. This has been discussed by Chafe (1980), who points out that within an intonation unit, words expressing old or given information (i.e., semantically predictable information) are unstressed and spoken with lower pitch, whereas words expressing new information are spoken with strong stress and higher pitch. In unmarked utterances, it is the stressed syllable in the last content word that tends to exhibit prominence.

Allen (1971) provides an excellent example of how prominence marks new versus old information; she uses capital letters to signal new information (strong stress and high pitch):

X: I've lost an umBRELla.
Y: A LAdy's umbrella?
X: Yes. A lady's umbrella with STARS on it. GREEN stars.

In this example, *umbrella* functions as new information in X's first utterance. However, Y's reply, *lady's* receives prominence because it is the new information. In X's second utterance, both *umbrella* and *lady's* are old information, whereas *stars* and *green* are new information, thus receiving prominence.

A second, related circumstance governing the placement of prominence is *emphatic stress* - when the speaker wishes to place special emphasis on a particular element. In fact, the element receiving emphatic stress usually communicates new information within the sentence; however, it is differentiated from normal prominence by the greater degree of emphasis placed on it by the speaker. (This greater degree of emphasis is also signaled by pitch level.) In the phrase *"I'm NEVer eating clams again,"* for example, the speaker might place emphatic stress on *never* to signal a particularly bad reaction she once had when eating clams. Similarly, in the following brief exchange, Speaker B places emphatic stress on *really* to indicate a strong degree of enjoyment:

- How do you like that new computer you bought?
- I'm REALly enjoying it!

The third circumstance governing the placement of prominence is *contrastive stress*. In this case, two parallel elements - either explicitly or by implication - can receive prominence within a given utterance. In the question *"Is this a LOW or a HIGH impact aerobics class?"* for example, the speaker places prominence on both *low* and *high* to signal this important contrast in the sentence.

To better understand the concept of prominence, compare the following two dialogues:

1. A: HOW was the MOvie? ; B: It was TOO LONG.

2. A: Was it a LONG DRIVE? B: It was TOO LONG.

Although Speaker B says essentially the same thing in both dialogues, *long* is the prominent word in the first dialogue (with *too* also receiving light stress as a content word), since the idea of the movie's being a long one is the main information Speaker B wishes to communicate in answer to *how*. However, in the second dialogue, *too* receives emphatic stress since the speaker, in response to the question about the length of the drive, wishes to highlight its excessiveness. Moreover, in this utterance, *long* is old information and therefore does not receive prominence.

The Guidelines for the Placement of Prominence

1. Some degree of sentence stress tends to fall on all content words within an utterance.

2. When any word receiving stress has more than one syllable, it is only the word's most strongly stressed syllable that carries the sentence stress.

3. Within an intonation unit, there may be several words receiving sentence stress but only one main idea or prominent element (or in the case of contrastive stress, two).

4. New information tends to receive prominence and generally occurs toward the end of an utterance.

5. If the speaker wishes to emphasize a given element even more strongly, that element will receive emphatic stress.

6. When contrast between two elements in an intonation unit is signaled, both of these elements tend to receive contrastive stress; in such cases the intonation unit will have two prominent elements.

The following example demonstrates these points:

1.Teacher: We're STUDYing phoNETics in this CLASS. *(the main idea)*

2.There are WEEKly exAMS. *(new information)*

3.The exAMS are Every THURSday. *(new information)*

4. Student: Did you SAY TUESday or THURSday? *(contrast)*

5. Teacher: I SAID THURSday. *(clarification and emphasis)*

The word *Phonetics* is the most meaningful piece of information in line 1, and thus receives prominence. The new, and thus highlighted, information in line 2 is *exams,* just as *Thursday* the new information in line 3 (not *exams,* which were previously mentioned and are therefore old information). In line 4, the student is not sure of the message and asks for clarification, giving extra emphasis to the contrasting items *Tuesday* and *Thursday*. Finally, in line 5, the teacher clarifies the matter, placing extra emphasis on *Thursday*.

So, the main idea or new information receiving prominence tends to come toward the end in unmarked utterances. However, the communicative context can override this general principle. Notice what happens when the speaker intentionally wishes to highlight some other element in the utterance:

1. JOHN'S CAR is WHITE. (unmarked)

2. JOHN'S CAR is **WHITE.** (contrast: not some other color)

3. **JOHN'S** CAR is WHTTE. (contrast: not Albert's car)

4. JOHN'S **CAR** is WHITE. (contrast: not his truck)

5. JOHN'S CAR **IS** WHITE. (emphatic assertion: *Why do you say it isn't? I'm absolutely certain it is.)*

In the first statement, the unmarked placement of prominence would occur on the final element, *white.* However, depending on the context, there may be contrast placed on *white* as in statement 2, signaling that the car is white and not some other colour.

Alternatively, the important contrastive piece of information may be that it is *John's car* that is white and not someone else's, as in statement 3. Or perhaps, as in statement 4, the speaker wishes to make the contrast that it is John's *car* that is white rather than his house or truck. Moreover, should there be a dispute over the color of John's car, the speaker may insist on his or her point of view (i.e., the fact that John's car is indeed white) by emphasizing the verb *be* as in statement 5.

This flexibility allows the speaker to use prominence rather than additional verbiage to get the message across. Here is one more example:

Discourse context	Prominent element
What about John?	He CAN'T GO.
Who can't go?	**HE** CAN'T GO. *{pointing to John)*
Why doesn't John go?	He **CAN'T** GO

These sentences further demonstrate how the assignment of prominence depends heavily on the discourse and situational context.

In sum, whereas placement of stress within a word is dictated by the word's etymology and other factors, such as affixation, spelling, and grammatical category, prominence is sensitive to meaning, discourse, and syntactic boundaries. It reflects the meaning and the context in which a given utterance occurs as well as the speaker's intention.

In languages with much more flexible word order, the highlighting of information may often be achieved by moving various sentence elements to the beginning or end of an utterance. In English, with its relatively fixed word order, prominence is a highlighter.

Whereas the stress pattern of any multisyllabic English word is more or less established and can be found in the dictionary, prominence can vary a great deal, reflecting changes in the meaning of an utterance.

Common Intonation Patterns in NAE:

As we have seen, one way of highlighting information is through prominence; another is intonation. To understand intonation, it is first necessary to define **pitch,** the relative highness or lowness of the voice. It is important to note that the phonetic notion of pitch is relative, referring to the differentiated pitch levels of a given speaker - not to the lower VS. higher pitches of men's and women's voices or the differing pitch variations of different speakers.

In fact, pitch in its phonetic meaning corresponds quite closely to the definition of pitch in music. For example, ascending *do, re,* and *mi* represent progressively higher tones, or musical pitch. We distinguish four levels of phonetic pitch in English: 4 = extra high, 3 = high, 2 = middle, 1 = low.

Normal conversation moves between middle and high pitch, with low pitch typically signaling the end of an utterance. The extra high level is generally used to express a strong emotion such as surprise, great enthusiasm, or disbelief, and is the pitch level often used in contrastive or emphatic stress. English makes use of pitch variation over the length of an entire utterance rather than within one word.

If pitch represents the individual tones of speech, then **intonation** can be thought of as the entire melodic line. Intonation involves the rising and falling of the voice to various pitch levels during the articulation of an utterance.

It performs several unique functions. First, intonation reflects the grammatical function of an utterance. For example: *She is gone*.

If the utterance is pronounced with a rising-falling intonation, then it signals speaker certainty, which often corresponds to a declarative statement. However, pronounced with rising intonation, the same sequence of phonemes signals uncertainty and corresponds to a special type of yes/no question with statement word order but rising intonation.

Intonation also performs the function of conveying an attitude or emotion. For example, the simple utterance "*Great"* can be used to express three different shades of meaning:

1) the overall effect of the slightly falling intonation is that the speaker's comment is neutral or perfunctory;

2) the broader movement from high to low signifies that the speaker is genuinely enthusiastic;

3) the flatter intonation signifies lack of enthusiasm or sarcasm on the part of the speaker

So, the attitude of the speaker will vary in these three instances.

The movement of pitch within an intonation unit is referred to as the **intonation contour** of that unit. Such contours span the range of extra high pitch to low pitch. These levels are highly dependent on discourse meaning and prominence, with rises in intonation co-occurring with the highlighted or more important words that receive prominence within the sentence. Thus pitch and prominence can be said to have a symbiotic relationship with each other in English, and the interrelationship of these phenomena determines the intonation contour of a given utterance. There are two basic options for sentence-final intonation in NAE:

1) RISING-FALLING INTONATION (e.g. declarative statements, WH-questions, command-form requests, tag questions eliciting agreement, Yes/No responses).

2) RISING INTONATION (e.g. yes/no questions, repetition questions, direct address, listing nonfinal members of a series).

Certain intonation patterns present difficulties for the learner of English. For example, learners frequently associate questions exclusively with rising intonation, and as a result may have difficulty correctly producing and/or interpreting many wh-questions, which typically have falling intonation in English.

Tag questions are also difficult for nonnative learners, in terms of both grammar and intonation. Most learners use the rising intonation only, thereby signaling uncertainty. Native speakers, on the other hand, use tag questions with intonation signaling certainty much more frequently, since they most typically use tags to elicit confirmation, not to express uncertainty. Thus when producing utterances such as *"That was a really tough exam, wasn't it?"* (with final rising intonation), an ESL/EFL learner might appear to a native-speaker interlocutor to be unusually indecisive or hesitant.

Alternative questions can also be confusing to the nonnative learner, since nonnatives may again have difficulty interpreting or producing the difference between open- or closed-choice alternative questions. A common phenomenon among learners is to interpret closed-choice questions as open-choice. Thus in restaurants, when asked if they would like blue cheese, ranch, or house vinaigrette dressing, learners may answer "*yes*" instead of selecting from among the three options.

Depending on the language background of the learner, the pitch variation within intonation contours may be either too narrow or too exaggerated. For example, the intonation of languages such as Japanese, Spanish, and Dutch typically has a narrower range - thus making the English intonation of learners from these language groups sound somewhat flat. Speakers of other languages (such as Russian, Norwegian or the Swiss dialect of German) use more exaggerated pitch variation within a contour, lending a somewhat sing-song quality to their English.

Intonation and Meaning

Individual speakers make very specific use of ***prosody*** (i.e., intonation, volume, tempo, and rhythm) to convey their meaning in extended spoken discourse. Initially, by marking thought groups or intonation units, a speaker signals "information about thematic cohesion, perspective, message prominence, and distinctions such as those between shared and non-shared, main and subsidiary information" (Gumperz and Kaltman 1980: 62).

The intonation or the pitch contour of a thought group is crucial; Ford and Thompson (in press), for example, demonstrate that in English conversation a complete intonation contour is almost always accompanied by a grammatical completion (a phrase, a clause, etc.). However, the reverse is not true. There are many grammatically complete word strings that are not perceived by the interlocutor as complete. This is because they are not produced with utterance-final intonation, thus indicating that the speaker is not finished. From these findings, we can deduce that intonation is more important than grammar for marking boundaries in conversation (see also Gumperz 1982).

In a similar vein, Chun (1988: 81) notes: "Intonation functions to express whether a speaker is ready and willing to relinquish the floor, to signal that a response is desired, unnecessary, or unwanted, and to differentiate normal information from contrastive or expressive intentions." In other words, intonation performs an important conversation management function, with the speaker being able to subtly signal to the interlocutor to quit talking, to respond in a particular fashion, or to pay particular attention to a piece of highlighted information.

Nonnative speakers are frequently **mis**interpreted as rude, abrupt, or disinterested solely because of the prosodies of their speech. Native speakers may find choppy, unnatural rhythm; overly flat intonation; or inappropriate application of rise or rise-fall patterns annoying or difficult to understand.

On the other hand, nonnative speakers often cannot hear important keys to meaning because of their limited command of prosodic clues. This is especially true when humor, sarcasm, anger, irony, and the like are conveyed through prosodic means. To take a simple example, the nonnative speaker might not understand that his or her idea is being negatively evaluated if the phrase "*That's a great idea,*" is spoken <u>sarcastically.</u>

Statements

Unmarked or neutral versions of most English statements have rising-falling intonation and fairly predictable stress. For example:

JOHN COOKED DINner.

However, statements are sometimes marked such that one constituent, for example the subject noun *John,* is singled out for special focus or emphasis. This special marking can be accomplished in a variety of ways. There are grammatical options, such as the cleft construction *(It was John <u>who</u> cooked dinner),* and addition of emphatic markers *(John <u>himself</u> cooked dinner);* yet in everyday spoken English, marking is most commonly accomplished through greater length, extra force, and higher pitch on the prominent syllable. Thus the most typical way to give special prominence to *John* in the statement we are discussing is to say:

JOHN COOKED DINner.

However, it does not make sense to practice the unmarked and marked versions of *John cooked dinner* in isolation and out of context. Learners must understand early on that one version is appropriate in one context, whereas the other is appropriate in another context. For example, consider the following conversational exchange:

Alice: WHAT HAPpened after you goт HOME?

Betty: NoTHing unUSual; JOHN cooked DINner.

In this context the unmarked version of the statement is used. Contrast it with the following:

Alice: Did you COOK DINner after you GOT HOME?

Betty: NQ, JOHN COOKED DINner.

The marked version of the statement is used to counter the false assumption that Betty cooked dinner; the correction is made by emphasizing the name of the person who actually did cook dinner: John.

YES/No Questions

When asking yes/no questions, the intonation can rise on whichever constituent is in focus, and this intonation pattern often has two or three possible contours depending on the syntactic complexity and length of the question.

However, it is also possible with this same syntactic option for the speaker to use a rising-falling intonation pattern. This pattern conveys either expectation of an affirmative answer (if normal stress and intonation are used) or impatience, simultaneously implying an additional query (i.e., Are you going to answer my question, or aren't you?) if more exaggerated stress and intonation occur. Again, two contours are possible depending on which constituent is being emphasized: *John* or *dinner*.

WH-Questions

Wh-questions follow the same rising-falling intonation as statements when they are unmarked, with the rise corresponding to the most prominent element in the utterance:

HOW are you DO ing? WHY is she CRY ing? WHAT can I DO for YOU?

Such rising-falling intonation often surprises nonnative speakers, who sometimes assume that all questions in English - regardless of type - should be spoken with rising intonation. In fact, this is often true. However, when **WH-QUESTIONS** are spoken with rising intonation, the rise often signals "Repeat or clarify some of your information. I didn't hear everything you said": *WHAT did ANN BRING?* or surprise or disbelief: *ANN BROUGHT WHAT?*

Question words in English generally do not receive prominence; (they may be given prominence for special emphasis "But WHY are you going?). This may differ from the stress pattern in learners' first language.

TAG Questions

Tag questions follow statements, which have rising-falling intonation. When tags are used in their most frequent function - that is, seeking confirmation or making a point - they also have rising-falling intonation:

PEOPle are WORried about the eCOnomy, AREN'T they?

Tag questions have rising intonation only when they are used much like yes/no questions normally are: to elicit a *yes* or *no* answer from the addressee or to seek further clarification: You didn't finnish the CANdy, DID you? /

Note that in these latter two examples the statement preceding the tag tends not to fall as low as it does in the former examples because of the general tentativeness the speaker is expressing and anticipation of the upcoming terminal rise in the tag. The rising-falling pattern is definitely the more frequent contour for tag questions in English. However, the same tag question can have different intonation and different meaning depending on the context.

Alternative Questions

Closed-choice alternative questions (true alternative) contain a rise in the first part, a pause, and then a rise-fall in the second part: Would you LIKE JUICE or SOda?

Closed-choice alternative questions differ semantically, syntactically, and pragmatically from **open-choice alternative questions**, which have rising

low

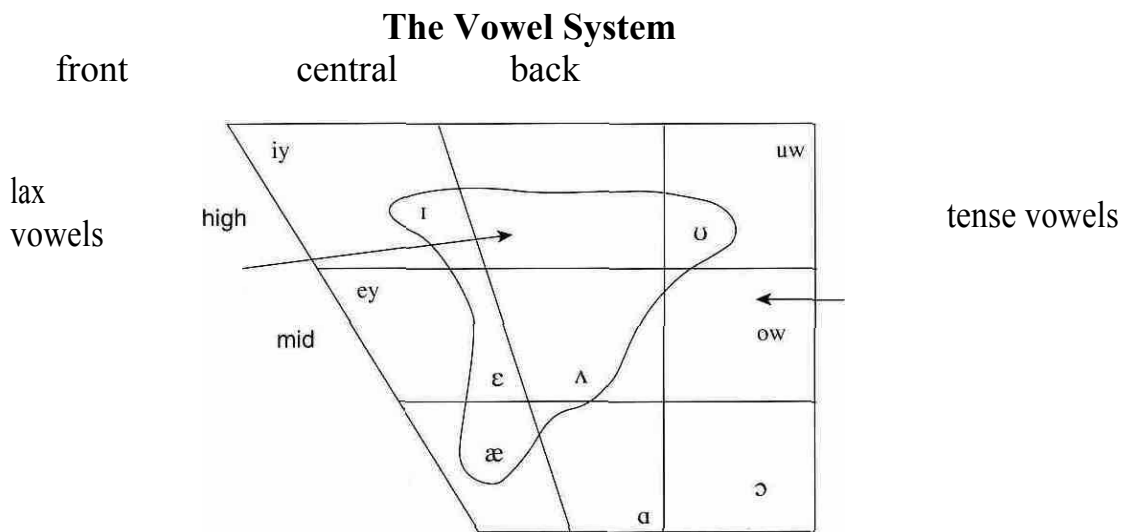intonation and do not force the listener to choose among alternatives: Would you LIKE JUICE or SOda? This pattern favors a yes/no question interpretation.

The Vowel System

front   central   back

lax vowels   tense vowels

Figure 4.1 Tense versus lax vowels in NAE
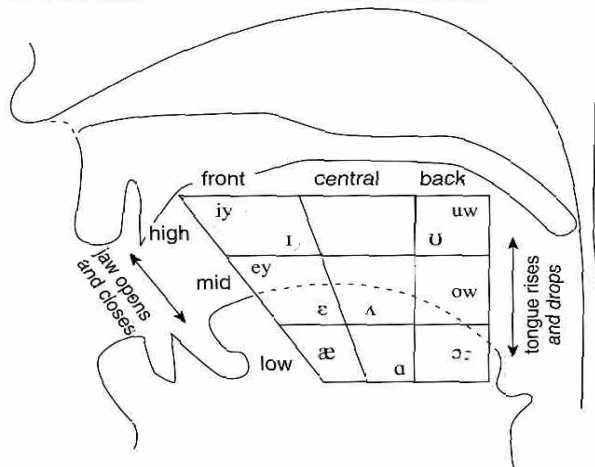
Figure 4.2 The NAE vowel quadrant and sagittal section of the mouth
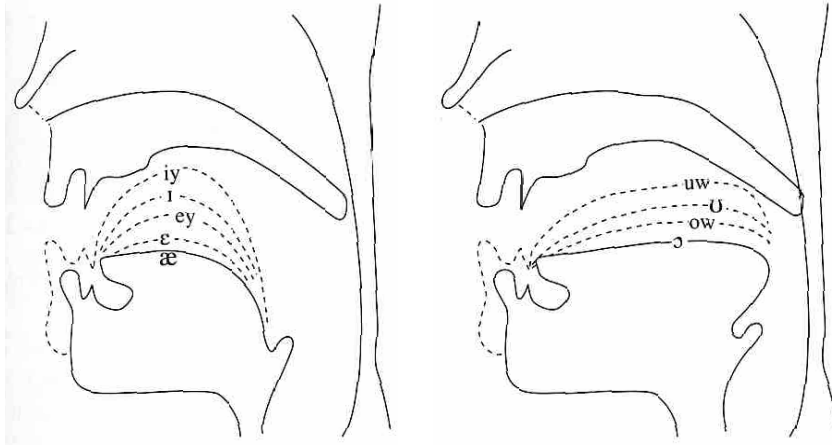
Figure 4.3 A comparison of tongue and jaw positions for front and back vowels

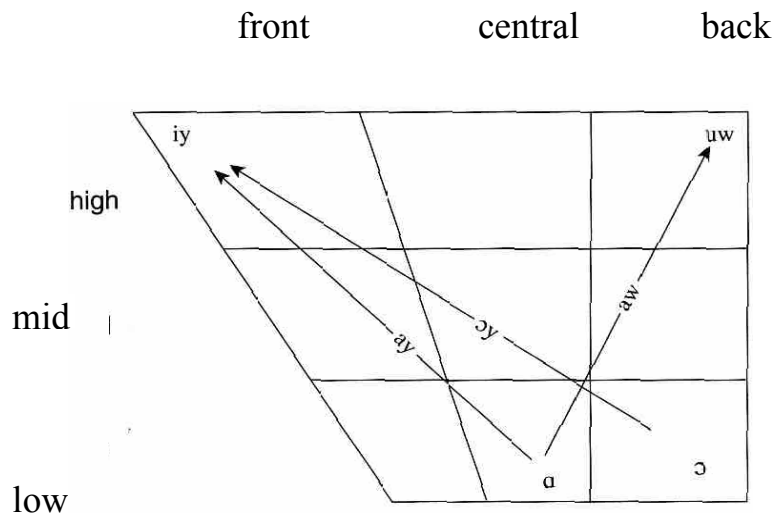front   central   back

high

mid

low

Figure 4.4 Glide movement for the NAE diphthongs

Comparison of Phonetic and Phonemic Alphabets

The transcription system used to represent NAE consonants and vowels in this text deviates in some respects from other commonly used transcription systems, especially with regard to the vowel symbols used. We have made these modifications to (1) allow the transcription system to more accurately reflect the sound system of NAE and (2) be of pedagogical value in helping learners of English approximate the segmental features of the language. The following table presents a comparison of our alphabet with several other commonly used systems. The IPA symbols given are from Jones (1991) and represent British Received Pronunciation (RP).

	Key Word	Celce-Murcia, Brinton, and Goodwin	International Phonetic Alphabet (Jones 1991)	Oxford Student's Dictionary of American English (1986)	Longman Dictionary of American English (1983)	Prator and Robinett (1985)	Bowen (1975)	Avery and Ehrlich (1992)
					Comparison Chart: A Phonemic Alphabet for NAE			
1	pen	/p/	/p/	/p/	/p/	/p/	/p/	/p/
2	back	/b/	/b/	/b/	/b/	/b/	/b/	/b/
3	ten	/t/	/t/	/t/	/t/	/t/	/t/	/t/
4	dive	/d/	/d/	/d/	/d/	/d/	/d/	/d/
5	cart	/k/	/k/	/k/	/k/	/k/	/k/	/k/
6	go	/g/	/g/	/g/	/g/	/g/	/g/	/g/
7	chin	/tʃ/	/tʃ/	/tʃ/	/tʃ/	/tš/	/ch/	/tʃ/
8	jam	/dʒ/	/dʒ/	/dʒ/	/dʒ/	/dž/	/j/	/dʒ/
9	fit	/f/	/f/	/f/	/f/	/f/	/f/	/f/
10	vat	/v/	/v/	/v/	/v/	/v/	/v/	/v/
11	thin	/θ/	/θ/	/θ/	/θ/	/θ/	/th/	/θ/
12	then	/ð/	/ð/	/ð/	/ð/	/ð/	/dh/	/ð/
13	set	/s/	/s/	/s/	/s/	/s/	/s/	/s/
14	zoo	/z/	/z/	/z/	/z/	/z/	/z/	/z/
15	shoe	/ʃ/	/ʃ/	/ʃ/	/ʃ/	/š/	/ch/	/ʃ/
16	beige	/ʒ/	/ʒ/	/ʒ/	/ʒ/	/ž/	/zh/	/ʒ/
17	how	/h/	/h/	/h/	/h/	/h/	/h/	/h/
18	mat	/m/	/m/	/m/	/m/	/m/	/m/	/m/
19	net	/n/	/n/	/n/	/n/	/n/	/n/	/n/
20	ring	/ŋ/	/ŋ/	/ŋ/	/ŋ/	/ŋ/	/ng/	/ŋ/

21	win	/w/	/w/	/w/	/w/	/w/	/w/	/w/
22	when	/(h)w/	/(h)w/	/(h)w/	/hw/	/hw/	/hw/	/w/
23	late	/l/	/l/	/l/	/l/	/l/	/l/	/l/
24	red	/r/	/r/	/r/	/r/	/r/	/r/	/r/
25	yes	/y/	/j/	/y/	/y/	/y/	/y/	/y/

Comparison Chart (Continued)

	Key Word	Celce-Murcia, Brinton, and Goodwin	International Phonetic Alphabet (Jones 1991)	Oxford Student's Dictionary od American English (1986)	Longman Dictionary of American English (1983)	Prator and Robinett (1985)	Bowen (1975)	Avery and Ehrlich (1992)
1	beat	/iy/	/i:/	/i/	/iʸ/	/iy/	/iy/	/iy/
2	pit	/i/	/i/	/i/	/i/	/i/	/i/	/i/
3	date	/ey/	/ei/	/ei/	/iʸ/	/ey/	/ey/	/ey/
4	set	/ɛ/	/e/	/e/	/ɛ/	/ɛ/	/ɛ/	/ɛ/
5	mat	/æ/	/æ/	/æ/	/æ/	/æ/	/æ/	/æ/
6	pot	/ɑ/	/o/	/a/	/ɑ/	/a/	/ɑ/	/a/
7	bought	/ɔ/	/ɔ:/	/ɔ/	/ɔ/	/ɔ/	/ɔ/	/ɔ/
8	so	/ow/	/əu/	/ou/	/oʷ/	/ow/	/ow/	/ow/
9	good	/u/	/u/	/u/	/u/	/u/	/u/	/u/
10	boot	/uw/	/u:/	/u/	/uʷ/	/uw/	/uw/	/uw/
11	time	/ay/	/ai/	/ai/	/ai/	/ay/	/ay/	/ay/
12	how	/aw/	/au/	/au/	/au/	/aw/	/aw/	/aw/
13	boy	/ɔy/	/ɔi/	/ɔi/	/ɔi/	/ɔy/	/ɔy/	/ɔy/
14	some	/ʌ/	/ʌ/	/ə/	/ʌ/	/ə/	/ə/	/ʌ/
15	bird	/ɜʳ/	/ɜ:/	/ər/	/ɜr/	/ər/	/ər/	/ər/
	The NAE Unstressed Vowels							
16	about	/ə/	/ə/	/ə/	/ə/	/ə/	/ə/	/ə/
17	butter	/əʳ/	/ə/	/ər/	/ər/	/ər/	/ər/	/ər/
18	city	/i/	/i/	/i/	/iʸ/	/i/	/iy/	/iy/
19	music	/i/	/i/	/i/	/i/	/i/	/i/	/i/
20	hotel	/o/	/əu/	/ou/	/oʷ/	/ow/	/ow/	/ow/
21	into	/u/	/u, u:, ə/	/ə, u/	/ə, u, uʷ/	/ə, uw/	/ə, uw/	/ə, uw/

Deletion

An even more radical form of adjustment in connected speech is **deletion** (also known as elision, ellipsis, or omission): the process whereby sounds disappear or are not

clearly articulated in certain contexts. In some cases, the spelling system of English is sensitive to this phenomenon, representing deletion in the contracted forms of auxiliary verbs plus *not* (e.g., isn't). In other cases, however, deletion occurs without any acknowledgement in the spelling system. Even many native speakers may be unaware of where deletion occurs. The process is pervasive.

The following are some of the most typical environment for deletion:

- Loss of /t/ when /nt/ is between two vowels or before a syllabic /ḷ/:

   /t/ win(t)er, Toron(t)o, en(t)er, man(t)le

- Loss of /t/ or /d/ when they occur second in a sequence or cluster of three consonants: /t/ res(t)less, lis(t)less, exac(t)ly   /d/   win(d)mill, kin(d)ness, han(d)s

- Deletion of word-final /t/ or /d/ in clusters of two at a word boundary when the following word begins with a consonant[1]:

Deletion
Eas(t) side
Blin(d) man
Wil(d) boar
However, when the following word begins with a vowel, there is no deletion. Instead, resyllabification occurs.

No deletion
(resyllabification)
Eas/t_end
Blin/d_eye
Wil/d_ass

- Loss of an unstressed medial vowel (also referred to as **syncope**), where the unstressed vowel /ə/ or /i/ optionally drops out in some multisyllabic words following the strongly stressed syllable[2]:

Choc(o)late, ev(e)ry, ev(e)ning, cam(e)ra, myst(e)ry, hist(o)ry, veg(e)table, comp(a)rable, lab(o)ratory, int(e)resting, mis(e)rable, gen(e)rally, asp(i)rin, diff(e)rent, fav(o)rite, rest(au)rant, bev(e)rage, fam(i)ly, reas(o)nable, em(e)rald
In rapid or informal native-speaker speech, deletion occasionally occurs in two-syllable words such as the following, which are reduced to one syllable:
c(o)rrect, p(a)rade, p(o)lice, s(u)ppose, g(a)rage
Related to this type of deletion is loss of an unstressed initial vowel or syllable in highly informal speech, a process known as **aphesis**:
'cause, 'bout, 'round

---

[1] There are two exeptions to this rule. First, when the second word begins with /w, h, y, r/, no deletion occurs: *East hill*, *blind youth*, *wild ride*. Second, some consonant clusters with final /t/ or /d/ never simplify: /nt, lt, rt, rd/: *plant food*, *felt pen*, *shortstop*, *bird feeder*.
[2] If the last syllable is stressed, syncope does not occur. Compare the verbs *separate* /ˈsepəˌreit/ with the adjective *separate* /ˈseprət/.

• Loss of the first noninitial /r/ in a word that has another /r/ in a following syllable:[3]
Feb(r)uary, gove(r)nor, su(r)prise, tempe(r)ature
• Loss of final /v/ in of (i.e., reduction to schwa) before words with initial consonants: lots <u>of</u> money, waste <u>of</u> time, hearts <u>of</u> palm
    /ə/   /ə/   /ə/
• Loss of initial /h/ and /ð/ in pronominal forms in connected speech:
  ask (h)er, help (h)im, tell (th)em

Epenthesis

Epenthesis is the insertion of a vowel or consonant segment within an existing string of segments. Although less frequent than deletion in English, epenthesis is by no means uncommon. The most important type of epenthesis in English occurs in certain morphophonological sequences such as the regular plural and past tense endings. Here an epenthetic schwa /ə/ is added to break up clusters of sibilants or alveolar stops. Progressive assimilation alone will not make the morphological endings sufficiently salient. Thus for the plural endings, for which we can posit an underlying (z) mor-, pheme, we have:

Assimilation	Epenthesis
Plate + /z/ = /pleits/	place + /z/ = /ˈpleisəz/
bag + /z/ = /bægz/	buzz + /z/ = /ˈbʌzəz/

And for regular past tense, for which we can posit an underlying /d/ morpheme, we have:

Assimilation	Epenthesis
Look + /d/ = /lukt/	plant + /d/ = /ˈplæntəd/
grin + /d/ = /grind/	hand + /d/ = /ˈhændəd/

Finally, there are also cases of consonant epenthesis in English. Often words like *prince* and *tense*, which end in [ns], are pronounced with an inserted [t] so that they sound just like *prints* and *tents*. In such cases, the insertion of the voiceless stop /t/ makes it easier for speakers to produce the voiced nasal plus voiceless fricative sequence. We see the same process at work when some speakers add a /p/ between the /m/ and /f/ in *comfort*.[4]

Crystal D. Prosodic Systems and Intonation in English
D. Crystal distinguishes the following functions of intonation.

• Emotional function's most obvious role is to express attitudinal meaning - sarcasm, surprise, reserve, impatience, delight, shock, anger, interest, and thousands of other semantic nuances.

• Grammatical function helps to identify grammatical structure in speech, performing a role similar to punctuation. Units such as clause and sentence often

---

[3] We believe that speakers of standard NAE will often omit the first /r/ sound in the listed words; however, in certain words, such as *library*, the loss of the first /r/ is more dialectal.
[4] In some cases an epenthetic consonant is now represented in the spelling of a word or name. Examples are *p* in *em<u>p</u>ty* or *Thom<u>p</u>son* (a variant of *Thomson*).

depend on intonation for their spoken identity, and several specific contrasts, such as question/statement, make systematic use of it.

• Informational function helps draw attention to what meaning is given and what is new in an utterance. The word carrying the most prominent tone in a contour signals the part of an utterance that the speaker is treating as new information.

• Textual function helps larger units of meaning than the sentence to contrast and cohere. In radio news-reading, paragraphs of information can be shaped through the use of pitch. In sports commentary, changes in prosody reflect the progress of the action.

• Psychological function helps us to organize speech into units that are easier to perceive and memorize. Most people would find a sequence of numbers, for example, difficult to recall. The task is made easier by using intonation to chunk the sequence into two units.

• Indexical function, along with other prosodic features, is an important marker of personal or social identity. Lawyers, preachers, newscasters, sports commentators, army sergeants, and several other occupations are readily identified through their distinctive prosody.

Леонтьева С.Ф. Теоретическая Фонетика Английского языка

There are two main approaches to the problem of intonation in Great Britain. One is known as a **contour analysis** and the other may be called **grammatical.**

The first is represented by a large group of phoneticians: H. Sweet, D. Jones, G. Palmer, L. Armstrong, I. Ward, R. Kingdon, J. O 'Connor, A. Gimson and others. It is traditional and widely used. According to this approach the smallest unit to which linguistic meaning can be attached is a **tone-group (sense-group).** Their theory is based on the assumption that intonation consists of basic functional "blocks". They pay much attention to these "blocks" but not to the way they are connected. Intonation is treated by them as a layer that is superimposed on the lexico-grammatical structure. In fact the aim of communication determines the intonation structure, not vice versa.

The grammatical approach to the study of intonation was worked out by M. Halliday. The main unit of intonation is a **clause**. Intonation is a complex of three systemic variables: tonality, tonicity and tone, which are connected with grammatical categories. Tonality marks the beginning and the end of a tone-group. Tonicity marks the focal point of each tone-group. Tone is the third unit in Halliday's system. Tones can be primary and secondary. They convey the attitude of the speaker. Halliday's theory is based on the syntactical function of intonation.

The founder of the American school of intonation is K. Pike. In his book "The Intonation of American English" he considers "**pitch phonemes**" and "**contours**" to be the main units of intonation. He describes different contours and their meanings, but the word "meaning" stands apart from communicative function of intonation. A. Antipova in her "System of English Intonation"

characterizes the approach of the American school to the study of intonation system as "mechanical".

Two **main** functions of intonation are — constitutive and recognitive, intonation also serves to distinguish communicative types of sentences and differentiate functional styles.

Attitudinal function of intonation can be observed in utterances consisting of one word and in utterances consisting of more than a single word. In the latter cases it is not only that the type of the nucleus is important but also the pitch of the utterance preceding the nucleus: prehead and head. The attitudinal function of different tonal types in statements, special and general questions, commands and interjections is accurately and thoroughly described in the "Intonation of Colloquial English" by J. D. O'Connor and G. F. Arnold and in other textbooks on phonetics.

Prosody Stress

Any word spoken in isolation has at least one prominent syllable. We perceive it as stressed. Stress in the isolated word is termed word stress, stress in connected speech is termed sentence stress. Stress is indicated by placing a stress mark before the stressed syllable: /'/.

Stress is defined differently by different authors. B. A. Bogoroditsky, for instance, defined stress as an increase of energy, accompanied by an increase of expiratory and articulatory activity. D.Jones defined stress as the degree of force, which is accompanied by a strong force of exhalation and gives an impression of loudness. H. Sweet also stated that stress is connected with the force of breath. Later, however, D. Jones wrote, that "stress or prominence is effected ... by inherent sonority, vowel and consonant length and by intonation." A.C. Gimson also admits that a more prominent syllable is accompanied by pitch changes in the voice, quality and quantity of the accented sounds.

If we compare stressed and unstressed syllables in the words *contract* /'kontrəkt/ *договор, to contract* /tə kən'trækt/ *заключать договор,* we may note that in the stressed syllable:

(a) the force of utterance is greater, which is connected with more energetic articulation;

(b) the pitch of the voice is higher, which is connected with stronger tenseness of the vocal cords and the walls of the resonance chamber;

(c) the quantity of the vowel /æ/ in /kən'trækt/ is greater, the vowel becomes longer;

(d) the quality of the vowel /æ/ in the stressed syllable is different from the quality of this vowel in the unstressed position, in which it is more narrow than /'æ/.

On the auditory level a stressed syllable is the part of the word which has a special prominence. It is "produced by a greater loudness and length, modifications in the pitch and quality. The physical properties are: intensity, duration, frequency and the formant structure. All these features can be analysed on the acoustic level.

Word stress can be defined as the singling out of one or more syllables in a word, which is accompanied by the change of the force of utterance, pitch of the voice, qualitative and quantitative characteristics of the sound, which is usually a vowel.

In different languages one of the factors constituting word stress is usually more significant than the others. According to the most important feature different types of word stress are distinguished in different languages.

1) If special prominence in a stressed syllable or syllables is achieved mainly through the intensity of articulation, such type of stress is called dynamic, or force stress.

2) If special prominence in a stressed syllable is achieved mainly through the change of pitch, or musical tone, such accent is called musical, or tonic. It is characteristic of the Japanese, Korean and other oriental languages.

3) If special prominence in a stressed syllable is achieved through the changes in the quantity of the vowels, which are longer in the stressed syllables than in the unstressed ones, such type of stress is called quantitative.

4) Qualitative type of stress is achieved through the changes in the quality of the vowel under stress.

English word stress is traditionally defined as dynamic, but in fact, the special prominence of the stressed syllables is manifested in the English language not only through the increase of intensity, but also through the changes in the vowel quantity, consonant and vowel quality and pitch of the voice.

Russian word stress is not only dynamic but mostly quantitative and qualitative. The length of the Russian vowels always depends on the position in a word. The quality of unaccented vowels in Russian may differ greatly from the quality of the same vowels under stress, e.g. /a/ in *травы, травы, травяной* is realized as /a, a, ъ/. /a, o, э/ undergo the greatest changes, /y/ and /и/ are not so much reduced when unstressed.

Stress difficulties peculiar to the accentual structure of the English language are connected with the vowel special and inherent prominence. In identical positions the intensity of English vowels is different. The highest in intensity is /a:/, then go / ɔ:, ɜ:, i:, u:, æ, ɔ, e, u, i/.

The quantity of long vowels and diphthongs can be preserved in (a) pretonic and (b) post-tonic position in English.

A stressed syllable carries a rhythmic beat. Accent is international pitch prominence.

Intonation

The descriptions of intonation show that suprasegmental phenomena are much more open to question than in the field of segmental phonology. Descriptions differ according to the kind of meaning different scientific schools regard intonation is carrying and also according to the significance they attach to different parts of the tone-unit. J.D. O'Connor and G.F. Arnold assert that a major function of intonation is to express the speaker's attitude to the situation he/she is placed in, and they attach these meanings not to pre-head, head and

nucleus separately, but to each of ten 'tone-unit types' as they combine with each of four sentence types: statement, question, command and exclamation.

D. Crystal presents an approach based on the view "that any explanation of intonational meaning cannot be arrived at by seeing the issues solely in either grammatical or attitudinal terms". He ignores the significance of pre-head and head choices and deals only with terminal tones.

It is still impossible to classify, in any practical analysis of intonation, all the fine shades of feeling and attitude which can be conveyed by slight changes in pitch, by lengthening or shortening tones, by increasing or decreasing the loudness of the voice, by changing its quality, and in various other ways. On the other hand it is quite possible

- to make a broad classification of intonation patterns which are so different in their nature that they materially change the meaning of the utterance;

- to make different pitches and degrees of loudness in each of them. Such an analysis resembles the phonetic analysis of sounds of a language whereby phoneticians establish the number of significant sounds it uses.

The distinctive function of intonation is realized in the opposition of the same word sequences which differ in certain parameters of the intonation pattern. Intonation patterns make their distinctive contribution at intonation group, phrase and text levels. Thus in the phrases:

*If **MARY,** comes let me know at   once* (a few people are expected to come but it is **Mary** who interests the speaker)

*If Mary **comes** let me know at once* (no one else but Mary is expected to come)

the intonation patterns of the first intonation groups are opposed.

Any section of the intonation pattern, any of its three constituents can perform the distinctive function thus being **phonological units**. These units form a complex system of intonemes, tonemes, accentemes, chronemes, etc. These phonological units like phonemes consist of a number of variants. The terminal tonemes, for instance, consist of a number of allotones, which are mutually non-distinctive. The principal allotone is realized in the nucleus alone. The subsidiary allotones are realized not only in the nucleus, but also in the pre-head and in the tail, if there are any.

The most powerful phonological unit is the terminal tone. The opposition of terminal tones distinguishes different types of sentence. The same sequence of words may be interpreted as a different syntactical type, i.e. a statement or a question, a question or an exclamation being pronounced with different terminal tones, e.g.:

Tom saw it (statement) - *Tom saw it?* (general question)
Didn't you enjoy it? (general question) - *Didn't you enjoy it?* (exclamation)
Will you be quiet? (request) - *Will you be quiet?* (command).

The number of terminal tones indicates the number of intonation groups. Sometimes the number of intonation groups may be important for meaning. For example, the sentence *My sister, who lives in the South, has just arrived* may mean two different things. In oral speech it is marked by using two or three

intonation groups. If the meaning is: 'my only sister who happens to live in the South', then the division would be into three intonation groups: *My sister, / who lives in the South, / has just arrived.* On the other hand, if the meaning is 'that one of my two sisters, who lives in the South', the division is into two intonation groups.

Melody

Speech melody or pitch of the voice is closely connected with sentence stress. D. Crystal states that "the only realizations of stress, which are linguistic, which are capable of creating an effect of relative prominence, of accent, are those which are effected with the complex help of pitch, quantity and quality variations. The most important is pitch."

Successive contours of intonation singled out of the speech flow may be defined differently: sense-groups (semantic approach), breath-groups (extra-linguistic approach), tone groups (phonological definition), intonation patterns / groups, tone (tonetic) units, pitch and stress patterns. Each <u>tone unit</u> has one peak of prominence in the form of a nuclear pitch movement and a slight pause after the nucleus that end the tone unit and is usually shorter than the term "pause" in pausation system.

The tone unit is one of the most important units of intonation theory. It contains one nucleus, which is often referred to as nuclear tone, or peak of prominence. The interval between the highest and the lowest pitched syllable is called the range of a sense-group. The range usually depends on the pitch level: the higher the pitch, the wider the range. High, medium and low pitch of the voice is shown on the staves. The change of pitch within the last stressed syllable of the tone-group is called a nuclear tone. It may occur not only in the nucleus but extend to the tail — terminal tone.

The inventory of tonal types given by different scholars is different. Sweet distinguishes 8 tones: level, high rising, low rising, high falling, low falling, compound rising, compound falling, rising-falling-rising.

Palmer has four basic tones: falling, high rising, falling-rising, low rising. He also mentions high-falling and "low level" and describes coordinating tonal sequences (identical tone groups), and subordinating tonal sequences (dissimilar tone groups). Kingdon distinguishes high and low, normal and emphatic tones and gives rising, falling, falling-rising (divided and undivided), rising-falling, rising-falling-rising and level tone (the latter is not nuclear). O'Connor and Arnold give low and high falls and rises, rise-fall, fall-rise, and a compound fall + rise (the latter is considered a combination of two simple tunes). Halliday recognizes seven major types.

Vasilyev gives ten tone units. He states that tones can be moving and level. Moving tones can be: simple, complex and compound. They are: Low Fall; High Wide Fall; High Narrow Fall; Low Rise; High Narrow Rise; High Wide Rise; Rise-Fall; Fall-Rise; Rise-Fall-Rise. The most common compound tones are: High Fall + High Fall; High Fall + Low Rise. Level Tones can be pitched at High, Mid and Low level.

The basic unit of intonation is an **intonation pattern**: pitch movements and tempo. Intonation patterns are actualized in speech.

The tonetic units that constitute the total intonation pattern (contour) are the following:

1) unstressed and half stressed syllables preceding the first stressed syllable constitute the prehead of the intonation group;

2) stressed and unstressed syllables up to the last stressed syllable constitute the head, body or scale of the intonation group;

3) the last stressed syllable, within which fall or rise in the intonation group is accomplished, is called the nucleus; the syllable marked with the nuclear tone may take a level stress;

4) the syllables (or one syllable), that follow the nucleus, constitute the tail.

The most important part of the intonation group is the **nucleus, which carries nuclear stress** (nuclear tone).

According to the changes in the voice pitch preheads can be: rising, mid and low:

Scales or heads can be: descending, ascending and level.

According to the direction of pitch movement within and between syllables, descending and ascending scales can be: stepping, sliding and scandent.

If one of the words in the descending scale is made specially prominent, a vertical arrow ↑ is placed before the dash-mark which indicates the stressed syllable on the staves, or before the word made specially prominent in the text —accidental rise, e.g. 'John is ↑very \busy.

This type of scale is called upbroken descending scale.

The falling tones convey completion and finality, they are categoric in character. The rising tones are incomplete and non-categoric. Of all the level tones mid level tone is used most frequently. The level tones may express hesitation and uncertainty.

We have been concerned with the relationship between intonation, grammatical patterns and lexical composition. Usually the speaker's intonation is in balance with the words and structures he chooses. If he says something nice, his intonation usually reflects the same characteristic. All types of questions, for instance, express a certain amount of interest which is generally expressed in their grammatical structure and a special interrogative intonation. However, there are cases when intonation is in contradiction with the syntactic structure and the lexical content of the utterance neutralizing and compensating them, e.g.: a statement may sound questioning, interested. In this case intonation neutralizes its grammatical structure. It compensates the grammatical means of expressing this kind of meaning: *Do you know what I'm here for? — No* (questioning).

There are cases when intonation neutralizes or compensates the lexical content of the utterance as it happens, for instance, in the command *Phone him*

at once, please, when the meaning of the word *please* is neutralized by intonation.

Lack of balance between intonation and word content, or intonation and the grammatical structure of the utterance may serve special speech effects. A highly forceful or exciting statement said with a very matter-of-fact intonation may, by its lack of balance, produce a type of irony; if one says something very complimentary, but with an intonation of contempt, the result is an insult.

Sentence Stress

Sentence stress is a greater prominence of words, which are made more or less prominent in an intonation group. The special prominence of accented words is achieved through the greater force of utterance and changes in the direction of voice pitch, constituting the nuclear tone.

The difference between stress and accent is based on the fact that in the case of stress the dominant perceptual component is loudness, in the case of accent it is pitch. Degrees of stress in an utterance correlate with the pitch range system. Nuclear stress is the strongest — it carries the most important information. Non-nuclear stresses are subdivided into full and partial. Full stress occurs only in the head of an intonation group, partial stress occurs also in the prehead and tail. Partial stresses in the prehead are most frequently of a low variety, high partial stress can occur before a low head. Words given partial stress do not lose prominence completely, they may retain the whole quality of their vowels e.g. /a:'tistik/.

In tone-groups stress may undergo alternations under the influence of rhythm, but there are some rules concerning words that are usually stressed or unstressed in an utterance.

Given below is the list of words that are usually stressed:

Nouns. Adjectives. Numerals. Interjections. Demonstrative pronouns. Emphatic pronouns. Possessive pronouns (absolute form). Interrogative pronouns. Indefinite pronouns: *somebody, someone, something, anybody, anyone, anything* (used as subject). Indefinite negative pronouns: *no, none, no one, nobody, nothing.* Indefinite pronouns *some, any* (expressing quality). Determinatives: *all, each, every, other, either, both.* Quantifiers: *much, many, a little, a few.* Notional verbs. Auxiliary verbs (negative contracted forms). Two-word prepositions. Two-word conjunctions. Particles: *only, also, too, even, just.*

The words that are usually unstressed:

Personal pronouns. Reflexive pronouns. Reciprocal pronouns. Relative pronouns. The pronoun *which* in non-defining clauses is usually stressed, e.g. *I gave him a spade, which tool he hid in the barn.* Possessive pronouns (conjoint form). Indefinite pronouns: *somebody, someone, something, anybody, anyone, anything* (used as object). Indefinite pronouns *some, any* (when expressing quantity). Auxiliary verbs (affirmative form). One-word prepositions and conjunctions. Articles. Particles: *there, to.* Modal verbs (contracted forms and general questions are exceptions).

The meaning of the verbs *may, should, must* changes depending on whether they are stressed or unstressed, e. g. *You ′may go* — possibility. *You may ′go* - permission.

Stresses in an utterance provide the basis for identification and understanding of the content, they help to perform constitutive, distinctive and identificatory function of intonation. These functions are performed jointly with the pitch component of intonation.

Rhythm and Tempo

Rhythm is the regular alternation of stressed and unstressed syllables. It is so typical of an English phrase that the incorrect rhythm betrays the non-English origin of the speaker even in cases of "correct" pronunciation.

The phenomenon of rhythm is closely connected with the phonetic nature of stress. The units of the rhythmical structure of an utterance are stress groups or rhythmic groups. The perception of boundaries between rhythmic groups is associated with the stressed syllables or peaks of prominence.

Each sense-group of the sentence is pronounced at approximately the same period of time, unstressed syllables are pronounced more rapidly: the greater the number of unstressed syllables, the quicker they are pronounced.

Rhythm is connected with sentence stress. Under the influence of rhythm words which are normally pronounced with two equally strong stresses may lose one of them, or may have their word stress realized differently, e. g.

'Picca'dilly —'Piccadilly 'Circus — 'close to Picca'dilly
'prin'cess — a 'royal prin'cess
'indiarubber — a 'piece of india'rubber — an 'indiarubber ˌball

Pausation and Timbre

Pausation is closely connected with the other components of intonation. The number and the length of pauses affect the general tempo of speech. A slower tempo makes the utterance more prominent and more important. It is an additional means of expressing the speaker's emotions.

Pauses made between two sentences are obligatory. They are longer than pauses between sense-groups and are marked by two parallel bars /‖/. Pauses made between sense-groups are shorter than pauses made between sentences. They are marked /|/.

Pauses are usually divided into filled and unfilled, corresponding to voiced and silent pauses. Pauses are distinguished on the basis of relative length: unit, double and treble. Their length is relative to the tempo and rhythmicality norms of an individual. The exception is "end-of-utterance" pause, which length is controlled by the person who is about to speak.

Another subdivision of pauses is into breathing and hesitation.

Pauses play not only segmentative and delimitative functions, they show relations between utterances and intonation groups, performing a unifying, constitutive function. They play the semantic and syntactic role, e. g. *There was no love lost between them* (they loved each other). *There was no love | lost between them* (they did not love each other).

Attitudinal function of pausation can be affected through voiced pauses, which are used to signal hesitation, doubt, suspence. Such pauses have the quality of the central vowels /ə, ə:/. They may be used for emphasis, to attach special importance to the word, which follows it.

The timbre or the voice quality is a special colouring of the speaker's voice. It is used to express various emotions and moods, such as joy, anger, sadness, indignation, etc.

Timbre should not be equated with the voice quality only, which is the permanently present person-identifying background, it is a more general concept, applicable to the inherent resonances of any sound. Timbre is studied along the lines of quality: *whisper, breathy, creak, husky, falsetto, resonant,* and qualification: *laugh, giggle, tremulousness, sob, cry.*

Reference List

1. *Hancock M.* English Pronunciation in Use / M. Hancock. – Cambridge: Cambridge University Press, 2004. – 200p.

2. *Соколова М.А.* Теоретическая фонетика английского языка: Учеб. для студ. высш. учеб. заведений / М.А.Соколова [и др]. – 3-е изд., стереотип. – М.: Гуманитар. изд. центр ВЛАДОС, 2004. –286 с.

3. *Соколова М.А.* Практическая фонетика английского языка: Учеб. для студ. высш. учеб. заведений / М.А.Соколова [и др]. – М.: Гуманитар. изд. центр ВЛАДОС, 2003. – 384 с.

Supplementary Literature

4. *Bradford B.* Intonation in Context / B. Bradford. – Cambridge: Cambridge University Press, 2002. – 62p.

5. *Crystal D.* The Cambridge Encyclopidia of the English Language / D. Crystal. – Cambridge: Cambridge University Press, 2003. – 499p.

6. *Hewings M., Goldstein Sh.* Practice Through Interaction: North American English / M. Hewings, Sh. Goldstein. – Cambridge: Cambridge University Press, 1999. – 148p.

7. *Hewings M.* Pronunciation Tasks: A Course for Pre-Intermediate Learners / M. Hewings. – Cambridge: Cambridge University Press, 1993. – 128p.

8. *Jones D.* The Pronunciation of English / D. Jones. – Cambridge: Cambridge University Press, 2002, – 223p.

9. *Кантер Л.А.* Системный анализ речевой интонации: Учеб. пособие / Л. А. Кантер. – М.: Высш. шк., 1988. – 127с.

10. *Merkulova Y.M.* English for University Students: Introduction to Phonetics / Y.M. Merkulova – СПб.: Изд-во «Союз», 2002. – 144p.

11. *Mortimer C.* Elements of Pronunciation: Intensive Practice for Intermediate and More Advanced Students / C. Mortimer. – Cambridge: Cambridge University Press, 2002. – 100p.

12. *Prator C., Robinett B.* Manual of American English Pronunciation / C. Prator., B. Robinett. – [S.L.]: Harcourt Brace & Company, 1985. – 244p.

13. *Trim J.* English Pronunciation Illustrated / J. Trim. – Cambridge: Cambridge University Press, 2002. – 96p.

Selection of Reading Materials

1. *Bryson B.* Mother Tongue / B. Bryson. – [S.L.]: Penguin, 1990. – 245p.

2. *Celce-Murcia M.* Teaching Pronunciation: a reference for teachers of English to speakers of other languages / M. Celce-Murcia, D. Brinton, J. Goodwin. – Cambridge: Cambridge University Press, 1996. – 435p.

3. *Crystal D.* Prosodic Systems and Intonation in English / D. Crystal. – Cambridge: Cambridge University Press, 1969. – 120p.

4. *Леонтьева С.Ф.* Теоретическая фонетика английского языка: Учеб. для студентов вечер. и заоч. отд-ний педвузов. – 2-е изд., испр. и доп. / С.Ф. Леонтьева. – М.: Высш. шк., 1988. – 271с.

Учебное издание

THEORETICAL PHONETICS
Study Guide
for second year students

Учебно-методическое пособие для вузов

Составители:
Борискина Ольга Олеговна
Костенко Нелли Васильевна

Редактор: Бунина Т. Д.