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A THEORETICAL COURSE OF ENGLISH PHONETICS

*Допущено Министерством высшего и среднего
специального образования СССР в качестве
учебного пособия для студентов вечернего и
заочного отделений педагогических институтов*



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Учебник написан в соответствии с программой для студентов вечернего и заочного отделений факультетов иностранных языков педагогических вузов. Он содержит основные сведения по курсу теоретической фонетики, необходимые для сохранения навыков правильного английского произношения и умения объяснить особенности английского произношения: артикуляционно-фонологические, слоговые, акцентные, интонационные. Материал иллюстрирован рисунками, схемами и таблицами, которые детально и наглядно объясняют трудности фонетической системы английского языка в сравнении с русским. Предназначается для студентов вечернего и заочного отделений факультетов иностранных языков педвузов.

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ПРЕДИСЛОВИЕ

Учебник предназначен для студентов вечернего и заочного отделений факультетов английского языка педагогических вузов, изучающих курс теоретической фонетики.

Требования к созданию такого рода пособия вызваны необходимостью расширения системы вечернего и заочного обучения и трудностями в изучении теоретической фонетики. Эти трудности связаны с ограниченным количеством часов, отводимых учебным планом на изучение этой дисциплины на вечернем и заочном отделениях.

Задачи учебника вытекают из тех задач, которые изложены в программе по теоретическому курсу фонетики английского языка:

1. Расширить знания студентов по фонетике, приобретенные при изучении курса «Введение в общее языкознание».

2. Познакомить студентов с ролью и достижениями русских и советских языковедов в развитии фонетической науки и решении ее проблем.

3. Систематизировать элементы фонетической теории, усвоенные студентами при изучении нормативного курса, и дать им на его основе более полное знание всех компонентов фонетического строя современного английского языка в их системе и в сопоставлении с фонетическим строем родного языка.

4. Познакомить студентов с основными спорными и нерешенными проблемами общей и английской фонетики и с новейшими теориями и взглядами по этим проблемам.

5. Познакомить студентов (в общих чертах) с современными методами фонетического исследования (особенно фонетического анализа), а также с применением теоретических положений курса в преподавании английского языка (например, о выборе учебной нормы произношения, о транскрипции, о типах произносительных ошибок, о применении результатов фонологического анализа при обучении произношению и др.).¹

Учебник состоит из десяти разделов. Объем каждого из них определяется спецификой материала. Основное внимание уделяется описанию четырех компонентов фонетического строя современного английского языка, в которые входят: 1) сегментные фонемы, 2) слог, 3) акцент и 4) интонация.

Каждый большой раздел состоит из: а) теоретического материала, б) вопросов, в) упражнений, г) контрольных заданий.

Лексический вокабуляр, использованный в упражнениях, включает в себя лексику учебника для II курса под редакцией В. Д. Аракина.²

Материал учебника широко иллюстрируется рисунками, схемами и таблицами, которые наглядно и детально объясняют механизмы артикуляции, помогают овладевать трудностями фонетического строя современного английского языка в сравнении с родным языком учащихся.

В учебнике имеется словарь фонетических терминов и ключ к наиболее трудным упражнениям (помечены *), что необходимо для самостоятельного изучения предмета.

¹ Программы педагогических институтов; Теоретический курс фонетики английского языка. М., 1973, с. 3.

² Practical Course of English (Second Year). Ed. by Arakin V. D. M., 1973.

МЕТОДИЧЕСКИЕ РЕКОМЕНДАЦИИ

Исходя из опыта работы на кафедре английского языка МОПИ им. Н. К. Крупской и в соответствии с учебным временем, которое отведено на изучение теоретической фонетики на вечернем и заочном отделениях (14 и 12 лекционных часов и 6 и 4 часа семинарских занятий), автор рекомендует излагать теоретический курс в пределах следующих тем:

на вечернем отделении:

1. Фонетика, как наука и ее связь с другими науками. Артикуляционная классификация согласных и гласных звуков.
2. Артикуляционные переходы от звука к звуку. Особенности артикуляционной базы в английском и русском языках.
3. Звуки речи как смысловозначительные единицы. Фонологический аспект.
4. Слоговая структура английского языка.
5. Акцентная структура английского языка.
6. Интонация как совокупность мелодического, фразоакцентного, темпорального и тембрального компонентов.

на заочном отделении:

1. Артикуляционно-фонологический аспект английского языка.
2. Слово-акцентная структура английского языка.
3. Интонация.

Теоретический материал дан в учебнике в минимальном объеме. При подготовке к обсуждению отдельных тем следует рекомендовать дополнительную литературу, указанную в библиографическом списке.

Так как учебник предназначен специально для студентов вечернего и заочного отделений, звуки речи описаны в нем и как артикуляционные и как функциональные единицы. Это дает возможность повторить нормативный курс, воспринять теорию в связи с практическим владением речью. Большое внимание уделено в пособии описанию артикуляторно-дистрибутивных свойств сегментных фонем, что способствует пониманию роли реально звучащих в речи звуковых вариантов — аллофонов.

В учебнике широко используется транскрипирование. Это имеет немаловажное значение для создания прочной произносительной базы и дальнейшего сохранения языковой нормы, что особенно необходимо учителю иностранного языка.

Вопросы к теоретическому материалу учебника являются основой для контроля усвоения изученного материала.

Регулярная работа с упражнениями помогает овладеть теоретическим материалом.

Контрольные задания дают возможность проверить знания студентов-заочников.

Упражнения к первому разделу учебника представлены заданиями на понимание роли фонетики среди других лингвистических дисциплин (грамматики, лексикологии, стилистики); на понимание связи произношения с правилами чтения. Работа со стихами, лимериками, скороговорками, загадками, отрывками из прозы может продолжаться на протяжении всего периода обучения в институте. Эту работу можно также расширить и вести по линии УИРС — учебно-исследовательской работы со студентами, обобщая результаты на фонетических конкурсах и олимпиадах внутри отдельных групп и смежных курсов.

Систематическое выполнение упражнений на тренировку особенностей английского консонантизма и вокализма даст возможность студентам вечернего и заочного отделений овладеть особенностями произношения и осмыслить явления, характерные для сегментных фонем английского языка. Например, упражнения на сопоставление гласных, долгота которых позиционно обусловлена, гласных, которые относятся к разному ряду и подъему, преследуют цель не только сопоставить особенности артикуляции изучаемых фонем, но и развить и автоматизировать произносительные навыки изучаемой звуковой системы.

Упражнения на выделение таких свойств согласных, как глухость и звонкость, наличие аспирации, сопоставление похожих по артикуляции, но разных по функциональным свойствам единиц, таких как *w — v*, *p — ɸ* и др., дают возможность показать релевантность одних и нерелевантность других различительных признаков.

Упражнения на тренировку наиболее трудных звуковых переходов в системе английского вокализма и консонантизма в сравнении с русским языком помогут учащимся улучшить произношение и сознательно подойти к исправлению ошибок.

Работа над упражнениями, связанными с определением различий в минимальных па-

рах, основанных на принципах классификации фонем, способствует более глубокому пониманию смысловых различий функций звуковых единиц, учит студентов самостоятельно проводить фонетико-фонологический анализ.

В упражнениях раздела «Сегментные фонемы и орфография» следует обратить внимание на тренировку чтения и письма имен собственных и географических названий — наиболее сложного материала при овладении произношением английского языка.

Упражнения на понимание структуры слога, роли сонорности и напряженности артикуляции в слогеобразовании, на соотношение произносительного, морфологического и орфографического слога рассчитаны на сознательное овладение слоговой структурой английской речи.

Упражнения на овладение акцентным компонентом фонетического строя неразрывно связаны с задачами обучения произношению как единству всех его компонентов.

Раздел «Интонация» содержит упражнения, рассчитанные на понимание структурных особенностей интонации, ее роли в овладении английской речью.

При изучении отдельных мелодических групп и их сопоставлении целесообразно использовать учебники по интонации, указанные в библиографическом списке, рекомендовать лингафонные курсы к этим учебникам, имеющиеся в фонетических кабинетах на кафедрах фонетики педагогических институтов.

При знакомстве студентов с оборудованием фонетической лаборатории и методами исследования физических свойств звуков желательно использовать опыт работы кафедры фонетики МГПИ им. В. И. Ленина и МГПИИЯ им. Мориса Тореза.

Для интенсификации учебного процесса на вечернем и заочном отделениях рекомендуется выносить часть материала на обсуждение в кружках по теоретической и практической фонетике: научно-исследовательская работа со студентами — НИРС. Можно также рекомендовать: а) обсуждение докладов по отдельным проблемам теоретической фонетики; б) отчеты о работе кружков (под руководством членов секций теоретической фонетики) в школе во время педагогической практики студентов; в) анализ фонетической части школьных учебников на материале, собранном студентами во время педагогической практики.

Большую роль в изучении теоретической фонетики на вечернем и заочном отделениях играет изготовление студентами наглядных пособий: таблиц, схем, рисунков строения органов речи.

В связи со спецификой работы на вечернем и заочном отделениях рекомендации автора к изучению теоретической фонетики носят общий характер. Преподаватель в каждом конкретном случае может творчески адаптировать материал в соответствии с особенностями аудитории и уровнем подготовки групп. Структура учебника дает возможность варьировать методические приемы для выполнения требований программы.

Так как учебник по теоретической фонетике для студентов вечернего и заочного отделений написан впервые, автор будет благодарен за все замечания, которые могут возникнуть во время работы с учебником.

Автор благодарит кафедру английского языка МОПИ им. Н. К. Крупской за постоянную поддержку в работе и рецензентов пособия за ценные замечания и советы, сделанные при прочтении рукописи.

Автор

I. THE SUBJECT-MATTER OF PHONETICS

Phonetics began long before there were either grammar or linguistics. Ancient objects, drawings, and written documents show that voice and speech always fascinated men. Written documents and evidences from the ancient civilizations point to an awareness of speech, its origin and abnormalities a long time ago.

Here are some data connected with the history of phonetic development:

1829 laryngoscope was invented,

1852 first observations of the vocal cords were made,

1877 gramophone was invented,

1886 International Phonetic Association (IPA) was founded.

IPA started publications of a special phonetic magazine "Le Maître Phonétique". It stated phonetic symbols for sounds of many existing languages. For the sounds of the English language IPA suggested the following broad and narrow transcription symbols:

| | | | | | | | | | | | |
|--------------------|----|----|----|----|----|----|----|----|----|----|----|
| broad ¹ | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| | i: | i | e | æ | ɑ: | ɔ | ɔ: | u | u: | ʌ | ə: |
| narrow | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | |
| | ə | eɪ | ou | aɪ | au | ɔɪ | ɪə | ɛə | ɔə | uə | |

Phonetics is an independent branch of linguistics like lexicology, grammar and stylistics. It studies not only separate sounds but their functions as well. It also studies the relation between written and spoken language. Phonetics is connected with other, non-linguistic sciences: acoustics, physiology, psychology, logic, etc.

Phonetics has branches of its own. The most important of them are *special* phonetics and *general* phonetics. The aim of special phonetics is to study the sounds of one language at a particular period of time, that is synchronically (it is *descriptive* phonetics), or diachronically,

¹ In this book we use the broad symbols.

that is to study the sounds of a language in its historical development (*historical phonetics*). General phonetics studies the sound systems of several languages. It is part of general linguistics.

The connection of phonetics with grammar, lexicology and stylistics is exercised first of all via orthography which in its turn is very closely connected with phonetics.

Phonetics formulates the rules of pronunciation of separate sounds and sound combinations. The rules of reading are based on the relation of sounds to orthography and present certain difficulties in learning the English language, especially on the initial stage of studying. Thus, vowel sounds, for instance, are pronounced not only as we name the letters corresponding to them: the letter *a* as /eɪ/, the letter *e* as /i:/, the letter *i* as /aɪ/, the letter *y* as /waɪ/, the letter *u* as /ʝ u:/, the letter *o* as /ou/, but *a* can be pronounced as: /æ/ — *can*, /ɑ:/ — *car*, /æ/ — *care*; *e* can be pronounced as: /e/ — *them*, /ə:/ — *fern*, /ɪə/ — *here*, etc.

Through the system of rules of reading phonetics is connected with grammar and helps to pronounce correctly singular and plural forms of nouns, the past tense forms and past participles of English regular verbs, e.g. /d/ is pronounced after voiced consonants (*beg* — *begged*), /t/ — after voiceless consonants (*wish* — *wished*), /ɪd/ — after /t/ (*want* — *wanted*). It is only if we know that /s/ is pronounced after voiceless consonants, /z/ after voiced and /ɪz/ after sibilants, that we can pronounce the words *books*, *bags*, *boxes* correctly.

One of the most important phonetic phenomena — sound interchange — is another manifestation of the connection of phonetics with grammar. For instance, this connection can be observed in the category of number. Thus, the interchange of /f — v/, /s — z/, /θ — ð/ helps to differentiate singular and plural forms of such nouns as: *calf* — *calves* /f — v/, *leaf* — *leaves* /f — v/, *bath* — *baths* /θ — ð/, *house* — *houses* /s — z/.

Vowel interchange helps to distinguish the singular and the plural of such words as: *basis* — *bases* /'beɪsɪs — 'beɪsi:z/, *crisis* — *crises* /'kraɪsɪs — 'kraɪsi:z/, *analysis* — *analyses* /ə'næləsɪs — ə'næləsi:z/ and also: *man* — *men* /mæn — men/, *foot* — *feet* /fʊt — fi:t/, *goose* — *geese* /gu:s — gi:s/, *mouse* — *mice* /maʊs — maɪs/.

Besides, vowel interchange is connected with the tense forms of irregular verbs, for instance: *sing* — *sang* — *sung*; *write* — *wrote* — *written*, etc.

Phonetics is also connected with grammar through its intonation component. Sometimes intonation alone can serve to single out the logical predicate of the sentence. Compare:

'He came home. (*Who came home?*)

He 'came home. (*Did he come?*)

He came 'home. (*Where did he come?*)

In affirmative sentences the rising nuclear tone may serve to show that it is an interrogation. Cf.

He 'came ,home.

He 'came ,home.

Pausation may also serve to perform differentiating function. If we compare two similar sentences pronounced with different place of pause, we shall see that their meaning will be different.

'What 'writing 'poet is 'doing is ,interesting.

If we make a pause after the word *what*, we are interested in what the poet is doing in general. If the pause is made after the word *writ-ing* we want to know, what book or article the poet is writing.

Phonetics is also connected with lexicology. It is only due to the presence of stress or accent in the right place, that we can distinguish certain nouns from verbs (formed by conversion), e.g.

| | |
|-------------------|---------------------------|
| 'abstract реферат | — to ab'stract извлекать |
| 'object предмет | — to ob'ject не одобрять |
| 'transfer перенос | — to trans'fer переносить |

Homographs can be differentiated only due to pronunciation, because they are identical in spelling, e.g.

| | |
|-------------------------|------------------------------|
| bow /bou/ лук | — bow /bau/ поклон |
| lead /li:d/ руководство | — lead /led/ свинец |
| row /rou/ ряд | — row /rau/ шум |
| sewer /souə/ швея | — sewer /sjuə/ сточная труба |
| tear /tə/ разрыв | — tear /tɪə/ слеза |
| wind /wind/ ветер | — wind /waɪnd/ виток |

Due to the position of word accent we can distinguish between homonymous words and word groups, e.g.

'blackbird дрозд — 'black 'bird черная птица

Phonetics is also connected with stylistics first of all through intonation and its components: speech melody, word stress, rhythm, pausation and voice timbre which serve to express emotions, to distinguish between different attitudes on the part of the author and speaker. Very often the writer helps the reader to interpret his ideas through special words and remarks such as: *a pause, a short pause, angrily, hopefully, gently, incredulously*, etc. For example:

"Now let me ask you girls and boys, would you paper a room with representations of horses?"

After a pause, one half of the children cried in chorus, "Yes, sir!" Upon which the other half, seeing in the gentleman's face that "Yes" was wrong, cried out in chorus, "No, sir!" — as the custom is in these examinations.

"Of course, no. Why wouldn't you?"

A pause.

(Ch. Dickens. *Hard Times*)

If the author wants to make a word or a sentence specially prominent or logically accented, he uses graphical expressive means, e.g.

"You *must* paper it," said the gentleman, rather warmly.

"You *must* paper it," said Thomas Gradgrind, "whether you like it or not. Don't tell *us* you wouldn't paper it." (*Ibid.*)

Phonetics is also connected with stylistics through repetition of words, phrases and sounds. Repetition of this kind serves the bases of rhythm, rhyme and alliteration.

Regular recurrence of accented elements, or rhythm, may be used as a special device not only in poetry, but in prose as well.

For example, in the extract, given below, the repetition of the word *fact* helps Ch. Dickens to characterize his hero, Mr. Gradgrind as a narrow-minded person unable to see anything behind bare facts.

"Now, what I want is, Facts. Teach these boys and girls nothing but Facts. Facts alone are wanted in life. Plant nothing else and root out everything else. You can only form the minds of reasoning animals upon Facts; nothing else will ever be of any service to them." (*Ibid.*)

In the description of Gradgrind's "mental introduction" rhythm is achieved through the repetition of parallel constructions, beginning with the word "man", which gradually develop and help to achieve the climax of significance.

"Thomas Gradgrind, sir. A man of realities. A man of facts and calculations. A man who proceeds upon the principle that two and two are four, and nothing over, and who is not to be talked into allowing for anything over. Thomas Gradgrind, sir — peremptorily Thomas—Thomas Gradgrind." (*Ibid.*)

The repetition of identical or similar sounds, which is called *alliteration*, helps, together with the words to which they belong, to impart a melodic effect to the utterance and to express certain emotions. Thus, the repetition of the sonant /m/ in the lines of the ballad, given below (together with the other stylistic devices), helps to produce the effect of merriment.

There are twelve months in all the year,
As I hear many men say,
But the merriest month in all the year
Is the merry month of May.¹

The repetition of the words *year*, *say* and *May* produces the effect of rhyme.

Onomatopoeia, a combination of sounds which imitate sounds produced in nature, is one more stylistic device which can serve as an example of the connection between phonetics and stylistics. E.g. *tinkle*, *jingle*, *clink*, *ting*, *chink*; *chatter*, *jabber*, *clatter*, *babble*; *chirp*, *cheep*, *twitter*, *chirrup*; *slap*, *clap*, *dab*, *smack*; *crash*, *clang*, *bang*.

Phonetics has several branches: physiological or articulatory phonetics ("articulatory aspect" in V.A. Vassilyev's terminology), acoustic or auditory phonetics (acoustic and auditory aspect), phonological or functional phonetics (linguistic or social aspect).²

Physiological or articulatory phonetics studies speech sounds from the point of view of their articulation and in connection with the organs of speech by which they are produced.

¹The rhyme was borrowed from *A Selection of English Poems* (classical and modern). M., 1952.

²Vassilyev V.A. *English Phonetics*. (A Theoretical Course). M., 1970.

Articulatory investigation of speech sounds is done on the basis of a good knowledge of physiology, that is, the structure of the voice and sound producing mechanisms. The investigator should be able to distinguish and reproduce sounds of the language under study and of the mother tongue. Articulatory phonetics makes use of such instruments and devices as: a hand mirror, laryngoscope, artificial palate, graphical representations of sounds, photographs and X-ray photographs, gramophone records and magnetic tape-recorder. TV classes and special films are also very helpful for the investigation and study of the articulatory aspect of speech.

Acoustic properties of sounds, that is, quantity, or length, tamber, intensity, pitch, temporal factor are investigated by the acoustic and auditory branch of phonetics.

Special laboratory equipment, such as kymograph, spectrograph, oscillograph and intonograph help to obtain the necessary data about prosodic properties of speech sounds.¹

A kymograph records qualitative variations of sounds in the form of kymographic tracings.

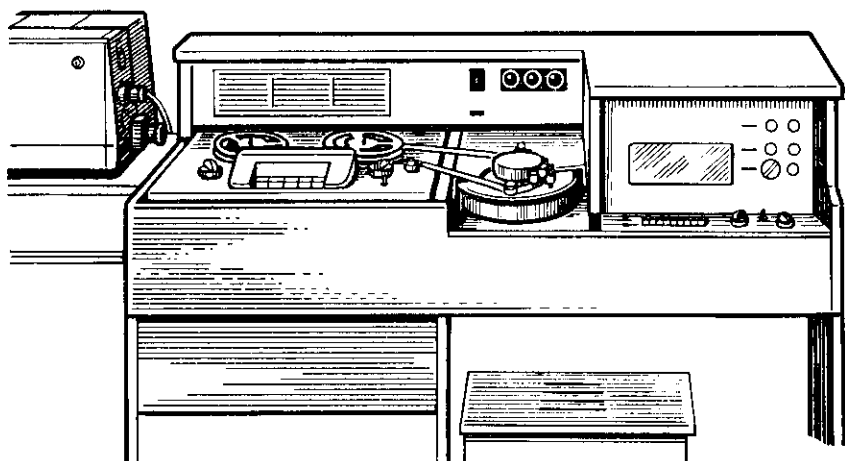


Fig. 1

A spectrograph produces sound spectrograms which help to list the frequencies of a given sound and its relative amplitudes.

An oscillograph records oscillograms of sound vibrations of any frequency. Automatically recorded oscillograms can be observed upon the screen.

An intonograph I-66 (Fig. 1) measures automatically: 1) the fundamental tone of the vocal cords, 2) the average sound pressure, 3) the duration or length of speech (pausation). The results are record-

¹Дикущина О.И. Фонетика английского языка. Теоретический курс. М. — Л., 1965.

ed: 1) visually upon the screen of the electron-ray tube, 2) on paper or film with the continuous reproduction by tape-recorder, 3) in digits (while estimating the limits of the recorded area along the screen of the electron-ray tube).

The phonological or functional properties of phonemes, syllables, accent and intonation are investigated by means of special linguistic methods, which help to interpret them as socially significant elements.

The significance of phonetics becomes quite clear from the statements made by the classics of Marxism-Leninism, who emphasized the importance of sounding speech in human intercourse.

V. I. Lenin defined language as "the most important means of human intercourse".¹ Marx and Engels define language as "practical consciousness."² The classics of Marxism-Leninism teach that speech and thought are impossible without words. Language can exist only in the material form of speech sounds, and that is the only and truly materialistic conception of language.

"First labour" [...] and then speech was one of "the most essential stimuli under the influence of which the brain of the ape gradually changed into that of man".³ "Necessity created the organ; the undeveloped larynx of the ape was slowly but surely transformed by modulation to produce constantly more developed modulations, and the organs of the mouth gradually learned to pronounce one articulate sound after another".⁴

The great Russian scientist I.P. Pavlov proves by his theory of conditioned reflexes that mute or speechless language can't exist. This teaching of the great physiologist coincides with the teaching of the founders of Marxism-Leninism.

Questions

1. What do you know about the history of phonetic development?
2. What is the aim of phonetics?
3. How is phonetics connected with other sciences?
4. What are the methods and devices of phonetic investigation?
5. What is the significance of phonetics in teaching a foreign language?

Exercises

1. Transcribe these words. Formulate the rules of reading the letters *a* and *e* and their combinations with other letters. Prove that phonetics is connected with orthography.

¹ Lenin V.I. Collected Works. M., 1964, v. 20, p. 625.

² Marx K., Engels F. German Ideology. M., 1964, p. 41.

³ Marx K., Engels F. Selected Works. M., 1970, p. 357.

⁴ Ibid., p. 356.

| | <i>According to the rules</i> | <i>Exceptions from the rules</i> |
|---------------|--|---|
| a | take, taking, table habit, rapid, valid back, scanty, battle also, fall, talk answer, branch, demand carry, narrow class, fast, grasp haste, taste, range father, path, rather water, war was, want, quantity aeroplane, aesthetics | have, atom, any, many example, sample ally, altitude, metallic, rally, shall starry asset, classic, mass, passive gather wake, wave wag, wax |
| ae | | |
| al, ay | aid, may | says, said |
| air | air, pair | |
| al | balm, calm, palm | |
| ar | far, part, particle care, careful, vary | are |
| au, aw | cause, pause, law | gauge, aunt |
| au | laugh, draught | |
| ough | caught, taught | |
| e | be, cede, precede set, better, settle berry, error, terror | edit, medal, merit, very English, England |
| ea | sea, peace | deaf, endeavour, heavy, peasant, weapon, great, idea, real, theatre |
| | bread, dead, dread health, death, head | lead /li:d/ beneath, breathe |
| ear | clear, hear, near earth, heard, search | heart, hearth, beard |
| ee | need, speed, exceed | |
| eer | deer, engineer | |
| ei | conceive, receive, seize | |
| ei, ey | convey, grey, veil | key |
| eigh | eight, weigh, weight | height |
| eir | heir, their | |
| er | germ, serve, verge | clerk |
| er | here, mere, zero | were, there, where |
| eu, ew | Europe, new | |

***2. Write down the plural forms of these words and transcribe them. Prove that phonetics is connected with grammar.**

| | | | | | |
|-------|-------|-------|-------|---------|------------|
| witch | judge | half | loaf | wife | mistress |
| glass | crash | knife | self | wolf | sculptress |
| fox | calf | leaf | sheaf | actress | waitress |
| gas | elf | life | thief | hostess | lioness |

*3. Write down the three forms of these verbs and transcribe them. Prove that phonetics is connected with grammar.

| | | | | | |
|--------|-----------|---------|------|--------|--------|
| beg | compel | stop | work | nod | invent |
| live | recognize | wrap | pass | permit | rest |
| open | arrive | help | ship | wait | load |
| travel | rain | ask | pack | expect | depend |
| cancel | inform | discuss | look | | |

*4. Transcribe these words. Underline the interchanging vowels and consonants in the corresponding parts of speech.

| | |
|-----------------------|-----------------------|
| nation — national | advice — to advise |
| grave — gravity | use — to use |
| provoke — provocative | a house — to house |
| zeal — zealous | an excuse — to excuse |
| supreme — supremacy | a device — to devise |
| occur — occurrence | loose — to lose |
| close — to close | |

*5. Read these words and word combinations. Translate them into Russian. Prove that phonetics is connected with lexicology through accent.

'redbreast — 'red 'breast
 'bluebell — 'blue 'bell
 'bluestone — 'blue 'stone
 'blue-lines — 'blue 'lines
 'bluebottle — 'blue 'bottle
 'blackshirt — 'black 'shirt
 'black-face — 'black 'face
 'bird's-eye — 'bird's 'eye
 'bread-and-butter — 'bread and 'butter
 'break-'promise — 'break 'promise
 'heavy-weight — 'heavy 'weight
 'red-book — 'red 'book
 'blue-'stocking — 'blue 'stocking
 'blue-nose — 'blue 'nose
 'blue-coat — 'blue 'coat
 'blue-bonnet — 'blue 'bonnet
 'black-hole — 'black 'hole
 'black mass — 'black 'mass

*6. Transcribe, read and translate these pairs of words. Single out the sounds that differentiate the meaning of the words.

| | | |
|---------------|-----------------|------------------|
| still — steel | sell — sale | but — bath |
| pool — pull | model — modal | breath — breadth |
| ship — sheep | saw — so | diary — dairy |
| sit — seat | Polish — polish | suit — suite |
| fill — feel | guard — guide | patrol — petrol |
| live — leave | worth — worse | mayor — major |
| ill — eel | truth — truce | rout — route |
| slip — sleep | | |

*7. Read the rhyme.¹ State what stylistic effect is achieved through repetition.

To market, to market, to buy a fat pig,
Home again, home again, jiggety jig;
To market, to market, to buy a fat hog,
Home again, home again, jiggety jog.
To market, to market, to buy a plum bun,
Home again, home again, market is done.

*8. Read the rhyme. Why is the word *think* singled out?

Look to left and look to right,
Note what traffic is in sight.
Note, too, which light can be seen:
The Red, the Amber, or the Green.
Children, keep from dangerous play
And THINK before you cross today.

*9. Read these rhymes. State what sounds are used to produce the effect of alliteration and for what purpose.

(a) She sells sea-shells on the sea-shore;
The shells she sells are sea-shells, I'm sure.
So if she sells sea-shells on the sea-shore,
Then I'm sure she sells sea-shore shells.

(b) Swan swam over the sea —
Swim, swan, swim;
Swan swam back again —
Well swum swan.

*10. Read the rhyme. Transcribe the words used to imitate the sounds made by different animals. State the stylistic device formed by this phonetic means.

Bow-wow, says the dog;
Mew, mew, says the cat;
Grunt, grunt, goes the hog;
And squeak, goes the rat.
Tu-whu, says the owl;
Caw, caw, says the crow;
Quack, quack, says the duck;
And moo, says the cow.

11. Read these sentences with correct logical accentuation and appropriate emotional colouring. Pay attention to the words singled out by italics.

1. "You've got a smut," he said *reprovingly*, looking at my nose.
2. "It's too hard," she replied *miserably* as she put it down. 3. "I'm going away," John remarked *briskly*, as he picked up his papers. 4. "What's wrong?" I asked *surprised* at the tone of his voice. 5. "Where did you see Paul?" they asked *excitedly*, looking in all directions. 6. "It's not difficult," Mary retorted, *angrily* pushing it into my hand. 7. "Fetch it to-morrow," he ordered *sharply* turning on his heel. 8. "How was it

¹ The rhymes in Ex. 7, 8, 9, 10 were borrowed from *An Anthology of Children's Literature*. M., L., 1968.

counteracted?" he asked, *gently*, while he lit a cigarette. 9. "Send for a policewoman," she demanded *at once*, her face pale with fright. 10. "Can you finish them?" we inquired *hopefully*, but with determination. 11. "I don't think he did run away," Mary exclaimed *suddenly* as she looked up. 12. "I can't think what you've done with it," he said *irritably*, searching in the drawers. 13. "Bernard's refused to help, of course," she called *loudly* through the open door. 14. "Can you really say you enjoyed it at all?" Henry demanded *sharply* and *incredulously*. 15. "Go and finish your wily book," Rosemary shouted *furiously*, as she threw it at him. 16. "I promise I won't tell anyone," he said *kindly*, as he took her by hand. 17. "Will you go to France this summer?" he asked *curiously*. 18. "Come over here a minute," he said *quietly*, beckoning with his hand. 19. "You are what?" shouted Nigel *in a fury*, turning pale with emotion. 20. "Where am I to sit?" repeated Joan with *irritation*.

Control Tasks

1. Give examples to prove that phonetics is an independent science.
2. Give examples to prove the significance of phonetics.
3. Give examples to prove that phonetics is connected with other sciences.
- *4. Translate these words and then transcribe them.

1. очень; меняться, изменяться; 2. личный персонал, личный состав; 3. костюм, свита; 4. патруль, бензин; 5. мэр, майор; 6. разгром, маршрут, путь; 7. выносить, терпеть; пиво; 8. год, ухо; 9. набережная, очередь; 10. допуск, излишество; 11. влиять, эффект; 12. сквозняк, засуха; 13. волосы, наследник, заяц; 14. наливать, бедный, лапа; 15. мужество, вагон; 16. требовать, наводить справки, приобретать.

- *5. Give the plural form of these words and then transcribe both forms.

wolf, wife, life, leaf, thief, knife, sheaf, half, self, elf, loaf, calf, echo, potato, hostess, tigress, basis, thesis, crisis, analysis, man, foot, goose, mouse, bath, house, class, box, dish, inch, phenomenon, focus.

- *6. Single out pairs of sounds the interchange of which makes the words different parts of speech.

clothe *v* — cloth *n*

glaze *v* — glass *n*

loathe *v* — loath *n*

lose *v* — loss *n*

halve *v* — half *n*

live *v* — life *n*

prove *v* — proof *n*

serve *v* — serf *n*

- *7. Accent and transcribe these words. Translate them into Russian.

insult — to insult

object — to object

outgo — to outgo

produce — to produce

subject — to subject

outgrowth — to outgrow

outlay — to outlay

outhrow — to outhrow

present — to present

protest — to protest

torment — to torment

- *8. Read the poem¹ of an anonymous writer and state what phonetic expressive means the author uses to make it more impressive.

¹ The poems in Ex. 8 and 9 were borrowed from *Topsy-Turvy World*. M., 1974.

SUSAN SIMPSON

Sudden swallows swiftly skimming,
Sunset's slowly spreading shade,
Silvery songsters sweetly singing
Summer's soothing serenade.
Susan Simpson strolled sedately,
Stifling sobs, suppressing sighs.
Seeing Stephen Slocum, stately
She stopped, showing some surprise,
"Say," said Stephen, "sweetest sigher;
Say, shall Stephen spouseless stay?"
Susan, seeming somewhat shyer,
Showed submissiveness straightway.
Summer's season slowly stretches,
Susan Simpson Slocum she—
So she signed some simple sketches—
Soul sought soul successfully.

*

Six September Susan swelters;
Six sharp seasons snow supplies;
Susan's satin sofa shelters
Six small Slocums side by side.

*9. Say how the effect of rhythm and rhyme is achieved by phonetic expressive means in the poem by D. F. Alderson.

Lines on Montezuma

(an extract)

Montezuma
Met a puma
Coming through the rhy:
Montezuma made the puma
Into apple pie.
 Invitation
 To the nation
 Everyone to come.
 Montezuma
 And the puma
 Give a kettle-drum.
Acceptation
Of the nation
One and all invited.
Montezuma—
And the puma
Equally delighted.

(abridged)

II. SOUNDS OF SPEECH AS ACOUSTIC AND ARTICULATORY UNITS

Speech sounds can be analysed from the viewpoint of three aspects: (1) acoustic, (2) physiological and articulatory, (3) functional.

ACOUSTIC ASPECT OF SPEECH SOUNDS

Acoustically, speech sound is a physical phenomenon produced by the vibration of the vocal cords and perceived due to the vibrations of the layers of air which occur at the rate of 16 to 20 thousand times per second. This is the limit of human hearing.

Sounds may be periodical and non-periodical. The auditory impression of periodic waves is a musical tone or a speech tone. If the vibrations are not rhythmical, we hear noises.

Sound has a number of physical properties, the first of them is *frequency*, i. e. the number of vibrations per second. It is measured in cycles per second (cps). The greater the frequency, the higher the pitch, and vice versa. The frequency of sound depends on certain physical properties of the vibrator, such as mass, length and tension. A man's voice is lower than a woman's partly because his vocal cords are longer and more thick. With the increase of the vocal cords' tension the frequency increases and the pitch rises. The pitch of a sound is the perception of the frequency of repeated pressures on the ear-drum. A man's voice is lower in pitch than that of a woman's.

The second physical property of sound is *intensity*. Changes in intensity are perceived as variation in the loudness of a sound. The greater the amplitude of vibration, the greater the intensity of a sound; the greater the pressure on the ear-drums, the louder the sound. Intensity is measured in decibels (dbs).

Any sound has *duration*, it is its length or quantity of time during which the same vibratory motion, the same pattern of vibration, are maintained. The duration of speech sounds is usually measured in milliseconds (msecs).

The sound waves produced by the vibration of the whole body are called *fundamental waves*, they are perceived as *fundamental tones*. Waves, produced by parts of the body are called *partial waves*, they are perceived as *partial tones*, or *overtones*, or *harmonics* (обертоны).

The analysis of a sound frequency and intensity at a definite period of time can be presented graphically with the help of a sound spectrograph. Acoustic characteristics of speech sounds are represented by spectrograms: linear or dynamic and intensity or instant. In instant spectro-

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grams intensity is represented by vertical dimensions, frequency — by horizontal dimension (Fig. 2).

In linear representations of intensity spectrograms the strength of harmonics is adequate to the blackness of spots: the stronger the harmonic, the more black is the spot.¹

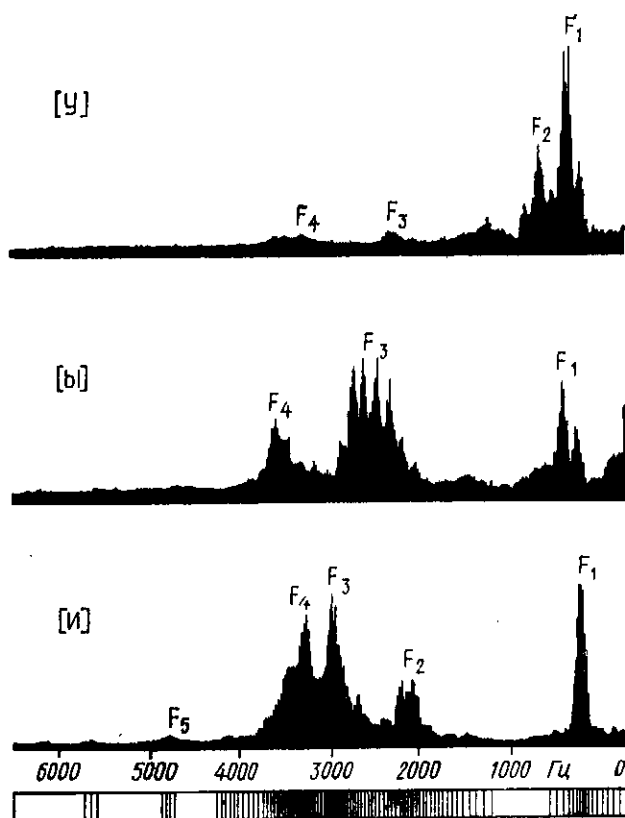


Fig. 2

Both types of spectrograms have certain limitations: in linear spectrograms a succession of sounds can be measured but it is difficult to compare their exact quality. However, they reveal a lot of information about the sound changes in time.

The intensity representations of instant spectrograms can't be read off with any exactness, but their great merit is the possibility to record not only the exact quality, but also the changes of sounds of speech at a particular moment of time.

¹Панов М.В. Русская фонетика. М., 1967, с. 134; Vassilyev V.A. Op. cit., ch. 4; Gleason H.A. An Introduction to Descriptive Linguistics. N. Y., 1961, ch.22.

Spectrographic analysis gives basis for acoustic definitions and classification of speech sounds. One of such classifications was suggested by R. Jacobson, C. Fant and M. Halle. This classification is not only phonacoustic but also phonemic.

Although acoustic descriptions, definitions and classifications of speech sounds are considered to be more precise than articulatory ones, they are practically inapplicable and useless in language teaching, because the acoustic features of speech sounds cannot be seen directly or felt by the language learner. Acoustic descriptions, however, can be applied in the fields of technical acoustics. They are also of great theoretical value.

Questions

1. What are the three aspects of a speech sound?
2. What is a speech sound from the acoustic point of view?
3. What is sound frequency? How is it connected with the pitch of the voice?
4. What is sound intensity?
5. What is sound duration?
6. What is the difference between fundamental tones and partial tones?
7. By what means is the analysis of a sound frequency carried out?
8. What types of spectrograms do you know?
9. What are the limitations and merits of linear and intensity spectrograms?
10. Can acoustic classifications of sounds be applied to language teaching?
11. What is the value of acoustic descriptions?

ARTICULATORY AND PHYSIOLOGICAL ASPECT OF SPEECH SOUNDS

To analyse a speech sound physiologically and articulatorily some data of the articulatory mechanism and its work should be introduced.

Speech is impossible without the following four mechanisms:

- (1) the power mechanism,
- (2) the vibrator mechanism,
- (3) the resonator mechanism,
- (4) the obstructor mechanism.

The *power mechanism* (Fig. 3) consists of the diaphragm (1), the lungs (2), the bronchi (3), the windpipe (or trachea) (4), the glottis (5), the larynx (6), the mouth cavity (7), and the nasal cavity (8).

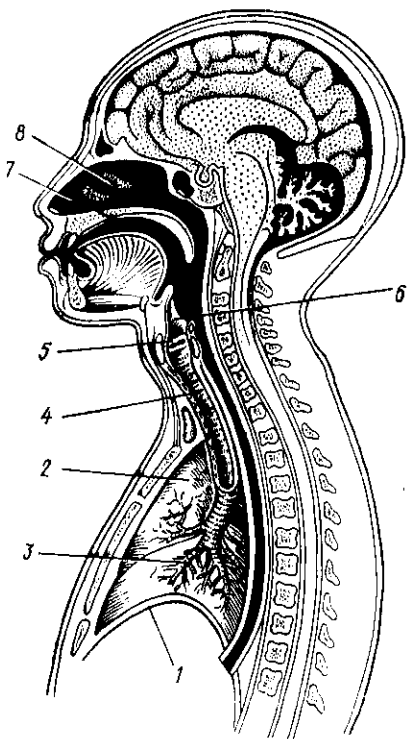


Fig. 3

The *vibrator mechanism* (Fig. 4) (the voice producing mechanism) consists of the vocal cords, they are in the larynx, or voice box. The vocal cords are two horizontal folds of elastic tissue. They may be

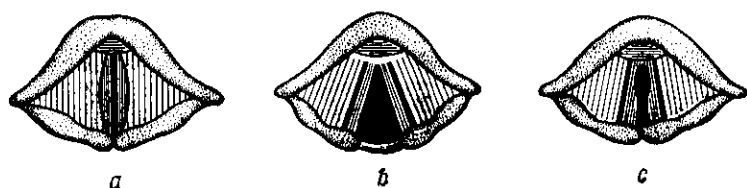


Fig. 4

opened (b) or closed (completely or incompletely) (a). The pitch of the voice is controlled mostly by the tension of the vocal cords. Voice produced by the vocal cords vibration (c) is modified by the shape and volume of the air passage.

H.A. Gleason mentions three sounds in the language that are produced by the vocal cords /h, \hbar , ʔ /. /h/ is glottal voiceless fricative and / \hbar / is its voiced allophone. He states that "during the pronunciation of /h, \hbar / the mouth may be in position for almost any sound."¹

When both parts of the glottis are firmly closed, the sound produced at separating the glottal stop position, is called the *glottal stop* / ʔ /. It sounds like a soft cough.

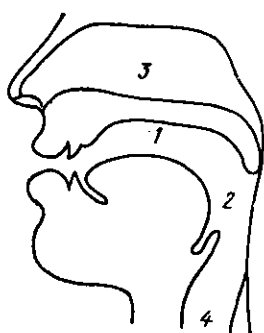


Fig. 5

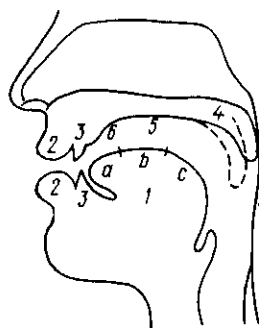


Fig. 6

The *resonator mechanism* (Fig. 5) consists of the pharynx (2), the larynx (4), the mouth cavity (1), and the nasal cavity (3).

The *obstructor mechanism* (Fig. 6) consists of the tongue (1: a — blade with the tip, b — front, c — back or dorsum); the lips (2), the teeth (3), the soft palate with the uvula (4), the hard palate (5), the alveolar ridge (6).

It should be borne in mind that the four mechanisms (the power, the vibrator, the resonator and the obstructor mechanisms) work simul-

¹ Gleason H.A. Op. cit., p. 241.

taneously and that each speech sound is the result of the simultaneous work of all of them.

When the air from the lungs gets into the larynx, it makes the vocal cords vibrate and produce the sounds of noise, that is, *voiced consonants* and *vowels*. The air may pass through the larynx, when the vocal cords do not vibrate and are taken apart. In this case *voiceless consonants* are produced. When, in the production of consonants, voice prevails over noise, *sonorants* are produced. The auditory impression of sonorants is that of neither noise, nor voice, therefore some of them are called *semi-vowels*: /w, j, r/.

Having passed through the vocal cords, the air gets into the pharynx and then, if the soft palate is raised and the way to the nasal cavity is closed, it gets into the *mouth cavity*. If the soft palate is lowered, and the passage to the stream of air through the mouth cavity is closed, the air passes out of the *nasal cavity*.

Articulatory differences between vowels, consonants and sonorants depend on the three articulatory criteria. They are:

- (1) the presence or absence of an articulatory obstruction to the air stream in the larynx or in the supra-glottal cavities;
- (2) the concentrated or diffused character of muscular tension;
- (3) the force of exhalation.

On the basis of these criteria *consonants* may be defined as sounds in the production of which (a) there is an articulatory obstruction to the air stream (complete, incomplete, intermittent); (b) muscular tension is concentrated in the place of obstruction; (c) the exhaling force is rather strong.

Vowels may be defined as sounds in the production of which (a) there is no articulatory obstruction to the air stream; (b) muscular tension is diffused more or less evenly throughout the supra-glottal part of the speech apparatus; (c) the exhaling force is rather weak.

Sonorants are sounds intermediate between noise consonants and vowels because they have features common to both. There is an obstruction, but not narrow enough to produce noise. Muscular tension is concentrated in the place of obstruction, but the exhaling force is rather weak. English sonorants are: /m, n, ŋ, l, w, r, j/.

ARTICULATORY AND PHYSIOLOGICAL CLASSIFICATION OF ENGLISH CONSONANTS

Soviet phoneticians classify consonants according to the following principles:

- I. Work of the vocal cords and the force of exhalation.
- II. Active organ of speech and the place of obstruction.
- III. Manner of noise production and the type of obstruction.

Within this principle of consonant classification there are the following subdivisions according to:

- (1) voice or noise prevalence,
- (2) number of noise producing foci,
- (3) shape of the narrowing.

IV. Position of the soft palate.

1. According to the work of the vocal cords and the force of exhalation consonants are subdivided into *voiced* (when the vocal cords are drawn together and vibrate) and *voiceless* (when the vocal cords are taken apart and do not vibrate).

Voiced consonants are: /b, d, g, z, v, ð, ʒ, m, n, ŋ, l, r, j, w, dʒ/,
voiceless consonants are: /p, t, k, s, f, θ, h, ʃ, tʃ/.

Table 1

Classification of Consonants According to the Active Organ of Speech and the Place of Obstruction

| Labial | | L i n g u a l | | | | | | | pharyn- gal |
|--------------|------------------|---------------|--------|----------------|--------------------------|----------|-------------------|------------------|----------------|
| | | forelingual | | | | | medio- lingual | backlin- gual | |
| bilabial | labio- dental | dorsal | apical | | cacuminal | | Palatal | Velar | |
| | | Dental | Dental | Alveo- lar | Palato- alveo- lar | Alveolar | | | |
| р, б п, б | | т, д | | т, д | | | | к, г к, г | |
| п', б' | | т', д' | | | | | | к', г' | |
| м м | | н | | п | | | | ŋ | |
| м' | | н' | | | | | | | |
| | | | с, з | с, з | | | | | |
| | | | с', з' | | | | | | |
| | ф, в ф, в | | θ, ð | | | | | х х | |
| | ф', в' | | | ʃ, ʒ ш', ж' | | | | | |
| | | | | ш, ж | | | | | |
| | | | | | | г | й й | | |
| | | | л' | l | | | | | |
| w | | | л | l̥ | | | | | |
| | | ц | | | | | | | |
| | | | | tʃ, dʒ ч | | | | | |
| | | | | | | р | | | |
| | | | | | | р' | | | |

The force of exhalation and the degree of muscular tension in the production of voiceless consonants is greater, therefore they are called by a Latin word "fortis", which means "strong, energetic". Voiced consonants are called "lenis", "soft, weak", because the force of exhalation and the degree of muscular tension in their articulation is weaker.

II. According to the active organ of speech and the place of obstruction consonants are classified into (Table 1):

- (1) *labial*, they are subdivided into (a) *bilabial* and (b) *labio-dental*;
- (2) *lingual*, they are subdivided into (a) *forelingual*, (b) *medio-lingual* and (c) *backlingual*. The subgroup of forelingual is subdivided into (a) *dorsal*, (b) *apical* and (c) *cacuminal*;
- (3) *pharyngeal*, or *glottal*.

This principle of consonant classification is rather universal; the only difference is that V.A. Vassilyev, G.P. Torsuyev, O.I. Dikushina, A.C. Gimson and others give more detailed and precise enumeration of active organs of speech than H.A. Gleason, A. Bloch, G. Trager and others.

There is, however, controversy about terming the active organs of speech. Thus, Soviet phoneticians divide the tongue into the following parts (Fig. 7): *front with the tip* (1), *middle* (2), and *back* (3). Following L.V. Shcherba's terminology, the front part of the tongue is subdivided into *apical* (a), *dorsal* (b), *cacuminal* (c) and *retroflexed* (d) according to the position of the tip and the blade of the tongue in relation to the teethridge (Fig. 8).

A.C. Gimson's terms differ from those used by Soviet phoneticians: *apical* is equivalent to *forelingual*; *frontal* is equivalent to *medio-lingual*; *dorsum* is the whole upper area of the tongue.

H.A. Gleason's terms in respect to the parts of the bulk of the tongue are: *apex*—the part of the tongue that lies at rest opposite the alveolae; *front*—the part of the tongue that lies at rest opposite the fore part of the palate; *back*, or *dorsum*—the part of the tongue that lies at rest opposite the velum or the back part of the palate.

III. A.L. Trakhterov, G.P. Torsuyev, V.A. Vassilyev and other Soviet phoneticians consider the principle of consonant classification according to the manner of noise production and the type of obstruction to be one of the most important and classify consonants according to this principle very accurately, logically and thoroughly. First of all, they suggest to classify consonants according to the manner of noise production from the viewpoint of the closure, which is formed in their articulation (Table 2).

It may be: (1) *complete closure*, then *occlusive* (stop, or plosive, and nasal) consonants are produced:

/p, b, t, d, k, g, m, n, ŋ/

/п, б, т, д, к, г, м, н, м', н'/



Fig. 7

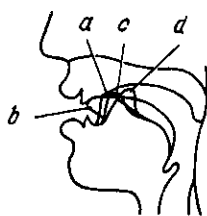


Fig. 8

(2) *incomplete closure*, then *constrictive* consonants are produced:

/f, v, θ, ð, h, s, z, ʃ, ʒ, w, j, l, r/

/ф, в, с, з, х, ф', в', с', з', ж, ш, ж', ш', й, л, л'/

(3) *the combination of the two closures*, then *occlusive-constrictive*, or *affricates*, are produced: /tʃ, dʒ/ /ц, ч/

(4) *intermittent closure*, then *rolled*, or *trilled* consonants, are produced:
Russian /p, p'/.

Table 2

Classification of Consonants According to the Manner of Noise Production

| | | | | | | | | | | | |
|-----------------------------------|--------------|--|--------|--------|----------------|----|---|--------|--|--------------|---|
| Occlusive consonants | p, b п, б | | т, д | | t, d | | | | | k, g к, г | |
| | п', б' | | т', д' | | | | | | | к', г' | |
| | м м | | н | | п | | | | | п | |
| | м' | | н' | | | | | | | | |
| | | | | с, з | s, z | | | | | | |
| Constrictive consonants | | | | с', з' | | | | | | | |
| | f, v ф, в | | θ, ð | | | | | | | х | h |
| | ф', в' | | | | ʃ, ʒ ш', ж' | | | | | | |
| | | | | | ш, ж | | | | | | |
| | | | | | | | г | й й | | | |
| | | | | | л | l | | | | | |
| | w | | | | | | | | | | |
| | | | | л | ɭ | | | | | | |
| Occlusive-constrictive consonants | | | ц | | | | | | | | |
| | | | | | tʃ, dʒ ч | | | | | | |
| Rolled, or trilled, consonants | | | | | | p | | | | | |
| | | | | | | p' | | | | | |

(1) According to the *principle of voice or noise prevalence*, Soviet phoneticians suggest to subdivide the group of occlusives and the group of constrictives into *noise* and *sonorants* (Table 3).

The group of occlusive-constrictive consonants consists of noise sounds /tʃ, dʒ, ɥ, ɯ/. The group of rolled or trilled is represented by two Russian sonorants /p, p'/.

Noise occlusive consonants are also called *stops*, or *plosives*. Occlusive sonorants are also called *sonorants*, or *nasals*.

There is no such subdivision in the classifications suggested by D. Jones, H.A. Gleason and A.C. Gimson. These authors do not single out the groups of sonorants, as such, but D. Jones, for example, gives separate groups of nasals /m, n, ŋ/, the lateral /l/, frictionless continuants, or glides (semi-vowels) /w, r, j/.

H.A. Gleason gives separate groups of nasals /m, n, ŋ/, the lateral /l/, semi-vowels /w, r, y/.

B. Bloch, G. Trager give separate groups of nasals /m, n, ŋ/, the lateral /l/, trills /r/.¹

B. Bloch, G. Trager and A.C. Gimson include in their classifications of consonants a number of allophones.

(2) Soviet phoneticians subdivide the rolled, occlusive, constrictive, occlusive-constrictive consonants into *unicentral* (pronounced with one focus) and *bicentral* (pronounced with two foci), according to the number of noise producing centres, or foci (Table 4). This subdivision is not included into the classifications of foreign phoneticians.

(3) According to the shape of the narrowing constrictive consonants and affricates are subdivided into sounds with *flat narrowing* and *round narrowing* (Table 5).

The consonants /f, v, θ, ð, ʃ, ʒ, tʃ, dʒ/ are pronounced with the flat narrowing; the consonants /s, z, ɹ/ are pronounced with the round narrowing. H.A. Gleason considers /ʃ, ʒ/ to be grooved fricatives.

There are different opinions on the nature of English affricates. The most extreme are the views expressed by B. Bloch and G. Trager who decline the existence of affricates as monophonemic entities and state that they are biphonemic sequences. The other extreme point of view is that expressed by D. Jones and I. Ward who state that there are six affricates in the system of English consonants (D. Jones), or even eight (I. Ward): /tʃ, dʒ, ts, dz, tr, dr, tθ, dð/.

Soviet phoneticians consider affricates as the units which are articulatorily and acoustically indivisible (this can be proved by instrumental techniques), and as the units which are morphologically unique. For instance, no morpheme boundary can pass within /tʃ, dʒ/ which is not the case that can be found in /tθ/, for example: eight—eighth /ert—ert-θ/, and /dz/, for example: bed—beds /bed—bed-z/.

¹We include here only the symbols of the sounds which are familiar to Russian students.

Table 4
Classification of Consonants According to the Manner of Noise Production
and the Type of Obstruction

| | | | | | | | | | |
|-----------------------------------|---------------------------|------------|--------------|--------|-----------------|--|---|---|--------------|
| Occlusive consonants | noise (stops or plosives) | unicentral | p, b п, б | т, д | t, d | | | | k, g к, г |
| | | bicentral | п', б | т', д' | | | | | к', г' |
| | sonorants (nasal) | unicentral | м м | н | п | | | | п |
| | | bicentral | м' | н' | | | | | |
| Constrictive consonants | noise | unicentral | | | с, з s, z | | | | |
| | | bicentral | | | с', з' | | | | |
| | | unicentral | f, v ф, в | θ, ð | | | | | x h |
| | | bicentral | ф', в' | | ʃ, ʒ ш', ж': | | | | |
| | | | | | ш, ж | | | | |
| | sonorants | unicentral | | | | | г | й | |
| | | bicentral | | л' | l | | | | |
| | | | w | | | | | | |
| | | | | л | ɫ | | | | |
| Occlusive-constrictive consonants | noise | unicentral | | ц | | | | | |
| | | bicentral | | | tʃ, dʒ ч | | | | |

Since only the sounds /tʃ, dʒ/ in the system of English consonants and /ц, ч/ in the system of Russian consonants are articulatorily and acoustically indivisible and morphologically unique (the combinations /ts, dz, tr, dr, tθ, dð/ do not comply with these requirements), they are the only occlusive-constrictive or affricated sounds.

Table of English and

| According to the active organ of speech | | | | | |
|--|-------------------------------|------------|-----------------------|-----------------------|-----------------|
| According to the place of obstruction | | | | | |
| According to the manner of the production of noise and the type of obstruction | | | | | |
| Occlusive consonants | Noise consonants (plosives) | | Unicentral | | |
| | | | Bicentral | front secondary focus | |
| | Sonorants (nasal) | | Unicentral | | |
| | | | Bicentral | front secondary focus | |
| Constrictive consonants | Noise consonants (fricatives) | | Unicentral | | round narrowing |
| | | | Bicentral | front secondary focus | |
| | | | Unicentral | | flat narrowing |
| | | | Bicentral | front secondary focus | |
| | | | | back secondary focus | |
| | Sonorants | Medial | Unicentral | | |
| | | Lateral | Bicentral | front secondary focus | |
| Constrictive consonants | Sonorants | Medial | | back secondary focus | round narrowing |
| | | Lateral | | | |
| Occlusive-constrictive (noise) consonants (affricates) | | Unicentral | | round narrowing | |
| | | Bicentral | front secondary focus | flat narrowing | |
| Rolled consonants | Sonorants | | Unicentral | | |
| | | | Bicentral | front secondary focus | |

Table 5

Russian Consonant Phonemes

| Labial | | Lingual | | | | | | | Pharyn- gal (glot- tal) |
|--------------|------------------|--|--------|----------------|---------------------|---------------|------------------------|-----------------------|----------------------------------|
| | | Forelingual | | | | | Medio- lin- gual | Back- lin- gual | |
| | | According to the position of the tip of the tongue | | | | | | | |
| Bilabial | Labio- dental | Dorsal | Apical | | | Cacuminal | | Pala- tal | Velar |
| | | Dental | Dental | Alveo- lar | Palato- alveolar | Alveo- lar | Post- alveo- lar | | |
| p, b п, б | | т, д | | т, д | | | | | к, г к, г |
| п', б' | | т', д' | | | | | | | к', г' |
| м м | | н | | п | | | | | п |
| м' | | н' | | | | | | | |
| | | | с, з | с, з | | | | | |
| | | | с', з' | | | | | | |
| | і, в ф, в | | о, ѓ | | | | | | х һ |
| | ф', в' | | | ш, ж ш', ж' | | | | | |
| | | | | ш, ж | | | | | |
| | | | | | | г | й й | | |
| | | | л' | і | | | | | |
| w | | | | | | | | | |
| | | | л | і | | | | | |
| | | ц | | | | | | | |
| | | | | тс, дз ч | | | | | |
| | | | | | | р | | | |
| | | | | | | р' | | | |

IV. According to the position of the soft palate all consonants are subdivided into *oral* and *nasal*. When the soft palate is raised and the air from the lungs gets into the pharynx and then into the mouth cavity, oral consonants are produced. E.g., /p, t, k, f, v/, etc. When the soft palate is lowered and the air on its way out passes through the nasal cavity, the nasal consonants are produced: /m, n, ŋ/.

If we compare classifications of consonants suggested by Soviet and some foreign authors, we can state that Soviet phoneticians propose more logical, accurate and detailed classifications which serve the teaching purposes much better than other classifications.

DIFFERENCES IN THE ARTICULATION BASES OF THE ENGLISH AND RUSSIAN CONSONANTS AND THEIR PECULIARITIES

The differences in the articulation bases between the two languages are "in the general tendencies their native speakers have in the way they move and hold their lips and the tongue both in speech and in silence, in the way they coordinate the work of the obstruenter and vibrator mechanisms (lenis and fortis articulation), in the way they effect CV, VC and CC transitions (close and loose transitions)."¹

The peculiarities of the articulation bases which give rise to the differences in the system of consonants in English and in Russian are the following:



Fig. 9



Fig. 10

(1) In the articulation of the English consonants the tip of the tongue is near the teethridge (*apical* position, Fig. 9), while in Russian it tends to move to the upper front teeth (*dorsal* position, Fig. 10). In



Fig. 11



Fig. 12

¹ Vassilyev V.A. English Phonetics, p. 113. Articulatory transition peculiarities of vowel and consonant phonemes are described in pt IV of this book.

the articulation of the English forelingual consonants the tip of the tongue may occupy *apical*, *cacuminal* (Fig. 11) and *retroflexed* (Fig. 12) positions.

When the tip of the tongue is against the teethridge, the forelingual, apical /t, d, n, s, z, ʃ, ʒ, l, ɫ, tʃ, dʒ/ are produced. When the tip of the tongue is curled behind the back slope of the teethridge, the forelingual, cacuminal post-alveolar /r/ is produced. When the tip of the tongue is curled still further behind the back slope of the teethridge, the American retroflexed /r/ is produced.

The tip of the tongue in the articulation of the Russian forelingual consonants occupies dorsal, or dental position. Russian /т, т', д, д', н, н', с, с', з, з', л, л', р/ are dorsal or dental.

In the articulation of the English /θ, ð/ the tip of the tongue is placed between the upper and lower teeth, this position of the tip of the tongue characterizes only the English articulation basis (see Fig. 31 on p. 80).

The tip of the tongue in the articulation of the Russian alveolar rolled consonant /p/ vibrates in the flow of air which passes out of the mouth cavity and interrupts it repeatedly making momentary obstruction against the teethridge.

Thus the number of positions of the tip of the tongue in the production of the English forelingual consonants is more varied, but the work of the tip of the tongue in the articulation of the Russian /p/ is more elaborate.

(2) The bulk of the tongue in the articulation of the English consonants has the tendency to occupy more retracted, more flat and low positions than in the articulation of the Russian consonants which provides the basis for the production of the pharyngeal /h/ and the backlingual velar /ŋ/.

In the production of /h/ the air passes through the larynx and glottis; the back wall of the pharynx contracts simultaneously with the slight movement of the root of the tongue in the direction of the pharyngeal cavity. In the articulation of the Russian /x/ the back part of the tongue is raised in the direction of the soft palate. Since the Russian articulation basis does not provide any conditions which might result in the articulation of the pharyngeal, or glottal /h/, Russian learners often use /x/ instead of the English /h/.

In the production of the English /ŋ/ (Fig. 13) the soft palate makes a complete obstruction with the back part of the tongue, and the flow of air goes out of the nasal cavity whereas the Russian articulation basis does not provide the conditions for similar articulation. The Russian learners often substitute the Russian forelingual /h/ for the English backlingual /ŋ/.

More flat and low position of the bulk of the tongue limits the system of the English "soft" consonants and provides the basis for "dark" articulation. The English "soft" consonants are pronounced with the front secondary focus. They are /ʃ, ʒ, dʒ, tʃ/ and the "soft" [ɪ]



Fig. 13

(Fig. 14). Front secondary focus is formed by the middle part of the tongue which produces "secondary" articulation simultaneously with the primary focus, or primary articulation.

The Russian /п', б', м', н', ф', в', т', д', с', з', л', ч, р', к', г'/ are also pronounced with the front secondary focus, but the middle of the tongue in their production is raised higher to the hard palate, than during the secondary articulation in the production of the English soft consonants.

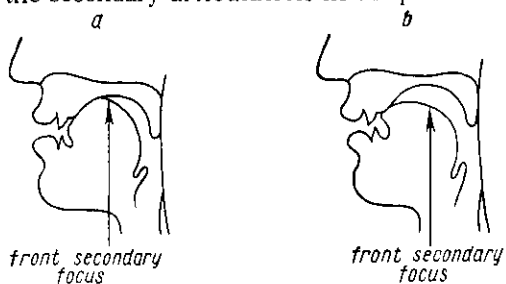


Fig. 14

Compare a) Russian "soft" dorsal "ль", b) English soft apical "l" (Fig. 14).

Russian students often use the hard /ш, ж/ phonemes instead of the soft English /ʃ, ʒ/ (Fig. 15).

The English phoneme /w/ and [ɹ] are pronounced with the back secondary focus, formed by the back part of the tongue, which is raised to the

soft palate simultaneously with the formation of the primary focus (Fig. 16). In the articulation of /w/ (Fig. 37, p. 89) the primary focus is formed by the lips, which are rounded but not protruded, as it happens when the Russian /o, y/ are pronounced. The bilabial /w/ which is pronounced with the round narrowing, is very often mispronounced by the Russian learners. They use the labio-dental /β/ or /v/ which are pronounced with the flat narrowing instead of the English /w/

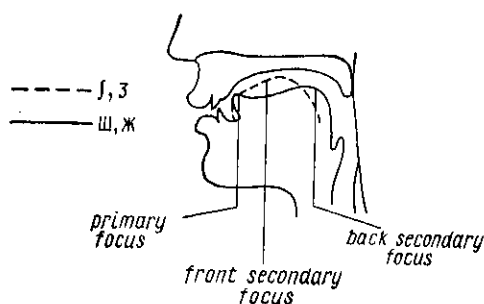


Fig. 15

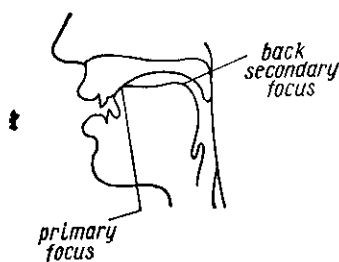


Fig. 16

The primary focus in the articulation of "dark" [ɹ] is formed by the tip of the tongue pressed against the teethridge (b). Russian hard /л/ and English dark [ɹ] are both pronounced with the back secondary focus (shown by arrows on Fig. 17).

The most common mistakes that may result from the differences in the articulation bases of the English and Russian languages are the following:

- dorsal articulation of the English forelingual apical /t, d/,
- the use of the Russian rolled /p/ instead of the English post-alveolar constrictive /r/,

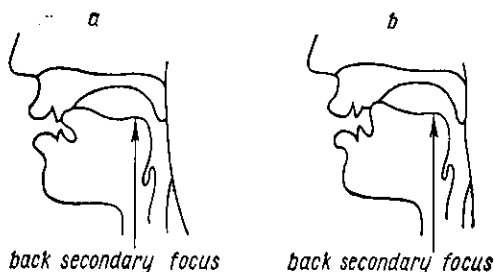


Fig. 17

— mispronunciation of the English interdental /θ, ð/: the use of /s, f/ for /θ/ and /d, z/ for /ð/,

— the use of the forelingual /n/ instead of the backlingual velar /ŋ/,

— the use of the Russian dark /w, ж/ instead of the soft English /ʃ, ʒ/,

— the use of the labio-dental /v, в/ instead of the bilabial /w/.

Questions

1. What are the components of the phonetic system of the English language?
2. What are the mechanisms of the production of speech sounds?
3. What are the four main principles of consonant classification?
4. What are the differences in the second principle of consonant classification according to Soviet and foreign linguists?
5. How are the consonants subdivided according to the third principle?
6. What are the subgroups of the noise consonants and sonorants within the groups of the occlusive and constrictive consonants and what is the controversy about them?
7. How are the consonants subdivided according to the noise producing foci and the shape of the narrowing?
8. What do you know about the groups of the affricates and rolled consonants?
9. What are the principal differences in the articulation bases of the English and Russian consonants according to:
 - (a) the position of the lips,
 - (b) the position of the tongue,
 - (c) the position of the soft palate?
10. What mistakes result from the differences in the articulation bases of the English and Russian consonants?

Exercises

1. Draw the diagrams of the four speech producing mechanisms.
2. Explain the work of the four mechanisms in the production of speech sounds.
- *3. Explain the articulation of /p, t, k/ and /b, d, g/ from the viewpoint of the work of the vocal cords and the force of exhalation.
- *4. Explain the articulation of /m, n, ŋ/ from the point of view of the position of the soft palate.
- *5. State the difference in the articulation of /b, v, tʃ/ and the Russian /p/ from the point of view of the manner of noise production.
- *6. Explain the articulation of /w, j, h/ from the viewpoint of the work of the active organ of speech.

7. Draw the figures of the position of the tip of the tongue in the articulation of the Russian /r/, the English /t, r/ and the Russian /p/.

*8. Explain the articulation of /s/ and /t/ from the viewpoint of noise producing focl.

9. Draw the figures to show the position of the tongue in the production of front secondary and back secondary focl.

*10. Transcribe these words and read them. Observe the aspiration of the initial /p, t, k/.

| | | |
|----------|----------|----------|
| people | take | courts |
| paper | time | cold |
| purpose | town | careful |
| possible | ties | car |
| put | tennis | cook |
| pence | took | covered |
| pity | taxis | cost |
| poor | till | kissed |
| pieces | teachers | campus |
| port | turned | curtly |
| penny | total | cottage |
| | toss | currents |
| | tin | colour |
| | tons | |

11. Read these words. Observe the apical and cacuminal positions of the tip of the tongue in pronouncing English /t, r/ and the dorsal in pronouncing Russian /r/.

| | | |
|----------------|----------|--------------|
| так | — take | — rates |
| тент | — tent | — read /red/ |
| тайм | — time | — rhyme |
| ток | — talk | — rock |
| тел | — tell | — Wren |
| Том | — town | — round |
| Тим | — Tim | — rim |
| тон | — ton | — run |
| тай (от таять) | — ties | — rise |
| туу... | — two | — room |
| тир | — tear | — rear |
| Тэдди | — Teddy | — ready |
| Антей | — take | — rake |
| Тима | — team | — reel |
| течь | — teach | — reach |
| тик | — ticket | — ricket |
| тост | — toast | — roast |

12. Read these Russian and English words. Avoid palatalization of English initial consonants before the front vowels /i:, i, e, ei/.

| | | | |
|------------|------------|----------------|-------------|
| пей — pay | бил — bill | Вил — veal | сед — said |
| Пит — pit | сил — sill | Фили — feeling | лес — less |
| кит — kit | зил — zeal | бел — bell | бер — beg |
| гей — gay | сел — sell | тип — tip | нет — net |
| тик — tik | мил — meal | бед — bed | Вена — when |
| тел — tell | мел — mell | лет — let | пек — reck |
| дел — dell | Нил — nill | | |

Control Tasks

1. Draw the following table: classification of English and Russian consonants according to the active organ of speech and the place of obstruction.
2. Draw the following table: classification of English and Russian consonants according to the voice or noise prevalence.
3. Draw the following table: classification of English and Russian consonants according to the manner of the production of noise and the type of obstruction.

ARTICULATORY AND PHYSIOLOGICAL CLASSIFICATION OF ENGLISH VOWELS

The first who tried to describe and classify vowel sounds irrespective of the mother tongue was D. Jones. He devised the system of 8 Cardinal Vowels. This system is an international standard. The basis of the system is physiological. The starting point of the tongue position is for *i* (the front of the tongue raised as close as possible to the palate).

No. 1 *i* is equivalent to the French sound of *i* in *si*, German sound of *ie* in *Biene*.

The gradual lowering of the tongue to the back lowest position gives another point which is easily felt (No. 5 *a*).

The tongue position between these points was X-rayed and equi-distant points were found. For the front position of the tongue they are No. 1 *i* mentioned above,

No. 2 *e*. French sound of *e* in *thé*;

Scottish pronunciation of *ay* in *day*.

No. 3 *ɛ*. French sound of *ê* in *même*.

No. 4 *a*. French sound of *a* in *la* (Fig. 18).

If we compare these four Cardinal Vowels with the Russian vowel system, we may state that:

No. 1 cardinal *i* is pronounced with the position of the tongue higher than for the Russian accented *и* in the word *нулу*.

No. 2 cardinal *e* is pronounced with the position of the tongue narrower than the Russian *е* in the word *мечем*.

No. 3 is similar to the Russian *э* in the word *эма*.

For the back position of the tongue four **и** auditory equi-distant points were also established (from the lowest to the highest position of the back part of the tongue). They are:

No. 5 *ɑ*. Nearly what is obtained by taking away the lip-rounding from English sound of *o* in *hot*; French vowel *a* in *pas*.

No. 6 *ɔ*. German sound of *o* in *Sonne*.

No. 7 *o*. French sound of *o* in *rose*, Scottish *o* in *rose*.

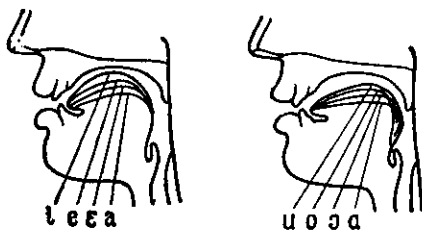


Fig. 18

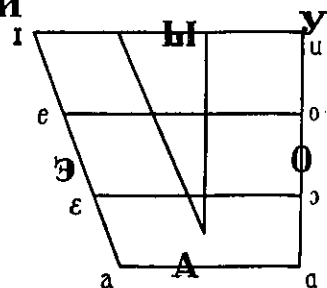


Fig. 19

No. 8 u. German sound of u in *gut*.

There are no sounds similar to Nos 4, 5, 6, 7, 8 in Russian.

The tongue position of the eight cardinal vowels can be represented diagrammatically. (Fig. 19) A more accurate form of the diagram is that with the curved sides. But this shape is inconvenient for use in practical teaching. Practice requires definiteness, which can only be attained by means of a figure bounded by straight lines. Here is the table suggested for practical studies:

Table 6

English and Russian Vowel Phonemes

| Height of the tongue | Position of the bulk of the tongue | Front | Front-retracted | Central, mixed | Back advanced | Back |
|-------------------------|------------------------------------|------------|-----------------|----------------|---------------|-------------|
| Close (high) | narrow variation | и i : | | ы | | у : y |
| | broad variation | | ɪ | | ʊ | |
| Mid-open (half-open) | narrow variation | е | | э : | о (ʊ) | о |
| | broad variation | ə ε(ə) | | ə | | |
| Low (open) | narrow variation | | | | ʌ | ɔ : ɔ(ɪ) |
| | broad variation | æ а (ɪ) | а (u) | ʌ | ɑ : | ɔ |

"The Cardinal Vowel scale is a fine and independent system needed on the auditory and articulatory levels."¹

In spite of the theoretical significance of the Cardinal Vowel System its practical application is limited to the field where no comparison is needed, in purely scientific work. In language teaching this system can be learned only by oral instruction from a teacher who knows how to pronounce the Cardinal Vowels. "Those who have access neither to a qualified teacher, nor to a gramophone cannot expect to learn the values of these or any other cardinal vowels with accuracy."²

Acoustically vowels are musical tones (not noises): the word "vowel" is a derivative of "voice". But vowels are not necessarily connected with voice. Prof. Zinder L.R. states that if the organs of speech are

¹ Gimson A. C. An Introduction to the Pronunciation of English. Ld., 1964, p. 36.

² Vassilyev V. A. Op. cit., p. 92; Зиндер Л. Р. Общая фонетика. Л., 1960, с. 175.

adjusted for the articulation of some vowel, it can be pronounced without voice, breathing the air out of the mouth cavity, then a voiceless vowel is produced. Such voiceless vowels exist in all languages as a "shwa" in a terminal position after voiceless (especially occlusive) consonants. E.g. in the Russian language /ʃ/ is heard in the words: *суд, кот, губы, кут, хлеб*, etc. When people pronounce vowels in whisper, they also articulate "voiceless vowels".

Acoustically vowels differ due to their timbral colouring, each vowel is characterized by its own formants (that is concentrations of energy in certain frequency regions on the spectrogram).

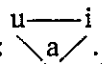
Soviet phoneticians suggest to classify vowels according to the following principles:

- I. Position of the lips.
- II. Position of the tongue.
- III. Degree of tenseness and the character of the end of a vowel.
- IV. Length.
- V. Stability of articulation.

I. According to the position of the lips vowels are classified into: (a) *rounded*, (b) *unrounded*. The Russian rounded vowels are pronounced with more lip protrusion than the English rounded vowels. The English rounded vowels are: /u — u:, ɔ — ɔ:/, the Russian rounded and protruded vowels are: /o, y/.

II. According to the position of the tongue it is the bulk of the tongue which conditions most of all the production of different vowels. It can move forward and backward, it may be raised and lowered in the mouth cavity.

A. M. Bell¹ was one of the first scientists who classified the vowels on the basis of fixed position produced by the horizontal and vertical movements of the tongue. He divided the vowels into front, central, back; high, mid and low.

Another, more ancient classification, suggested by Ch. F. Hellwag,² has at the basis vowels /i, a, u/ which compose a triangle: . It serves as the frame for placing all the other vowels of the analysed system. Hellwag does not insist on the definiteness of the three points under consideration. And indeed, according to the movements of the tongue vowels cannot be classified with accuracy.

Thus L.V. Shcherba³ is right when he leaves empty spaces in a triangle for vowels that may be articulated in speech. L.V. Shcherba did not separate vowels according to the vertical and horizontal movements of the tongue with definite lines, considering such subdivision to be conventional (Fig. 20).

Soviet scientists divide vowels according to the (a) *horizontal* and (b) *vertical* movements of the tongue.

¹ Bell A. M. Sounds and their relations. Wash., 1894.

² Hellwag Ch. F. Dissertatio inauguralis physiologicomedica de formatione loquelaе. Tubingae, 1881.

³ Щерба Л. В. Фонетика французского языка. М., 1957.

(a) When the bulk of the tongue moves backwards, it is usually the back part of the tongue which is raised highest towards the soft palate. Vowels produced with the tongue in this position are called *back*. They are subdivided into:

| Front | Mixed | Back |
|-------|------------|------|
| Y I | ɨ | ɯ u |
| ʏ ɪ | | ɤ ʊ |
| ø e | ɜ | ʏ ɔ |
| œ ɛ | ɜ | ʌ ɔ |
| æ | | |
| | ɑ ɒ | |
| | {ə ɐ | |
| | Indefinite | |

Fig. 20

fully back: /ɔ, ɔ:, u:/, the nuclei of the diphthongs /ɔɪ, əə/, and the Russian /o, y/;

back-advanced: /ʌ, u, ɑ:/ and the nuclei of the diphthongs /ou, uə/.

When the bulk of the tongue moves forward, it is usually the front part of the tongue which is raised highest towards the hard palate. Vowels produced with this position of the tongue are called *front*. They are subdivided into:

fully front: /i:, e, æ/, the nuclei of the diphthongs /ei, əə, ai/ and the Russian /и, э/;

front-retracted: /ɪ/ and the nucleus of the diphthong /au/.

The term *front* is not quite correct, because the front vowels are produced by the action of the mouth resonator, which is in the back part of the mouth cavity and the raised front of the tongue.

There is some controversy in the subdivision (and terming) of vowels into front and front-retracted, back and back-advanced.

Russian phoneticians consider /i:, ɪ/ different phonemes, sounds different not only in quantity but mainly in quality. D. Jones¹ considers /i:, ɪ/ to be variants of one and the same phoneme. Similar controversy exists in the interpretation of the back vowels /u:, ʊ/.

G.P. Torsuyev² defines /ɑ:/ as fully-back. A.L. Trakhterov, V.A. Vassilyev, D. Jones term this vowel back-advanced.

D. Jones says: "In the /ɑ:/ production the part of the tongue which is raised highest, is a point in advance of the centre of the back."

V.A. Vassilyev defines the nucleus of the diphthong /ou/ as back-advanced but notes that there is a tendency to pronounce /ou/ as fully-back.

A.C. Gimson considers the nucleus of /ou/ to be a variety of the neutral vowel /ə/.

There is also some controversy in the /ʌ/ classification. G. P. Torsuyev places it among back-advanced mid vowels of broad variety. D. Jones' point for /ʌ/ is on the line between half-open and open (Fig. 21).

Terminological controversy about vowels is only of academic interest because in speech the "cardinal" points mentioned in the diagrams of vowels are slightly altered. The guiding principle in teaching English

¹ Jones D. An Outline of English Phonetics. 9th ed. Cambridge, 1960.

² Торсуев Г. П. Фонетика английского языка. М., 1950, с. 93.

vowel sounds should be accurate articulatory description accompanied by diagrams and drills.

In the production of mixed, or central, vowels the tongue is raised towards the junction between the hard and the soft palate, e.g., the Russian vowels /a/ and /ы/. They are produced neither in the front, nor in the back part of the mouth cavity.

British phoneticians consider /ə, ɜ:/ "central". D. Jones says that the central part of the tongue is raised highest and it is culminating at the junction between "front" and "back". He regards /ə, ɜ:/ as variants of one phoneme.

Russian phoneticians define the vowels /ə, ɜ:/ as "mixed", because the tongue position in their production is different from that of the Russian central /a, ы/. Torsuyev writes: «При произнесении /ə:/ тело языка приподнято, причем вся спинка языка лежит максимально плоско.»¹

H. Sweet also defines /ə, ɜ:/ as "mixed". /ы/ is considered by Torsuyev as central. A. L. Trakhterov places it among back-advanced vowels. In L.V. Shcherba's classification the vowels of the /ы/-type and the English /ə, ɜ:/ are classified as mixed.

(b) According to the vertical movements of the tongue vowels are subdivided into:

high: /i:, ɪ, u, u:/ and /и, у, ы/;

mid, half open /e, ɛ:, o (u), ɛ(ə), ə/ and /ə, o/;

low, open: /ʌ, ɔ:, æ, a (ɪ, u), ɑ:, ɒ, ɔ(ɪ)/ and /a/.

Each of the subclasses is subdivided into vowels of *narrow* variation and vowels of *broad* variation:

high { narrow variation: /i:, u:/ and /и, ы, у/;
broad variation: /ɪ, u/;

mid { narrow variation: /e, ɛ:, o (u)/;
broad variation: /ɛ (ə), ə/;

low { narrow variation: /ʌ, ɔ:/;
broad variation: /ɑ:, ɒ, æ, a (ɪ, u)/ and /a/.

The Russian /ə, o/ are placed on the border of the mid-open vowels of broad and narrow variation.

III. According to the degree of tenseness traditionally long vowels are defined as *tense* and short as *lax*. The term "tense" was introduced by H. Sweet, who stated that the tongue is tense when vowels of narrow variety are articulated. This statement is a confusion of two problems:

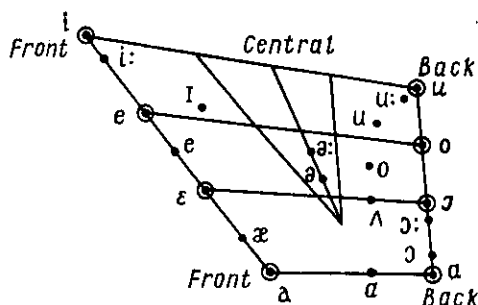


Fig. 21

¹ Торсуев Г. П. Фонетика английского языка. М., 1950, с. 101.

acoustic and articulatory because "tenseness" is an acoustic notion and should be treated in terms of acoustic data. However, this phenomenon is connected with the articulation of vowels in unaccented syllables (unstressed vocalism). The decrease of tenseness results in the reduction of vowels, that is in an unstressed position they may lose their qualitative characteristics.

When the muscles of the lips, tongue, cheeks and the back walls of the pharynx are tense, the vowels produced can be characterized as "tense". When these organs are relatively relaxed, lax vowels are produced. There are different opinions in referring English vowels to the first or to the second group. D. Jones¹ considers only the long /i:/ and /u:/ to be *tense*. G.P. Torsuyev² defines all long English vowels as *tense* as well as /æ/, all short vowels are considered by him as *lax*.

This problem can be solved accurately only with the help of electromyography. The Russian vowels are not differentiated according to their tenseness but one and the same vowel is tense in a stressed syllable compared with its tenseness in an unstressed one.

Some phoneticians suggest to subdivide vowels according to the character of the end into "checked" and "free". This principle of vowel classifications is not singled out by British and American phoneticians.

When the intensity of the vowel does not diminish towards its end, such vowel is called "checked"³. When the intensity of the vowel decreases, the vowel is called "free". This problem is closely connected with articulatory transitions in syllable division and should be treated in terms of acoustic properties of vowels on the syllable level.

IV. According to the length vowels are subdivided into: (historically) *long* and (historically) *short*.⁴

Vowel length depends on a number of linguistic factors:

- (1) position of the vowel in a word,
- (2) word accent,
- (3) the number of syllables in a word,
- (4) the character of the syllabic structure,
- (5) sonority.

(1) Positional dependence of length can be illustrated by the following example:

be — bead — bit
we — weed — wit

In the terminal position a vowel is the longest, it shortens before a voiced consonant, it is the shortest before a voiceless consonant.

¹ Jones D. Op cit., p. 40.

² Цит. соч., с. 84—102.

³ English Phonetics. A Normative Course. Vassilyev V. A., Burenkova O. V., Katanskaya A. R. et al. M., 1962, p. 97.

⁴ Length is marked with a raised /ː/, shortness with /ʊ/.

(2) A vowel is longer in an accented syllable, than in an unaccented one:

forecast *n* /'fɔ:kə:st/ — прогноз
to forecast *v* /fɔ:'kə:st/ — предсказывать погоду

In the second example /ɔ:/ is shorter, than in the first, though it may be pronounced with /ɔ:/ equally long.

(3) If we compare a one-syllable word and the word consisting of more than one syllable, we may observe that similar vowels are shorter in a polysyllabic word. Thus in the word *verse* /ə:/ is longer than in *university*.

(4) In words with V, CV, CCV¹ type of syllable the vowel length is greater than in words with VC, CVC, CCVC type of syllable. For example, /ə:/ is longer in *err* (V type), than in *earn* (CVC type). /ju:/ is longer in *dew* (CV type), than in *duly* (CVCV type).

(5) Vowels of low sonority are longer, than vowels of greater sonority. It is so, because the speaker unconsciously makes more effort to produce greater auditory effect while pronouncing vowels of lower sonority, thus making them longer. For example, /ɪ/ is longer than /ɔ:/; /i:/ is longer than /ɑ:/, etc.

Besides, vowel length depends on the tempo of speech: the higher the rate of speech the shorter the vowels.

D. Jones² treats quantity independently of the vowel sounds themselves. Thus he treats /i:/, /ɪ/ as positional allophones of one phoneme.

Length is a non-phonemic feature in English but it may serve to differentiate the meaning of a word. This can be proved by minimal pairs, e.g.

beat — bit /bi:t — bɪt/ бить, кусочек
deed — did /di:d — dɪd/ дело (деяние), сделал, делал

The English long vowels are /i:/, u:/, ɔ:/, ɑ:/, ə:/.

G. P. Torsuyev considers /æ/ to be a long vowel, but he admits that in certain positions /æ/ can be a short phoneme. English phoneticians state that it is a short one, though in some words it may be long.³

The English short vowels are /ɪ, e, æ, ɒ, u, ʌ, ə/.

V. The stability of articulation is the principle of vowel classification which is not singled out by British and American phoneticians. In fact, it is the principle of the stability of the shape, volume and the size of the mouth resonator.

We can speak only of relative stability of the organs of speech, because pronunciation of a sound is a process, and its stability should be treated conventionally.

¹ V is the initial letter of the word *vowel*;
C is the initial letter of the word *consonant*;
V, CV, CCV open types of syllables;
VC, CVC, CCVC closed types of syllables.

² Jones D. Op. cit., p. 70.

³ Ward I. The Phonetics of English. Cambridge. 1948, p. 75.

According to this principle vowels are subdivided into:

- (a) monophthongs, or simple vowels,
- (b) diphthongoids,
- (c) diphthongs, or complex vowels.

(a) English *monophthongs* are pronounced with the more or less stable lip, tongue and the mouth walls position. They are: /i, e, æ, a:, ɔ, ɔ:, u, ʌ, ə:, ə/.

(b) A *diphthongoid* is a vowel, which ends in a different element. «Гласный имеет в начале (или в конце) незначительный элемент другого, близкого ему по артикуляции гласного, наличие которого придает звучанию гласного несколько неоднородный характер, не производящий, однако, впечатление дифтонга.»¹

There are two diphthongoids in English /i:/, u:/. In allophonic transcription they can be represented as [iɪ], [uʊ]. Russian vowels are diphthongoids of the widening type, e.g. [ə=ʲə, o=ʲo].

In speech the Russian /a/ between soft consonants begins and ends with /u/, e.g., in *сядь* /c'äɪ/, where ä="a".

(c) *Diphthongs* are defined differently by different authors. One definition is based on the ability of a vowel to form a syllable. Since in the diphthong only one element serves as a syllabic nucleus, a diphthong is a single sound.

Another definition of a diphthong as a single sound is based on the instability of the second element. The third group of scientists define a diphthong from the accentual point of view: since only one element is accented and the other is unaccented, a diphthong is a single sound.

D. Jones defines diphthongs as an unisyllabic gliding sound in the articulation of which the organs of speech start from one position and then glide to the other position.

N.S. Trubetsky states that a diphthong should be (a) unisyllabic, that is the parts of a diphthong cannot belong to two syllables, (b) monophonemic with gliding articulation, (c) its length should not exceed the length of a single phoneme.

L.R. Zinder adds that phonemically diphthongs are sounds that cannot be divided morphologically. E.g. the Russian /aɪ, eɪ, oɪ/ in *чай, но́й, сто́й* can be separated: ча-ю, но-ю, сто-ю.

L.L. Bulanin calls combinations like Russian /aɪ, eɪ, oɪ/ — phonetic diphthongs and English inseparable units like /aɪ, er, .../ — phonemic diphthongs.²

The first element of a diphthong is the *nucleus*, the second is the *glide*. A diphthong can be *falling* — when the nucleus is stronger than the glide, and *rising* — when the glide is stronger than the nucleus. When both elements are equal such diphthongs are called *level*.

English diphthongs are falling with the glide toward:

¹ Матусевич М.И. Введение в общую фонетику. Л., 1948, с. 61.

² Буланин Л.Л. Фонетика современного русского языка. М., 1970, с. 85.

ɪ — /eɪ, aɪ, ɔɪ/,

u — /aʊ, ou/,

ə — /ɪə, eə, ɔə, uə/.¹

Diphthongs /eɪ, ou, ɔɪ, aʊ, aɪ/ are called *closing*, diphthongs /eə, ɪə, ɔə, uə/ are called *centring*, according to the articulatory character of the second element.

If we compare classifications of vowels suggested by Soviet and foreign authors, we may state that the classification of vowels suggested by Soviet authors is more exact from the articulatory point of view and more simple for teaching purposes. It reflects more exactly distinctively relevant differences between the English vowel phonemes.

DIFFERENCES IN THE ARTICULATION BASES OF ENGLISH AND RUSSIAN VOWELS

Articulation bases of English and Russian vowels are different.

(1) *The lips*. In the production of Russian vowels the lips are considerably protruded and rounded /o, y/. In the articulation of the similar English /ɔ, ɔ:/, /u, u:/ such protrusion does not take place. In the neutral position, that is, when a person does not speak, the lips of the Russian people are more lax and their corners lowered. Englishmen have the so called "flat-type" position of the lips, their lips are more tense, than the lips of the Russians, and the corners of the lips are raised, which resembles a smile.

(2) *The bulk of the tongue* in the production of the Russian vowels occupies mostly the front part of the mouth cavity, in the articulation of the English vowel sounds the bulk of the tongue is more often in the back part of the mouth cavity. Besides, in the articulation of the English vowels the bulk of the tongue occupies more positions than in the Russian vowel production. E.g., when the bulk of the tongue moves in the horizontal direction, in English there is a front-retracted and back-advanced position of the bulk of the tongue for the /ɪ/ and /u/ production. Horizontal movements of the tongue condition the articulation of the /ə, ə:/ vowels, which are of mixed type. There are no vowels of such articulatory position in the Russian vowel system.

Each of the three vertical positions of the tongue (high, mid, low) in English is subdivided into narrow and broad variety. Thus, six groups of English vowel sounds are formed in the system of English vowels.

Such broad variety of the bulk of the tongue positions is not observed in the production of the Russian vowel sounds. These articulatory peculiarities in the pronunciation of English vowels constitute the basis for the formation of diphthongs when the position of the tongue changes within the articulation of one and the same vowel. It also helps to articulate a great number of vowel sounds of different height.

(3) The principle of *the degree of tenseness and the character of the end* in vowel classification is inseparably connected with the next principle.

¹ D. Jones treats the diphthongs /ɪə, uə/ in some positions as rising, e.g. /hæpɪə/, /'sɪərɪə/.

(4) *The length of the vowels.* Long vowels in English are considered to be tense. There are no long vowels which can be opposed phonemically to short vowels in the Russian language. Length in the Russian vowel system is an irrelevant feature.

(5) *The stability of articulation.* There are monophthongs and diphthongoids in the Russian vowel system, but there are no diphthongs, which exist in the English vowel system and are characterized by phonetic instability and phonemic unity.

PECULIARITIES OF ENGLISH VOWELS

In the system of the English vowels there are the following peculiarities, which do not exist in the system of the Russian vowels:

- (1) long and short vowels /i: — i/, /ɔ: — ɒ/, /u: — u/, /ə: — ə/, /ɑ: — ʌ/;
- (2) slightly rounded, but not protruded vowels /u:, ɔ:/;
- (3) vowels articulated with the "flat" position of the lips in the /i:, ɪ, e, eɪ/ production;
- (4) very low vowels, such as /æ, ɒ/;
- (5) front-retracted and back-advanced /ɪ, u, ɑ:/;
- (6) mixed /ə, ɜ:/;
- (7) diphthongoidal pronunciation of /i:, u:/ and stable articulation in the /ɔ:/ pronunciation;
- (8) diphthongs /eɪ, aɪ, ɔɪ, ɪə, ɛə, ɔə, uə, au, ou/.

In connection with these peculiarities Russian students make the following mistakes:

- (1) they do not observe the quantitative character of the vowel (that is the length);
- (2) they do not observe the qualitative difference in the articulation of such vowels as /i: — i/, /u: — u/, /ɔ: — ɒ/;
- (3) they substitute English vowels by similar Russian vowels;
- (4) they pronounce /i:, ɪ, e, eɪ/ without the "flat position" of the lips;
- (5) they raise the middle part of the tongue to adapt the vowel to the preceding consonant and soften consonants which precede front vowels as a result of which the latter become more narrow /i:, ɪ, e, æ, eɪ/ (this phenomenon is known as adaptation) and the former are palatalized;
- (6) they articulate /ɔ, ɔ:, u, u:, ou/ with the lips too much rounded and protruded;
- (7) they make the sounds /æ, ɒ/ narrow because they don't open the mouth properly;
- (8) they do not observe the positional length of vowels;
- (9) they make both elements of the diphthongs equally distinct;
- (10) they pronounce initial vowels with a glottal stop /ʔ/.

Questions

1. What do you know about the system of Cardinal Vowels devised by D. Jones?
2. What is the acoustic nature of vowels?

3. What do you know about the classifications of vowels suggested by A.M. Bell and Ch.F. Hellwag? What is the difference between the latter and Shcherba's principles of vowel classification?

4. What are the principles of vowel classification taught by Soviet phoneticians in the articulatory characteristics of vowels?

5. How are vowels classified according to the movements of the bulk of the tongue?

6. What is the controversy in the classification of vowels according to vertical-horizontal movements of the tongue?

7. What do you know about the principle of lip participation and the degree of tenseness in the articulation of vowels?

8. How are vowels classified according to their tenseness and length? What does the length of vowels depend on?

9. What do you know about stability of articulation in vowel production?

10. What are the differences in the articulation bases of English and Russian vowel sounds?

11. What mistakes do Russian students make because of the articulation differences in the pronunciation of English and Russian vowel sounds?

Exercises

1. Show by dots the position of cardinal vowels on the trapezium. Supply each dot with the appropriate cardinal vowel and its number.

2. Characterize each of the cardinal vowel according to D. Jones.

3. Draw the diagram of cardinal vowels.

*4. Describe the cardinal vowels that can be compared with the corresponding Russian vowels.

*5. Give examples to prove that voiceless vowels exist in the English and in the Russian languages.

6. Explain the articulation of the /i:/, e, æ/ sounds from the viewpoint of the horizontal and vertical movements of the tongue.

7. Explain the articulation of the /ə, ɜ:/ sounds from the viewpoint of the horizontal and vertical movements of the tongue. Compare these sounds with the Russian vowel sounds /ы, а/.

8. Explain the articulation of the /u:, ɔ:, ɑ:/ sounds from the viewpoint of the horizontal and vertical movements of the tongue

9. Explain the articulatory differences between the /i: — ɪ/, /u: — ʊ/, /ɔ: — ɒ/ sounds.

10. Give articulatory and morphological proofs of diphthong indivisibility. Prove by examples that the Russian sound combinations оӱ, аӱ, ӱ are not diphthongs.

*11. Draw sagittal figures and use solid and dotted lines to show the instability of articulation of the /i:, u:/ diphthongoids.

*12. Transcribe these words and read them. Observe the difference between the fully front /i:/ and the front-retracted /ɪ/.

(a) seem — since
meal — mill
mean — mince
sleep — slip
least — list

(b) read — rid
steal — still
creek — crick
sleet — slit
seek — sick

(c) team — Tim
 feel — fill
 been — bin
 chief — chill
 cheap — chip

(e) deed — did
 Jean — Jim
 feeling — filling
 eat — it
 seats — sits

(g) leave — live
 fever — fifty
 beacon — bill
 cheek — chin
 beat — bit

(d) seen — sin
 dealer — dinner
 beat — bit
 heat — hit

(f) fees — fizz
 me — missed
 these — this
 steep — stick

(h) he — him
 theme — thing
 seats — sits
 steep — stiff
 people — pit

***13. Transcribe these words and read them. Observe the difference between the mid-open /e/ and the fully open (low) /æ/.**

(a) bed — bad
 then — than
 plenty — plan
 else — Alice
 letter — ladder

(c) French — ran
 pence — pants
 burial — barrow
 twenty — twang
 many — matter

(e) dead — Dad
 any — Alice
 Shelly — shall
 merry — married
 Henry — happy

(g) Hetty — hat
 central — sandy
 cheviot — channel
 many — map
 vessel — value

(i) elderly — anxious

(b) head — had
 ten — tan
 left — lad
 let — slack
 select — relax

(d) end — and
 then — than
 anyway — family
 bed — back
 helping — happy

(f) ten — tan
 men — man
 said — sad
 bed — bad
 chest — chap

(h) any — anxious
 bet — back
 plenty — platform
 flesh — flash

***14. Transcribe these words and read them. Observe the difference between the back-advanced low long vowel of broad variation /ɑ:/ and the back-advanced low short vowel of narrow variation /ʌ/.**

(a) calm — come
 rather — running
 barn — button
 lark — luck
 classes — busses

(b) aunt — under
 hard — hundred
 dark — dull
 basket — above
 lark — flush

(c) marvel — money
laugh — lovely
fast — puzzling
market — mug
last — London

(e) Arnold — others
master — monkeys
started — study
enlarge — instructor
last — must

(g) France — front
harbours — hundred
advantage — above
half — hut
past — but

(i) star — stun
can't — come
hard — hut
target — two-pence
mask — must

(d) darn — done
Bart — but
cart — cut
March — much

(f) hardly — honey
rather — rubbed
last — luck

(h) arm — other
hardly — hundreds
started — studied
March — much
half — struck

***15. Transcribe these words and read them. Observe the difference between the high /i:/, /ɪ/, the mid /e/ and the low /æ/.**

| | |
|------------------|----------------------|
| bid — bed — bad | team — ten — tan |
| rid — read — rat | hid — head — had |
| mill — men — man | lift — left — lad |
| Sid — said — sad | lit — let — lack |
| pit — pet — pat | mean — many — matter |
| beat — bet — bat | |

***16. Transcribe these words and read them. Observe the difference between the back /ɔ:/, the mixed /ə:/ and the front /æ/.**

| | |
|---------------------|--------------------------|
| all — earl — shall | torn — turn — tan |
| caught — curt — cat | call — curl — cat |
| walk — work — whack | board — bird — bad |
| for — fur — fat | chalk — church — channel |
| warm — worm — twang | saw — sir — sad |
| more — mercy — man | caution — curtain — cat |
| lawn — learn — lad | |

Control Tasks

1. Make a copy of Table 7 and fill it in with the suitable vowels.
2. Make a copy of Table 8 and fill it in with the necessary classificatory terminology.
3. Draw a diagram of English and Russian vowel sounds and mark by dots the eight cardinal vowels.

Table 7

| | | Front | Front-retracted | Mixed, central | Back-advanced | Back |
|----------------|------------------|-------|-----------------|----------------|---------------|------|
| Close (high) | Narrow variation | | | | | |
| | Broad variation | | | | | |
| Mid-open (mid) | Narrow variation | | | | | |
| | Broad variation | | | | | |
| Open (low) | Narrow variation | | | | | |
| | Broad variation | | | | | |

Table 8

| | | | | | | |
|--|--|-----------|------|----|-------|-------------|
| | | | | | | |
| | | и i: | | ы | | у u: |
| | | | і | | у | |
| | | е | | ə: | о (u) | о |
| | | э | | ə | | о |
| | | ε | | ə | | |
| | | | | | Λ | ɔ: ɔ (ɪ) |
| | | a(ɪ) æ | a(u) | a | ɑ: | ɔ |

III. FUNCTIONAL ASPECT OF SPEECH SOUNDS

Phonetics studies sounds as articulatory and acoustic units. Phonology investigates them as units which serve people for communicative purposes. Both phonetics and phonology are closely connected.

The founder of the phoneme theory was the Russian scientist I. A. Baudouin de Courtenay (1845—1929). He did a lot in the study of phonemic alternations and was the first linguist who demanded accurate distinction between synchronic and diachronic approach to phonemic investigation.

I. A. Baudouin de Courtenay's views were later developed and perfected by his disciple L. V. Shcherba, who separated phonetics from phonology and stated that sounds are not only articulatory and acoustic units but that they also possess functional properties. L. V. Shcherba stated that in actual speech we utter a much greater variety of sounds than we are aware of; in every language these sounds are united in a comparatively small number of sound types, which are capable of distinguishing the meaning and the form of words; that is they serve the purpose of social intercourse. It is these sound types that we have in mind when discussing speech sounds. Such sound types are called *phonemes*. The various speech sounds that we actually utter and which are the individual representing the universal, are called *phonemic variants*, or *allophones*. It means, that in speech we pronounce, for instance, not only /t/ which is a forelingual apical plosive (occlusive) voiceless fortis sound, but a much greater variety of this "sound type", or of the /t/ phoneme, that is: in the word *twice* /t/ is rounded because as soon as the tip of the tongue touches the teethridge, the lips move forward to form a round narrowing for the /w/ sound which follows it. In the word *teeth* /t/ is pronounced with spread lips under the influence of /i:/. In the word *try* /t/ is post-alveolar under the influence of the /r/ phoneme which follows it. In the word *eightth* /t/ is dental, because of the influence of the interdental /θ/ which follows it.

Another example with the sound type /i:/. In the word *bee* /i:/ is the longest, in *bead* /i:/ becomes shorter under the influence of the voiced /d/, which follows it, in the word *beat* /i:/ is the shortest because it is followed by the voiceless consonant /t/.

Vowel phonemes undergo changes not only in quantity, but also in quality, as, for example, in the word *beak* where /i:/ is more back than in the word *bee*. It happens because of the influence of the /k/ phoneme which follows /i:/ in the word *beak*.

The number of sound types, or phonemes, in each language is much smaller than the number of sounds actually pronounced (See Table 9).

Comparative Table of Phonemes in Different Languages

| Language | Conso- nants | Vowels | Total | Language | Conso- nants | Vowels | Total |
|----------|-----------------|--------|-------|-----------|-----------------|--------|-------|
| Russian | 34 | 6 | 40 | German | 22 | 18 | 40 |
| English | 24 | 21 | 45 | Abkhazian | 68 | 3 | 71 |
| French | 17 | 15 | 32 | Finnish | 13 | 8 | 21 |

Phonemic variants, or allophones, are very important for practical teaching because they are pronounced in actual speech and though their mispronunciation does not always influence the meaning of the words, their misuse makes a person's speech sound as "foreign". For example, the word *table* will be understood no matter whether it is pronounced with the apical /t/, which is the norm, or with the dental or dorsal Russian /τ/.

That variant of the phoneme which is described as the most representative and free from the influence of the neighbouring phonemes is considered to be *typical*, or *principal*. For example, when the phoneme /t/ is described in practical teaching its principal variant is characterized as fore-lingual apical occlusive voiceless fortis. To distinguish principal variants of phonemes from their allophones in writing, two types of brackets are used: slant-like for the principal variant of the phoneme (which is usually described for teaching purposes), and square — for allophonic variants.

Allophones can be *positional* and *combinatory*. Positional allophones are used in certain positions traditionally. For example, the English /l/ phoneme is always "clear" in the initial position and "dark" in the terminal position. Russian sonorants are devoiced in the terminal position after voiceless and voiced consonants and vowels: *воплѣ, рубль, мой*.

Combinatory allophones appear as the result of assimilation, adaptation, accommodation, that is—when one phoneme influences another. For example, [t] is a rounded combinatory allophone of the /t/ phoneme in the word *twice*. The same is true of the Russian [τ] in *my, mo*.

There are different opinions on the nature of the phoneme and its definition among Soviet and foreign linguists. I. A. Baudouin de Courtenay viewed phonemes as fictitious units and considered them to be only perceptions. Ferdinand de Saussure (France) viewed phonemes as the sum of acoustic impressions and articulatory movements. N. S. Trubetskoy (the Prague Linguistic School) defined the phoneme as a unity of phonologically relevant features. He wrote that when the phoneme is neutralized it becomes an "archi-phoneme" or a unity of relevant features common to two phonemes, thus it is an abstraction. D. Jones, head of the London School of phonology, defined phonemes as a family of sounds. The phoneme theory in America was elaborated by the so called structuralists L. Bloomfield, E. Sapir and others who define the phoneme as a minimum unit of distinctive sound-features, an "abstrac-

tional fiction...". The representatives of the so called Copenhagen trend view all linguistic problems as "algebraic" (R. Jakobson, R. Halle).

In spite of the lack of consistency, non-materialistic approach to the phoneme analysis, metaphysical and vulgar materialistic approach to the phoneme definition expressed by some scientists, all of them did a lot for the development of the phoneme theory.

L. V. Shcherba took the positive ideas from his teacher I. A. Baudouin de Courtenay, overcame the drawbacks of his theory and worked out a truly materialistic theory of phoneme. He was the first who defined the phoneme as a real independent distinctive unit which manifests itself in the form of its allophones.

Shcherba's theory was further developed by his disciples. Prof. V.A. Vassilyev in his book "English Phonetics. A Theoretical Course" (Mosc., 1970) writes that a phoneme is a dialectical unity of three aspects: (1) material, real and objective, (2) abstractional and generalized, (3) functional.

In speech the phoneme serves to perform three functions: (a) *constitutive*, because sounds constitute words, phrases and sentences; (b) *distinctive*, because sounds help to distinguish them; and (c) *recognitive*, that is, its allophones help to recognize words and consequently phrases and sentences. V. A. Vassilyev further writes, that the phoneme is material, real and objective, because it really exists in the material form of speech sounds, allophones. It is an objective reality existing independently from our will, or intention.

The phoneme is an abstraction, it is not any definite /t/ or /d/ sound, for example, but an abstractional language unit, which exists in the form of its allophones.

The phoneme is functional, because it functions to make one word or its grammatical form distinct from the other, it functions because it constitutes words and because due to the fact that it really functions we recognize words (even though they are not pronounced properly).

O. I. Dikushina, another of Shcherba's disciples, writes: "Everyone is able to recognize phonemes in his mother tongue. A Russian can distinguish between the /k/ or the /r/ phonemes in the words *калоши*, *залоши*."¹

Each phoneme manifests itself in a certain pattern of distribution. The patterns of distribution may be different. The simplest is *free variation*, that is the variation of one and the same phoneme pronounced by the same or different speakers, e.g. the pronunciation of the phoneme /k/ with different degrees of aspiration which doesn't affect the differentiatory properties of this phoneme. Another example of free variation distributional pattern is the pronunciation of words *why*, *which*, *who*; they may be pronounced either with the phoneme /w/ or /ʍ/. It depends on the individual manner of one's pronunciation.

Complementary distribution is another pattern of phoneme environment, when one and the same phoneme occurs in a definite set of contexts in which no other phoneme ever occurs. In other words, if the same

¹ Дикущина О. И. Цит. соч., с. 31.

sound occurs in different environments, it is supposed to be one phoneme which manifests itself in the form of different allophones.

Different phonemes can occur in identical context which is never the case with allophones.

Sounds are in *contrastive distribution* when we find them in contrasted pairs: *said — sad, pit — peat, bed — bad, take — cake*. Here we can observe contexts which are the same but for one sound phoneme.

Phonemes are discovered by the method of *minimal pairs*, or by *distinctive oppositions*. This method consists in finding as many pairs of words as possible which differ in one phoneme.

The substitution of one sound for another is called *commutation test* (коммутационная проверка). If such substitution results in the change of meaning, the commuted sounds are different phonemes.

The method of distinctive oppositions enables one to prove whether the phonemic difference is relevant or not, e.g.

/t/ is a forelingual plosive occlusive voiceless fortis phoneme,

/d/ is also a forelingual plosive occlusive but a voiced lenis phoneme.

So, for /t, d/ the only relevant distinctive features are: voiceless fortis vs. voiced lenis. Other features are irrelevant.

Depending on the number of relevant distinctive features oppositions can be (1) *single*, (2) *double*, and (3) *multiple*.

To establish the number of relevant and irrelevant features and to state whether the opposition is single, double, or multiple it is convenient: (1) to enumerate the characteristic features of the phonemes under discussion; (2) to mark distinctively irrelevant features by pluses and distinctively relevant features by minuses; (3) to count distinctively relevant features, e.g.

| /t/ | /d/ |
|------------------|----------------|
| voiceless fortis | — voiced lenis |
| lingual | + |
| forelingual | + |
| apical | + |
| alveolar | + |
| occlusive | + |
| noise | + |
| unicentral | + |
| oral | + |

Since there is only one minus which corresponds to a single relevant distinctive feature in the /d/ phoneme, /t — d/ can be considered to have a single opposition in pairs *ten — den, time — dime, try — dry*, etc., that is voiceless fortis vs. voiced lenis distinction.

| /p/ | /d/ |
|------------------|--|
| voiceless fortis | — voiced lenis |
| labial, bilabial | — lingual forelingual apical, alveolar |

| | |
|------------|---|
| occlusive | + |
| noise | + |
| unicentral | + |
| oral | + |

There are two distinctively relevant features in the /p — d/ phonemes in the pairs *pie — die*, *pail — dale*, *pry — dry*, which are examples of double opposition: 1. voiceless fortis vs. voiced lenis, 2. labial bilabial vs. lingual forelingual apical alveolar.

The phonemes /b — h/ in pairs: *be — he*, *bit — hit*, *bait — hate* can be considered as members which are characterized by a multiple opposition.

| /b/ | /h/ |
|----------------------------|---------------------------------|
| voiced lenis | — voiceless fortis |
| labial bilabial | — pharyngeal |
| occlusive noise unicentral | — constrictive noise unicentral |
| oral | + |

The /b — h/ phonemes in the pairs mentioned above, are characterized by three distinctively relevant features and only one distinctively irrelevant feature. Thus, they are examples of a multiple opposition.

Those linguists who apply the commutation test based on the knowledge of the words' meaning and their grammatical forms, use the semantic method of phoneme identification.

Those scientists who ignore the meaning use the purely distributional method. They state, that the sounds can be grouped into phonemes on the basis of the law, that allophones of one and the same phoneme may occur only in different contexts because they cannot perform distinctive functions, and that allophones of different phonemes occur in the same phonetic context.

There are two main problems phonologists are confronted with: (1) to establish the inventory of the phonemes in the language under consideration, and (2) to define the phonemic status of the sound in the neutral position.

In connection with the second problem there are three different points of view expressed by the representatives of the Moscow School, the Leningrad School and the Prague Linguistic Circle.

The representatives of the Moscow trend (A. A. Reformatsky, R. S. Kusnetsov, R. I. Avanesov, M. V. Panov, et al.) investigate the phoneme on the material of the Russian language. They did a lot in its thorough and multilateral morpho-phonological analysis.

The representatives of the Leningrad School (L. V. Shcherba's disciples: L. R. Zinder, O. I. Dikushina, V. A. Vassilyev, et al.) analyse and investigate sounds as real speech units. Shcherba's followers always care for the practical appliance of phonemic analysis. For example, in solving the problem of phoneme identification in the neutral position they advocate the autonomy of the phoneme, its independence from the morpheme, which is more simple for practical purposes. They state

that in *буз, уз, серб*, when the terminal sounds /р, з, б/ are devoiced, they should be assigned to the /к, с, п/ phonemes, with the principal variants of which they fully coincide in sounding speech. The representatives of the Leningrad School suggest to consider /к, с, п/ in *бук, ус, серп* to belong to the /к, с, п/ phonemes and /р, з, б/ in *буз, уз, серб* also to belong to the /к, с, п/ phonemes.

The Muscovites consider such devoiced /р, з, б/ sounds to be the allophones of the /р, з, б/ phonemes, because they coincide with their principal variant in the "strong" position:

| | |
|-------------------|---------------------|
| Бур — Бура /р/ | бук — бу́ками /к/ |
| уз — уза́ми /з/ | ус — уса́ми /с/ |
| серб — се́рбы /б/ | сerp — серпа́ми /п/ |

That is, they suggest to check up "suspicious" phonemes through their allomorphs in the strong position on the basis of morphological criteria.

The Leningraders' solution is better because it can "... provide... a definite, simple, objective and reliable criterion for assigning all the sounds of the language in all its morphemes, words and their forms of particular phonemes".¹

The representatives of the Prague Linguistic Circle state, that in such cases we have neither the /к, с, п/ nor the /р, з, б/ phonemes, but units higher than both, that is archiphonemes.²

Questions

1. In what way is phonetics closely connected with phonology?
2. Who was the founder of the phoneme theory?
3. What is Shcherba's view on speech sounds?
4. What is the difference between phonemes and allophones?
5. What is the difference between positional and combinatory allophones?
6. In what way is the phoneme treated by different scientists?
7. What are the three aspects of the phoneme?
8. In what way does the phoneme perform constitutive, distinctive and recognitive functions?
9. What do you know about distributional analysis and the patterns of distribution?
10. What is the difference between the relevant and the irrelevant features of the phonemes?
11. What is the difference between single, double and multiple oppositions? How are they established?
12. What are the two main problems of phonological analysis?
13. What is the difference between semantic and purely distributional methods of phoneme identification?

¹ Vassilyev V.A. Op. cit., p. 174.

² Трубецкой Н.С. Основы фонологии. М., 1960, с. 87

14. How do the representatives of the Moscow Phonological School solve the problem of phoneme identification?

15. How is the problem of phoneme identification solved by the representatives of the Leningrad School?

16. How is the problem of phoneme solved by the Prague Linguistic Circle?

Exercises

1. Using the example below prove that phonetics is closely connected with phonology.

Twas brillig, and the slighty toves
Did gyre and gimble in the wabe;
All mimsy were the borogoves,
All the mome raths outgrabe.¹

Было супно. Кругтелся, винтясь по земле,
Склипких козей царапистый рой.
Тихо мисиков стайка грустела во мгле,
Зеленавки хрющали порой.

Перевод Т. Л. Щепкиной-Куперник

2. Read these words. Pay attention to the allophonic difference of one and the same phoneme.

/t/

aspirated: take, tall, tone

unaspirated: steak, stall, stone

no audible release: outpost, halpin, football, white chalk

nasal release: cotton, button, eaten, utmost

lateral release: cattle, atlas, at last

/d/

partly devoiced: do, dog, day

voiced: leader, order, murder

voiceless: bid, mad, road

no audible release: good dog, bed time, good cheese

nasal release: admit, road map, red map

lateral release: middle, headless, badly, good luck

/k/

aspirated: come, car, coal

unaspirated: baker, talking, equal, secret

no audible release: locked, deck chair, blackboard, dark night, black magic, begged

lateral release: glow, bugle, struggle

voiceless: dog, leg, vague

partly devoiced: go, geese, girl, glass

voiced: figure, eager, ago, begin

¹ Carol L. Through the Looking-Glass. M., 1966, p. 49.

3. Read these words. Pay attention to the positional allophones of the /l/ phoneme.

| [l] | [ɫ] |
|-------------|---------------|
| like — lip | pull — mill |
| live — lily | fool — hall |
| less — leak | doll — girl |
| let — list | coal — twelve |

4. Read these words. Pay attention to the pronunciation of the devoiced allophones of the /l, w, r/ phonemes after /p, t, k/.

| | | |
|-----------------|---------------|-------|
| cleft | twice | try |
| cleg | tweed | tree |
| ply | quiet | pry |
| please | quaver | price |
| clerk | queer | cry |
| play | | crone |
| | | crop |
| plight — blight | class — glass | |
| clad — glad | clean — glean | |
| clue — glue | | |

5. Read these words. Mind the distributional character of the /h/ phoneme. Pay attention to the allophones in the syllable initial prevocalic position, each of them should be considered as a “strong, voiceless onset of the vowel, which follows it.”¹

he, hit, help, happy, half, hop, horn, hut, hook, who, her, habitual, hay, high, how, hoist, hoe, hear, hare, hour.

6. Read these words. Pay attention to the complementary nature of soft and hard English allophones and to the independent soft and hard Russian phonemes.

| | | | |
|-----------------|---------------------|-------------------|-----------|
| /p/ pea — paw | /k/ key — car | /f/ far — fee | |
| /b/ bee — bark | /g/ geese — goose | /v/ veel — vote | |
| /t/ tea — talk | /tʃ/ cheese — chose | /θ/ theme — thumb | |
| /d/ deep — dope | /dʒ/ jet — jar | /ð/ thee — those | |
| | | | |
| /s/ see — saw | /r/ read — rode | | |
| /z/ zeal — zone | /j/ yes — young | | |
| /ʃ/ she — shoe | /w/ we — wet | | |
| /dʒ/ jupe — Joe | /m/ me — met | | |
| /h/ he — home | /n/ knee — net | | |
| /l/ lee — law | | | |
| | | | |
| /п/ пол | /к'/ Кяхта | /с/ сон | /м/ мак |
| /п'/ пёк | /г/ год | /с'/ сёл | /м'/ мять |
| /б/ бак | /г'/ гяур | /з/ зол | /н/ нос |
| /б'/ бязь | /ц/ цепь | /з'/ зять | /н'/ нёс |
| /т/ ток | /ч/ час | /ш/ шёлк | /л/ лад |
| /т'/ тёк | /ф/ фунт | /ш'/ счет | /л'/ лёд |
| /д/ да | /ф'/ Фёкла | /ж/ жар | /й/ яр |
| /д'/ дядя | /в/ воз | /ж'/ жжёшь | /р/ рад |
| /к/ как | /в'/ вёз | /х/ холм | /р'/ ряд |

¹ Gimson A. C. An Introduction to the Pronunciation of English, p. 186.

Control Tasks

1. Prove the material, real and objective character of the /t/ phoneme.
- * 2. Give examples of combinatory allophones of the /r/ phoneme.
- * 3. What positional allophones occur as a result of palatalization in the Russian language?
- * 4. Give examples for different types of distribution: (a) complementary, (b) contrastive, (c) free variation.
5. Give examples of: (a) single opposition, (b) double opposition, (c) multiple opposition.
6. Give theoretical and practical proofs to explain constitutive, recognitive and distinctive functions of phonemes.

ENGLISH CONSONANTS AS UNITS OF THE PHONOLOGICAL SYSTEM

Sounds can function as units of language only if they differ from one another. Mutually distinctive speech sounds are called phonemes. As has been pointed out the main method of establishing phonemes of a given language is the commutation test or discovery of minimal pairs through which the establishment of the phonemic status of each sound is accomplished.

When in a contrastive pair one consonant phoneme is opposed to any other consonant phoneme in at least one position, this pair is called minimal.¹ For example, in the minimal pair *pen* — *Ben* the phoneme /p/ is opposed to the phoneme /b/ due to the presence and absence of voice; it is the only distinctive feature of this minimal pair. All the other features of the pair *pen* — *Ben* are irrelevant. If there are more than one distinctive feature in a pair, it is called sub-minimal. For example, the pair *treasure* — *pressure* is sub-minimal because the opposition is due to: (1) the presence and absence of voice in the /ʒ — ʒ/ phonemes, (2) forelingual articulation of the /t/ phoneme and bilabial articulation of the /p/ phoneme. All the other features are distinctively irrelevant. Minimal pairs occur in identical, sub-minimal in similar environments.

It should be borne in mind that distinctively irrelevant features can be of two types: incidental, which may or may not be present in a phoneme, and such, without which the phoneme can't exist at all. For example, the presence or absence of voice in the word final consonants /c, ʒ/ in the Russian *пос* — *поз* is a genuinely incidental or redundant feature, whereas the forelingual articulation of /t/ and the bilabial articulation of /p/ are relevant differentiatory features. Palatalization is phonemically irrelevant incidental in English and relevant in Russian, etc.

The phonological analysis of the system of English consonant phonemes helps to establish 24 phonemes:

/p, b, t, d, k, g, f, v, θ, ð, s, z, ʃ, ʒ, h, tʃ, dʒ, m, n, ŋ, w, r, j, l, ɹ, ɱ, ʎ/

¹ "Minimal pairs are useful, when found, but not necessarily to be expected, and not essential to the work of analysis." *Gleason H.A. An Introduction to Descriptive Linguistics*. p. 280.

² /ɹ/ is a "facultative phoneme". Some authors prove its phonemic status by minimal pairs: *witch* — *which*, *wine* — *whine*, *wear* — *where*.

Classificatory principles suggested by Soviet phoneticians provide the basis for the establishment of the following distinctive oppositions in the system of consonants of the English language.

1. Work of the Vocal Cords

Voiceless vs. voiced

/p — b/ pen — Ben /t — d/ ten — den /k — g/ coat — goat

Voiceless — voiced opposition is simultaneously based on fortis — lenis distinction. It is not so in the Russian language where the voiceless — voiced opposition is based only on the presence or absence of voice. If we compare the English /p, t, k, b, d, g/ and the Russian /п, т, к, б, д, г/, we may state that: in the initial position the English /b, d, g/ are weakly voiced, the Russian /б, д, г/ are fully voiced:

book — бук goose — гусь deem — Дима

In English /p, t, k/ in the initial position are aspirated fortis, in Russian /п, т, к/ are unaspirated, therefore in English the /p — b, t — d, k — g/ oppositions are based on breath force distinction, whereas in Russian, the pairs /п — б, т — д, к — г/ differ due to voice — absence of voice distinction (but not in the final position).

in English

| | | |
|---------------|-------------|-------------|
| plead — bleed | tip — dip | come — gum |
| peach — beach | tea — Dee | cot — got |
| pat — bat | tear — dear | cane — gain |

in Russian

| | | |
|-----------|-----------|-----------|
| пой — бой | тал — дал | кот — год |
| пей — бей | тол — дол | кит — гид |

2. Active Organ of Speech and the Place of Articulation

This principle of consonant classification provides the basis for the following distinctive oppositions:

(1) Labial vs. lingual

pain — cane bun — ton fame — tame

In these pairs the labial bilabial /p/ is opposed to the lingual backlingual velar /k/;

the labial bilabial /b/ is opposed to the lingual forelingual apical /t/;

the labial labio-dental /f/ is opposed to the lingual forelingual apical /t/.

(2) Lingual vs. pharyngeal (glottal)

Tim — him this — hiss foam — home care — hair

In these pairs the lingual forelingual apical /t/ is opposed to the pharyngeal /h/;

the lingual forelingual apical interdental /ð/ is opposed to the pharyngeal /h/;

the labial labio-dental /f/ is opposed to the pharyngeal /h/;
 the lingual backlingual velar /k/ is opposed to the pharyngeal /h/.
 Within the group of labial, bilabial may be opposed to labio-dental.

wear — fair mice — vice

In these pairs the bilabial /w/ is opposed to the labio-dental /f/;
 the bilabial /m/ is opposed to the labio-dental /v/.

Within the group of forelingual, apical may be opposed to cacuminal.

dim — rim

In this pair the apical forelingual alveolar /d/ is opposed to the cacuminal forelingual alveolar /r/.

Within the group of lingual, forelingual can be opposed to mediolingual.

tongue — young jet — yet

In these pairs the forelingual (apical alveolar) /t/ is opposed to the mediolingual (palatal) /j/;

the forelingual (apical palato-alveolar) /dʒ/ is opposed to the mediolingual (palatal) /j/.

3. Manner of the Production of Noise

This principle of consonant classification provides the basis for the following distinctive oppositions:

(1) Occlusive (stops) vs. constrictive

| | | |
|--------------|--------------|--------------|
| pine — fine | Bern — fern | dare — share |
| bat — that | bore — thaw | bee — thee |
| care — there | mine — thine | came — lame |

In these pairs the occlusive /p, b, d, k, m/ are opposed to the constrictive /f, ʃ, θ, ʈ, l/.

(2) Constrictive vs. occlusive-constrictive (affricates)

fare — chair fail — jail work — jerk

In these pairs the constrictive /f, w/ are opposed to the occlusive-constrictive (affricates) /tʃ, dʒ/.

Within the groups of occlusives, or stops, and constrictives, noise consonants may be opposed to sonorants.

(a) occlusive: noise vs. nasal sonorants

| | | |
|-------------|-------------|-------------|
| pine — mine | boat — moat | tale — nail |
| dead — need | kick — king | |

In these pairs the occlusive noise /p, b, t, d, k/ are opposed to the nasal sonorants /m, n, ŋ/.

(b) constrictive: noise vs. sonorants

same — lame vain — lane then — when

In these pairs the constrictive noise consonants /s, v, ð/ are opposed to the constrictive sonorants /l, w/.

Unicentral constrictive consonants may be opposed to bicentral constrictive consonants.

(c) constrictive unicentral vs. constrictive bicentral

same — shame thine — wine

In these pairs the constrictive unicentral /s, ʃ/ are opposed to the constrictive bicentral /ʒ, w/.

Constrictive consonants with a flat narrowing can be opposed to constrictive consonants with a round narrowing.

(d) flat narrowing vs. round narrowing

fame — same vat — sat

In these pairs the constrictive consonants with a flat narrowing /f, v/ are opposed to the constrictive consonants with a round narrowing /s/.

In all these oppositions only examples with the initially opposed consonant phonemes are given. It does not mean that the pairs of medially and finally opposed consonants, that prove their phonemic status, may not be found.

4. Position of the Soft Palate

This principle of consonant classification provides the basis for the following distinctive oppositions.

Oral vs. nasal

pit — pin seek — seen thieves — theme sick — sing

In these pairs the oral consonants /t, k, v/ are opposed to the nasal /m, n, ŋ/.

The method of minimal pairs helps to identify 24 consonant phonemes in the English language on the basis of such an analysis which demands a recourse to the meaning, or to the distinctive function of the phoneme. V. A. Vassilyev¹ writes that those linguists who reject meaning, as external to linguistics, think that it is possible to "group the sounds of the language into phonemes even without knowing the meaning of words" as D. Jones put it. V. A. Vassilyev states that "this belief [...] is based on two laws of phonemic and allophonic distribution (1) that allophones of *different* phonemes always occur in the same phonetic context [...] and (2) that consequently, the allophones of the *same* phoneme never occur in the same phonetic context and always occur in *different* positions [...]". From these laws "two conclusions are deduced: (1) if more or less different speech sounds occur in the *same phonetic context*, they should be allophones of *different phonemes*; and (2) if more or less similar speech sounds occur in *different positions* and never occur in the same phonetic context, they are variants of one and the *same phoneme* [...]. This method is known in modern phonology as the *purely distributional method* of identifying the phonemes of a language as items of its phonemic system."

¹ Vassilyev V. A. Op. cit., p. 160

Though the practical application of the purely distributional method is theoretically feasible, there are many difficulties in its use.

The principle which determines the choice of the most suitable method for teaching purposes is called the principle of pedagogical expedience in phonemic analysis.

Questions

1. What is the definition of the phoneme from the viewpoint of distinctive oppositions?
2. What is the difference between minimal and sub-minimal pairs?
3. What features of the phoneme are distinctively relevant and distinctively irrelevant?
4. What is the nature of voiced — voiceless opposition in English and in Russian?
5. What distinctive oppositions illustrate the existence of labial, lingual, and pharyngeal consonant phonemes?
6. What distinctive oppositions illustrate classificatory subdivisions within the group of labial and lingual consonants?
7. What distinctive oppositions illustrate the existence of occlusive (or stops), constrictive, occlusive-constrictive (or affricated) consonants?
8. What distinctive oppositions illustrate classificatory subdivisions within the groups of occlusive and constrictive consonants?
9. What distinctive oppositions prove the existence of oral and nasal consonant phonemes?
10. What is the difference between the semantic and purely distributional methods of phonological analysis?

Exercises

* 1. State what classificatory principles can be illustrated by the groups of pairs given below (consonants opposed initially).

pin — bin, pack — back, pie — bye, tie — die

pen — ten, been — dean

pole — coal, bait — gait

fee — we, fell — well

fee — he

sob — rob, seal — reel, sole — role, sip — rip, sight — right

pity — city, pay — say, pail — sail, pole — sole, peel — seal

pine — mine, debt — net, kick — Nick

fell — well, those — rose, soul — role, sip — rip, sight — right

fell — well, fee — we

fail — sail, fee — see, foot — soot, fat — sat, fell — sell

2. Read the pairs of words. Pay attention to the presence of aspiration in /p, t, k/ vs. its absence in /b, d, g/ rather than to voiceless fortis vs. voiced lenis distinction.

/p — b/
pet — bet

/t — d/
ten — den

/k — g/
come — gum

| | | |
|---------------|---------------|---------------|
| pig — big | town — down | coast — ghost |
| puts — boots | ton — done | came — game |
| pass — bus | ties — dies | could — good |
| pack — back | takes — days | cot — got |
| port — bought | tear — dear | curls — girls |
| | tart — dart | corn — gone |
| | torse — doors | cave — gave |

***3. What minimal distinctive feature (or features) makes these oppositions phonologically relevant?**

- | | | |
|------------------|--------------------|-----------------------|
| (a) cap — cab | sent — send | leak — league |
| pack — back | ton — don | coal — goal |
| caper — labour | latter — ladder | decree — degree |
| (b) pee — fee | tie — sigh | do — zoo |
| supper — suffer | attend — ascend | raider — razor |
| leap — leak | park — part | rude — ruse |
| (c) till — chill | day — jay | share — chair |
| martyr — marcher | murder — merger | much — marsh |
| eat — each | lard — large | furnisher — furniture |
| (d) thigh — shy | Ruth — ruche | root — rouge |
| save — shave | presser — pressure | mass — mash |
| ruze — rouge | | |
| (e) bad — mad | dock — knock | rigging — ringing |
| arbour — armour | eddy — any | log — long |
| rub — rum | bad — ban | |

***4. Read these pairs of words. State which of them represent minimal pairs and which sub-minimal pairs.**

| | | |
|------------------|-----------------|------------------|
| thick — sick | zest — lest | daily — daisy |
| bathed — base | they — lay | Weller — weather |
| mouth — mouse | marry — measure | eel — ease |
| thigh — shy | genre — jar | bathe — bail |
| leasure — ledger | | |

Control Tasks

***1. Sort out the oppositions under the following headings: (a) labial vs. forelingual; (b) labial vs. mediolingual, (c) labial vs. backlingual.**

| | | |
|------------------|---------------|------------------|
| pat — cat | wield — yield | man — nap |
| supper — succour | wail — Yale | coming — cunning |
| leap — leak | | seem — seen |

***2. State which of the pairs illustrate (a) forelingual vs. mediolingual and (b) forelingual vs. backlingual oppositions.**

| | | |
|-----------------|-----------------|--------------|
| tame — came | sinner — singer | sung — young |
| less — yes | bitter — bicker | bat — back |
| rudder — rudder | clue — cue | day — gay |
| drew — due | bad — bag | rung — young |

*3. Sort out the oppositions under the following headings: (a) occlusive vs. constrictive, (b) constrictive vs. occlusive-constrictive, (c) noise vs. sonorants, (d) unicentral vs. bicentral, (e) flat narrowing vs. round narrowing.

| | | | | | |
|------|---------|-------|--------|------|--------|
| pine | — fine | work | — jerk | vain | — lane |
| fare | — chair | bee | — thee | came | — lame |
| boat | — moat | deed | — need | fame | — same |
| seek | — seen | thine | — wine | sick | — sing |
| kick | — king | | | | |

4. State allophonic differences of the /t, k/ phonemes in the initial position due to the influence of the next vowel.

/t/ tea, tip, ten, tan, tar, top, tore, tub, took, two, term, tobacco, tale, tie, town, tow, tear, tore

/k/ key, kin, kept, cap, car, cot, core, cut, cork, cool, curb, contain, cake, kite, cow, coy, coal, care

*5. State allophonic differences of:

/l, r, j/ after /p/ in: plan, price, pure;

/r, j, w/ after /t/ in: try, tube, twelve;

/l, r, j, w/ after /k/ in: clean, cream, cue, quite

ENGLISH VOWELS AS UNITS OF THE PHONOLOGICAL SYSTEM

Classificatory principles suggested by Soviet phoneticians can be illustrated by distinctive oppositions in the system of the following English vowels phonemes: /i:/, ɪ, e, æ, a:, ɔ, ɒ, u, ʊ, ʌ, ə:/, ə/.

I. Position of the Lips

Rounded vs. unrounded vowels:

don — dawn pot — port

In these pairs the unrounded vowel phoneme /ɔ/ is opposed to the rounded /ɒ:/ phoneme.

II. Position of the Tongue

(1) Horizontal movement of the tongue

(a) Front vs. mixed

cab — curb bed — bird

In these pairs the front vowel phonemes /æ, e/ are opposed to the mixed phoneme /ə:/.

(b) back vs. mixed

pull — perl cart — curt call — curl

In these pairs the back vowel phonemes /u, a:, ɔ:/ are opposed to the mixed phoneme /ə:/.

(2) Vertical movement of the tongue

(a) close (high) vs. mid-open (mid)

bid — bird put — port week — work

In these pairs the close vowels /ɪ, u, i:/ are opposed to the mid-open vowel /ə:/.

(b) open (low) vs. mid-open (mid)

lack — lurk bard — bird call — curl

In these pairs the open vowels /æ, ɑ:, ɔ:/ are opposed to the mid-open vowel /ə:/.

As is known, within each group which we single out according to the horizontal and vertical movements of the tongue there are subgroups.

Front vowels are subdivided into *fully front* and *front-retracted*: /i:, e, æ/ are fully front, /ɪ/ is a front-retracted vowel phoneme. Its independent phonological status can be proved by the existence of minimal pairs, e.g.

Pete — pit deep — dip beet — bit

Back vowels are also subdivided into *fully back* /u:, ɔ:, ɒ, ɑ:/ and *back-advanced* /ʊ, ʌ/. The independent phonological status of back-advanced vowels can be proved by the existence of minimal pairs, e.g.

bard — bud cart — cut pool — pull

Close (or *high*) *mid-open* (or *mid*) as well as *open* (or *low*) vowels are subdivided into vowels of *narrow* and *broad variation*. Thus, within the group of high vowels /i:, u:/ belong to the vowel phonemes of narrow variation, and /ɪ, ʊ/ belong to the vowel phonemes of broad variation. Their independent phonological status can be proved by the existence of such pairs as:

Pete — pit pool — pull

In these pairs /i:, u:/ are opposed to /ɪ, ʊ/, which belong to the subgroup of high vowels of broad variation.

Within the group of *mid-open* (or *mid*) vowels /e, ə:/ belong to the phonemes of narrow variation and /ə/ belongs to the subgroup of mid vowels of broad variation. The independent phonological status of /e, ə:, ə/ can be proved by the existence of such pairs as:

| | |
|-----------------------|------------------------|
| pence — sixpence | foreword — forward |
| /'pens/ — /'sɪkspens/ | /'fɔ:wə:d/ — /'fɔ:wəd/ |

Open (or *low*) vowels are also subdivided into the phonemes of *broad variation* (/æ, ɑ:/) and of *narrow variation* (/ɒ, ɔ:/). Their independent phonological status can be proved by the existence of minimal pairs:

bord — bard born — barn but — Bart

III. Degree of Tenseness and the Character of the End of the Vowel

This principle of vowel classification together with the principle of length provide the basis for the following distinctive oppositions:

| Tense vs. lax | | Checked vs. free | |
|---------------|---------------|------------------|-------------|
| eel — ill | steel — still | done — darn | must — mast |
| peel — pill | seat — sit | fun — far | cut — cart |
| deed — did | feet — fit | come — calm | fit — feet |

IV. Length

There are *long* vowel phonemes in English /i:/, a:/, ɔ:/, u:/, ə:/ and short /ɪ, e, æ¹, ʌ, ɒ, u, ə/. But the length of the vowels is not the only distinctive feature of minimal pairs like: *Pete* — *pit*, *beet* — *bit*, *Bart* — *bud*, etc. In other words, the difference between /i:/ — ɪ, a:/ — ʌ/, etc. is not only quantitative but also qualitative, which is conditioned by different positions of the bulk of the tongue. E.g. in the words *bead* — *bid* not only the length of the vowels /i:/, ɪ/ is different but in the /i:/ articulation the bulk of the tongue occupies a more front and high position, than in the articulation of /ɪ/ (Fig. 22).

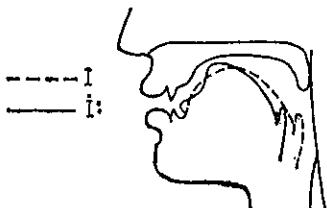


Fig. 22

Qualitative difference is the main relevant feature that serves to differentiate long and short vowel phonemes because quantitative characteristics of long vowels depends on the position they occupy in a word:²

(a) they are the longest in the terminal position: *bee*, *bar*, *coo*, *her*, *law*, *car*

(b) they are shorter before voiced consonants: *bead*, *bard*, *cool*, *term*, *lard*, *card*

(c) they are the shortest before voiceless consonants: *beet*, *Bart*, *hoot*, *Turk*, *loose*, *cart*

To observe the quantity, or length of vowels in different positions, it is advisable to do contrast exercises, e.g.

bee — *bead* — *beet* *bar* — *Bard* — *Bart* *car* — *card* — *cart*

V. Stability of Articulation

The principle provides the basis for the following distinctive oppositions:

(1) Monophthongs vs. diphthongs

bit — *bait* *bid* — *beard* *dead* — *dared* *cot* — *coat*

In these pairs the monophthongs /ɪ, e, ɔ/ are opposed to the diphthongs /eɪ, ɪə, əə, ou/.

¹ Some authors consider /æ/ to be a long phoneme.

² There are other factors, that condition the quantitative difference of vowel phonemes (see p. 40).

kit — kite debt — doubt John — join

In these pairs the monophthongs /ɪ, e ɔ/ are opposed to the diphthongs /aɪ, aʊ, ɔɪ/.

(2) Diphthongs vs. diphthongoids

| | | | |
|-------------|--------------|-------------|-------------|
| bite — bee | bait — beet | boat — boot | pail — pool |
| lake — leek | beard — bead | raid — rude | care — coo |

In these pairs the diphthongs /aɪ, eɪ, ɪə, ou, əʊ/ are opposed to the diphthongoids /i:, u:/.

According to the movement of the tongue within the articulation of

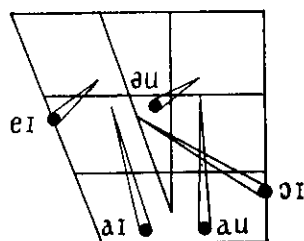


Fig. 23

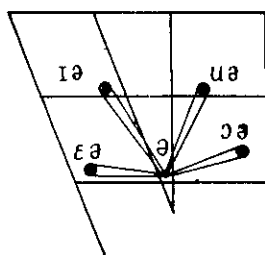


Fig. 24

the diphthong from the nucleus to the glide, diphthongs are subdivided into *closing* and *centring* (Fig. 23, 24).

The method of minimal pairs helps to establish 21 vowel phonemes in the phonological system of English vowels:

10 monophthongs: /ɪ, e, æ, ɑ:, ɔ, ɔ:, u, ʌ, ə:, ə/

9 diphthongs: /eɪ, aɪ, ɔɪ, ɪə, əə, ɔə, uə, aʊ, ou/

2 diphthongoids: /i:, u:/

Questions

1. What distinctive oppositions illustrate classificatory groups of rounded and unrounded vowels?

2. What distinctive oppositions illustrate classificatory groups according to the (a) horizontal, (b) vertical movements of the tongue?

3. Can the existence of front-retracted and back-advanced vowels be proved by minimal pairs?

4. Is the length of the vowels the only distinctive feature of long (tense) and short (lax) vowel phonemes like /i:, ɪ/, /u:, u/, etc.?

5. How is vowel length conditioned positionally?

6. What distinctive oppositions illustrate classificatory principle of vowel stability of articulation?

7. How are diphthongs subdivided according to the tongue movement from the nucleus to the glide?

Exercises

***1. Read these pairs of words. State what principles of vowel classification they illustrate.**

- | | | |
|--|---|--|
| (a) cod — cord not — nought cot — caught body — border | (b) end — and ten — tan hem — ham kettle — cattle | (c) fir — for firm — form turn — torn bird — bord |
| (d) fool — full pool — pull food — put tool — took boot — book | (e) am — aim add — aid man — main lad — laid fat — fate | (f) nor — no law — low called — cold bald — bold caught — coat |

2. Read these words and state what movements of the tongue make the vowel phonemes /e, æ, ʌ, ɑ:, u, ɪ, æ, ɔ:/ different.

| | |
|---------------------------|---------------------|
| bed — bird — bud — bard | bid — bird — bud |
| lack — lurk — luck — lark | lid — led — lad |
| hat — hurt — hut — heart | big — beg — bag |
| cab — curb — cub | kit — curt — caught |
| tan — turn — ton | |

***3. Read these pairs of words. State:**

(a) what closing diphthongs are opposed in the pairs:

| | | | |
|------------|-------------|-----------|----------------|
| hay — high | laid — lied | no — now | known — noun |
| bay — buy | tape — type | hoe — how | phoned — found |

(b) what centring diphthongs are opposed in the pairs.

| | | |
|-------------|-------------|-------------|
| here — hair | ear — air | rear — rare |
| fear — fair | beer — bear | tear — tare |

***4. Read these words. Observe the allophonic difference of the /i:, eɪ, ɔ:, ə:/ phonemes conditioned by their positional length.**

| | |
|-----------------------|---------------------|
| bee — been — beet | lay — laid — late |
| dee — dean — deep | may — maid — mate |
| knee — need — neat | say — save — safe |
| see — seed — seat | sigh — side — sight |
| lee — league — leak | tie — tide — tight |
| core — cord — caught | her — heard — hurt |
| saw — sword — sought | sir — serve — serf |
| four — form — fork | fur — furl — first |
| bore — board — bought | were — girl — purse |

***5. What classificatory principle of vowels can be illustrated by the contrastive pairs given below?**

| | | | |
|--------------|----------------|----------------|----------------|
| bid — beard | pooh — poor | too — tour | at — out |
| dead — dared | ass — ice | ate — eight | ladder — lower |
| pod — poured | manner — minor | letter — later | mass — mouse |

Control Tasks

*1. Which of the given examples illustrate (a) high, mid, open and (b) front, mixed, back oppositions?

| | | |
|------------------|-------|-------------------|
| bead — bed | — bad | deed — dead — dad |
| cab — curb — cub | | fan — turn — ton |
| bad — bird — bud | | hat — hurt — hut |

*2. Arrange these words into minimal distinctive pairs.

cart, wart, Boz, caught, don, what, bars, cod, card, down, cot, cord.

*3. Sort out these oppositions into two columns: (a) closing diphthong vs. closing diphthong, (b) centring diphthong vs. centring diphthong.

| | | | |
|----------------|-------------|-------------|-------------|
| known — noun | beer — bear | hay — high | rear — rare |
| phoned — found | ear — air | bay — buy | no — now |
| hear — hair | tear — tear | fear — fair | hoe — how |
| | | | tape — type |

SEGMENTAL CONSONANT PHONEMES. DESCRIPTION OF PRINCIPAL VARIANTS

Strictly speaking, it is impossible to give an exact and detailed description of a sound within the limits of a short definition, because not a single sound is pronounced identically even twice. Sounds undergo changes due to the individual manner and even mood of the speaker and due to the complementary distribution in which every sound exists in the language.

"The first step to learn a sound is to isolate it."¹ It means that for teaching purposes we single out the principal, or typical variant of the phoneme as a segment of the system, which is conventionally free from any influences. Then the detailed description of this variant should be carried out by means of the simultaneous comparison with the similar sound of the mother tongue. The next stage is the mastering of the sound, which is done by teaching the students to pronounce the sound in a definite set of contexts in which this sound occurs. The final stage is to automatize the newly acquired abilities of the students.

Consonants are best of all learnt if a teacher directs the attention of the students to tactile and muscular sensations of the organs of speech. In teaching to articulate sounds, diagrams and tables are very helpful.

OCCLUSIVE NOISE CONSONANT PHONEMES (PLOSIVES)

/p, b, t, d, k, g/
/p, b/

I.² In the articulation of /p/ the vocal cords do not vibrate, therefore /p/ is *voiceless*, but the force of exhalation and the muscular tension is great, /p/ is *fortis*.³

¹ Sweet H. The Sounds of English. p. 16.

² The figures I, II, III, IV correspond to the principles of consonant classification (see p. 21).

³ Zinder L. R. treats /p, t, k/ aspirated as lenis (Общая фонетика. Л., 1960, c. 116).

II. The lips are brought together and form a complete obstruction, /p/ is *labial bilabial*.

III. The obstruction is broken with a kind of explosion, /p/ is *occlusive* (plosive, or stop).

(1) In the production of /p/ noise prevails over voice, /p/ is a *noise* consonant.

(2) There is only one place of articulation in the /p/ production, so it is *unicentral*.

IV. The air passes out of the mouth cavity, /p/ is *oral*.

/b/ is pronounced in the similar way, but the vocal cords are drawn together and vibrate, the force of exhalation is not great and the muscular tension is not strong, therefore /b/ is *voiced lenis labial bilabial occlusive noise unicentral oral* (Fig. 25).

The Russian /п/ is pronounced in the similar way but without aspiration. Aspiration is a slight puff of breath, which is heard immediately after the "explosion" is accomplished. That is, the exhalation continues after the explosion is accomplished.

The Russian /б/ is fully voiced in the initial position, the English /b/ is slightly devoiced. Cf. *Bill* — *бул*.

In the terminal position the Russian /б/ can be devoiced almost completely: e.g. *эриб* /эрип/, *дуб* /дуп/, etc.

The English /b/ is devoiced but slightly: *sob*, *rob*, *mob*.

The English /p, b/ are never soft, whereas in Russian there are two independent phonemes /п—п'/ and /б—б'/. It can be proved by the existence of such pairs as: бил — был, пил — пыл, etc.

Soft articulation of the consonant is called *palatalization*. Its mechanism is the following: as soon as the lips are pressed to form a complete obstruction for /p, b/, the middle part of the tongue is raised to the hard palate (front secondary focus). This results in the soft articulation of any consonant phoneme followed by a front vowel.

To avoid palatalization of /p, b/ in the initial position it is advisable to do contrast exercises of the following type:

peel — пыл — пил
bill — был — бил

Graphic Equivalents of the /p, b/ Phonemes

/p/ is pronounced when spelt as:

p pen /pen/ перо
pp happy /'hæpi/ счастливый
gh hiccough /'hɪklɒp/ икота

/p/ is not pronounced:

(1) in the following words:

cupboard /'kʌbəd/ — шкаф

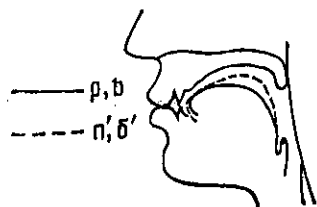


Fig. 25

raspberry /'rɑ:zbəri/ — малина

receipt /rɪ'si:t/ — расписка

(2) in Greek words before **n, s, t**:

pneumonia /nju'maʊnjə/ — воспаление легких

pneumatic /nju'mætɪk/ — пневматический

psalm /sa:m/ — псалом

Ptolemy /'tələmi/ — Птоломей

/b/ is pronounced when spelt as:

b — be /bi:/ — быть

bb — ebb /eb/ — убывать

/b/ is not pronounced in the words after **m** and before **t**:

lamb /læm/ — ягненок

debt /det/ — долг

plumber /'plʌmə/ — водопроводчик

doubt /daʊt/ — сомнение

comb /kəʊm/ — гребень

subtle /'sʌtl/ — тонкий, хитрый

bomb /bɒm/ — бомба

/t, d/

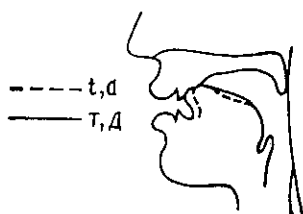
I. /t/ is voiceless fortis, /d/ is voiced lenis

II. lingual forelingual apical alveolar

III. occlusive (plosive, or stop)

(1) noise, (2) unicentral

IV. oral



--- t, d
— т, д

Fig. 26

The English /t/ is pronounced with aspiration, the Russian /т/ is not aspirated.

The English /t, d/ are never soft, whereas in the Russian language there are two independent phonemes: /т/ and /т'/, /д/ and /д'/. It can be proved by the existence of such minimal pairs, as:

брат — брать Дон — дён (диал.)

The English /t, d/ are apical, the Russian /т, д/ are dorsal.

To avoid palatalization of the English /t, d/ in the initial position, when they are followed by front vowels, it is advisable to do contrast exercises of the following type:

| | | |
|------------------|--------------------|------------------|
| ты — tea /ti:/ | тим — Tim /tɪm/ | дик — Dick /dɪk/ |
| тын — tin /tɪn/ | тиф — teeth /ti:θ/ | дед — dead /ded/ |
| тик — tick /tɪk/ | дим — deam /di:m/ | дел — dell /del/ |

Graphic Equivalents of the /t, d/ Phonemes

/t/ is pronounced when spelt as:

t take /teɪk/ — брать

tt better /'betə/ — лучше

ed stopped /stɒpt/ — остановился

th Thames /temz/ — Темза
 Thomas /'tɒməs/ — Томас
 Thomson /'tɒmsn/ — Томсон
 Anthony /'æntəni/ — Энтони
 Esther /'estə/ — Эсфирь

/t/ is not pronounced:

(1) in the following words:

often /'ɔ:fn, 'ɒfn/ — часто
 Christmas /'krɪsməs/ — рождество
 boatswain /'bəʊsn/ — боцман
 soften /'sɒfn/ — смягчать
 bankruptcy /'bæŋkrəpsɪ/ — банкротство
 chestnut /'tʃesnʌt/ — каштан

(2) in words ending in **-stle, -sten**:

listen /'lɪsn/ — слушать castle /'kɑ:sl/ — замок
 hasten /'heɪsn/ — спешить ostler /'ɒslə/ — конюх

(3) in French borrowings:

restaurant /'restro:ŋ/ — ресторан
 mortgage /'mɔ:ɡɪdʒ/ — закладная, закладывать
 trait /treɪ, treɪt/ — черта
 bouquet /'buket/ — букет

/d/ is pronounced when spelt as:

d do /du:/ — делать
 dd add /æd/ — добавлять
 ed begged /begd/ — просил
 ddh buddhism /'budɪzm/ — буддизм

/d/ is not pronounced in the following words:

handkerchief /'hæŋkətʃɪf/ — носовой платок
 handsome /'hænsəm/ — красивый
 Guildford /'ɡɪlfəd/ — Гильдфорд
 Windsor /'wɪnzə/ — Виндзор

/k, g/

- I. /k/ is voiceless fortis, /g/ is voiced lenis¹
- II. lingual, backlingual
- III. occlusive (plosive, or stop)
- (1) noise, (2) unicentral
- IV. oral

The English /k/ is aspirated in the initial position. k, g

The Russian /к/ is pronounced without aspiration:
 кино, куль.

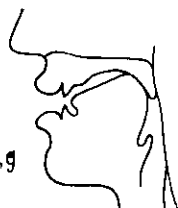


Fig. 17

¹ Since only the first classificatory principle of the consonants /k, g/ is different, principles II, III, IV are given for both.

The Russian /r/ is fully voiced in the initial position and devoiced almost completely in the final position: *род, роз*.

To avoid palatalization of the English /k, g/ it is advisable to do exercises of the following type:

акын — кино — keen
кило — keel
кипа — keep

To observe the correct degree of aspiration of /p, t, k/ the following exercises are recommended:

1. Strongest aspiration in the initial position:
tie, toe, party, taper, coat, tart, patter, cape
2. Less strong aspiration is manifested in the devoicing of /l, r, w, j/ after /p, t, k/:
pray, proper, creep, try, quick, pleat, crow, clip, clean, queen
3. Less strong aspiration is manifested before a short vowel:
pity, tick, cut
4. Practically no aspiration:
(a) after /s/: **stop, spit, score, sport, scope**
(b) in the final position: **top, pit, cope, port, coke**

Graphic Equivalents of the /k, g/ Phonemes

/k/ is pronounced when spelt:

- k** keep /ki:p/ — держать, иметь
c before /a, o, u/
cap /kæp/ — мочь, быть в состоянии, coat /kouʔ/ — пиджак, пальто; cut /kʌt/ — порез
c in the terminal position — music /'mjuzɪk/ — музыка
ck black /blæk/ — черный; lock /lɒk/ — замок
ch in a number of Latin and Greek words:
chemist /kemɪst/ — химик, character /'kærəktə/ — характер, anchor /'æŋkə/ — якорь, scheme /ski:m/ — план, проект
qu quick /kwɪk/ — быстрый, banquet /'bæŋkwɪt/ — банкет
cqu acquaintance /ə'kweɪntəns/ — знакомство
cc account /ə'kaʊnt/ — счет в банке
sc sceptic /'skeptɪk/ — скептик
x = /ks/ except /ɪk'sept/ — исключать, exhibition /,eksɪ'biʃn/ — выставка
gh hough /hɒk/ — поджилки

/k/ is not pronounced:

- (1) before /n/ in the initial position:
knife /naɪf/ — нож
- (2) in the words:

indict /ɪn'daɪt/ — обвинять
victuals /'vɪtlz/ — съестные припасы
muscle /'mʌsl/ — мускул

/g/ is pronounced when spelt:

- (1) g before /a, o, u/, before a consonant and in the terminal position:

go /gou/ — ход, ходьба game /geɪm/ — игра
good /gud/ — добро, благо leg /leg/ — нога

(2) but also in the words:

get /get/ (get) — доставать give /gɪv/ — давать
girl /gɜ:l/ — девочка gig /gɪg/ — кабриолет
gild /gɪld/ — золотить

gg egg /eg/ — яйцо

gu guard /ga:d/ — охрана

gh ghost /'goust/ — привидение

x = /gz/ examine /ɪg'zæmɪn/ — рассматривать, осматривать
/g/ is not pronounced:

(1) before /n/ in the initial and final positions:

gnat /næt/ — комар gnaw /nɔ:/ — грызть
feign /feɪn/ — притворяться sign /saɪn/ — знак

(2) when spelt as:

ng singer /'sɪŋə/ — певец, tongue /tʌŋ/ — язык

gm in the Greek words such as:

diaphragm /'daɪəfræm/ — диафрагма, paradigm /'pærədəɪm/ — пример,

phlegm /flem/ — мокрота; хладнокровие but phlegmatic /fleg'mætɪk/

gh high /haɪ/ — высокий sigh /saɪ/ — вздыхать

plough /plau/ — пахать light /laɪt/ — свет

Questions

1. Is it possible to give a detailed description of a sound within the limits of a short definition?

2. What are the ways to learn a consonant?

3. To what classificatory groups do the phonemes /p, b, t, d, k, g/ belong according to the I, II, III, IV principles?

4. What is the difference between the English and the Russian occlusive consonant phonemes from the viewpoint of the tongue and the lips position?

5. What is palatalization? Is it a phonemic feature in English?

6. What is the difference between the English /p, t, k/ phonemes and the Russian /п, т, к/ phonemes from the viewpoint of voice-breath distinction?

7. Prove that softness of consonants in Russian is a phonemic feature.

8. How are the phonemes /p, t, k; b, d, g/ represented in orthography?

Exercises

1. Define the consonant phonemes /p, t, k/.

2. Define the consonant phonemes /b, d, g/.

3. State acoustic, articulatory, and phonemic differences between the English /p, t, k/ and the Russian /п, т, к/.

4. State acoustic, articulatory and phonemic differences between the English /b, d, g/ and the Russian /б, д, г/.

*5. Transcribe the words and read them. Observe the degree of aspiration: (a) the strongest, (b) less strong, (c) practically no aspiration.

(1) keep, pieces, teachers, people, purpose, curtain, turned, curly, car, courts, parts, pause, take, time, ties, tears, cold, total, care, peer-ing

(2) till, kissed, tin, pity, penny, tell, tennis, Pendelton, campus, Cambrian, taxi, put, took, cook, currents, colour, pumped, republic, covered, tons, possible, cost, college, toss

(3) spent, stay, stone, study, stick, started, splendid, experience, extensively, basket, cleaning, explain, place, plan, classes, plain, creek, crept, crop, platform, act, kept, looked

*6. Transcribe these words and read them. Avoid palatalization of consonants before the front and mixed vowels.¹

Lesson 1 /p/ people, pay, permanent

/t/ eating

/k/ camp, kitchen

/b/ billiards

/d/ different, idea

/g/ get, again, girls

Lesson 2 /p/ purgative, epidemic

/k/ capsules

/b/ bed, better

/d/ different

Lesson 3 /p/ pieces, pence, pages

/t/ twenty, sixteen, turning

/k/ carefully

/b/ birds, big, unbelievable

/d/ different, don't

/g/ guineas, giving, goes

Lesson 4 /p/ pieces, repaired, purpose

/t/ tears, take, turned

/b/ been, big, bed, back, both

/d/ idea, decided, didn't, day

/g/ get, guessed, girls, going

Lesson 5 /p/ picture, period, expect, pair

/t/ fifteen, instead, artist

/k/ keep, basket, vacation, campus

/b/ be, beside, embarrassing

/d/ study, depths, days, Daddy

/g/ giggle, gets, girls, go

Lesson 6 /p/ pink, experience, penny, pale

/t/ tin, wanted, take, turned

/k/ drinking, came, candid, curly

/b/ been, beacon, bit, bad, Burton

¹ The exercise was borrowed from Practical Course of English (Second year). Ed. by Arakin V. D. M., 1973.

| | | |
|----------|-----|----------------------------------|
| | /d/ | condition, nodded, idea |
| | /g/ | give, get, girls |
| Lesson 7 | /p/ | especially, pattern |
| | /t/ | still, potatoes, tulip |
| | /k/ | keep, occasional, can, occupy |
| | /b/ | be, sugar-beet, backbone |
| | /d/ | Dee, deer, muddy, dirt |
| | /g/ | gives, longest, regular |
| Lesson 8 | /p/ | appealing, paid, pupils, perfect |
| | /t/ | teach, stick, Tuesday, tears |
| | /k/ | keep, looking, carriage, cold |
| | /b/ | be, obeyed, back, boat |
| | /d/ | indeed, dinner, duly, date |
| | /g/ | given, guessed, again, ago |
| Lesson 9 | /p/ | planning, pit, repaid, passenger |
| | /t/ | stiff, city, grotesque, turns |
| | /k/ | keep, breaking, carriage, cold |
| | /b/ | being, best, back, Burrow |
| | /d/ | deal, ditties, dear, dead |
| | /g/ | getting, gave, go |

*7. Transcribe these words. Say how the /p, t, k, b, d, g/ sounds are represented in spelling. Point out the letters which represent the mute sounds /p, t, k; b, d, g/.

happy, hiccough, cupboard, pneumonia, lamb, plumber, bomb, Thomas, Christmas, listen, whistle, bouquet, handkerchief, Windsor, chemist, anchor, banquet, except, muscle, ghoast, gnaw, sign, tongue, diaphragm, sigh, plough, eight

OCCLUSIVE NASAL SONORANTS

/m, n, ŋ/

In the /m, n, ŋ/ phonemes only the second principle of classification is different:

/m/ is labial bilabial

/n/ is lingual forelingual apical alveolar

/ŋ/ is backlingual velar

All the other principles (I, III, IV) are similar.

I. in the articulation of /m, n, ŋ/ voice prevails over noise, so they are sonorants

II. see above

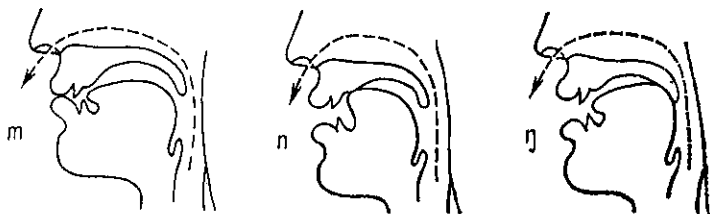


Fig. 28

nn dinner /'dɪnə/ — обед
en written /'rɪtɪn/ (write) — написанный
on button /'bʌtɪn/ — пуговица

/n/ is not pronounced in the words:

damn /dæm/ — проклятье, solemn /'sələm/ — торжественный

/ŋ/ is pronounced when spelt:

ng long /lɒŋ/ — длинный, strong /strɒŋ/ — сильный
nk sink /sɪŋk/ — раковина
ing writing /'raɪtɪŋ/ — писание, reading /'ri:diŋ/ — чтение
ngue tongue /tʌŋ/ — язык

/ŋ/ is pronounced, when **ng** is immediately followed by a vowel (with the exception of the degrees of comparison of adjectives, where /g/ is pronounced), cf.

younger /'jʌŋɡə/, longer /'lɒŋɡə/, singer /'sɪŋɡə/, but: 'getting ,on /'getɪŋ ,ɒn/, 'peering 'anxiously /'piəriŋ 'æŋkɪəsli/, 'working in the ,garden /'wɜ:kɪŋ ɪn ðə ,ɡɑ:dn/, 'coming ,out /'kʌmɪŋ ,aʊt/

In such combinations, the uvula takes part in the articulation of the sound /ŋ/.

| /ŋɡ/ | /ŋ/ |
|---------|-------------------------|
| younger | 'getting ,on |
| longer | 'peering ,anxiously |
| singer | 'working in the ,garden |
| | 'coming ,out |

In the words: English, England, mingled, hungry the sounds /ŋɡ/ are represented in spelling by the letters **ng**.

Questions

1. Why are the /m, n, ŋ/ phonemes referred to sonorants?
2. What is the difference between /m, n, ŋ/ from the viewpoint of the active organ of speech (II)?
3. What are the ways to teach students the English consonant phoneme /ŋ/?
4. What is the difference in articulation between the English /m, n/ and the Russian /м, н/?
5. How are the sounds /m, n, ŋ/ related to orthography?

Exercises

1. Define the sounds /m, n, ŋ/.
2. State the acoustic articulatory and phonemic differences between the English /m, n/ and the Russian /м, н/.
3. Describe the position of the tongue in the articulation of the English /m, n, ŋ/.
4. Read these words and spell them. Translate them into Russian.

| | | |
|-----------|-----------|----------------|
| θɪn — θɪŋ | ræn — ræŋ | wɪnz — wɪŋz |
| wɪn — wɪŋ | sæn — sæŋ | teɪkn — teɪkɪŋ |
| sɪn — sɪŋ | ræn — ræŋ | |

***5. Transcribe these words, read and translate them into Russian.**

| | |
|---------------------|---------------------|
| yarn — young | son — sung |
| thin — thing | clean — cling |
| give in — giving | not thing — nothing |
| drive in — driving | go in — going |
| come in — coming | own — owing |
| sane — saying | |
| break in — breaking | |
| look in — looking | |

***6. Transcribe these words. Underline /ɒ/ with a single line, /oŋ/ with two lines, /ŋ/ with a wavy line.**

bring, lungs, England, younger, anything else, English, nothing of the kind, willingly, taking it, mingled, sleeping, thing, hungry, fishing, morning, driving on, longer, young, getting on, spring, seeing a friend off, clasping in both hands

***7. Transcribe these words and use them to explain the /m, n, ŋ/ relation to orthography.**

writing, reading, going, gone, when, sung, hungry, suck, thing, thick, hanger, hanker, rang, rank, comb, autumn, English, mingled

CONSTRUCTIVE NOISE CONSONANT PHONEMES (FRICATIVES)

/s, z, f, v, θ, ð, h, ʃ, ʒ/
/s, z/

- I. /s/ is voiceless fortis
/z/ is voiced lenis
- II. lingual forelingual apical alveolar
- III. constrictive noise unicentral with a round narrowing
- IV. oral

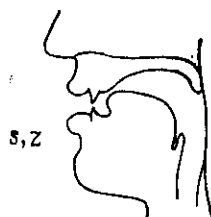


Fig. 29

The /s, z/ phonemes are pronounced with a round narrowing because the air passes out of the mouth cavity through the narrowing, which is formed between the teethridge and the tip of the tongue. There is a groove-like, or round, narrowing in the fore part of the tongue raised to the teethridge (apical position).

The Russian /c, ʒ/ are pronounced with the tip of the tongue lowered to the upper or low teeth (dorsal position).

Graphic Equivalents of the /s, z/ Phonemes

/s/ is pronounced when spelt:

- s** speak /spi:k/ — говорить
ss pass /pa:s/ — проход, путь

- c** (before /e, i, y/): certainly /'sə:tnɪ/ — конечно, непременно
 circle /'sə:kl/ — круг, сунік /'sɪnɪk/ — циник
- sc** scene /si:n/ — место действия (в пьесе, романе и т.д.)
 scissors /'sɪzəz/ — ножницы
 scythe /saɪð/ — коса (серб)
 coalesce /'kəʊə'les/ — соединяться
 abscess /'æbsɪs/ — нарыв
- sch** in the word schism /sɪzm/ — раскол, ересь
- ces** in the middle of the word Leicester /'lestə/
- tz** in quartz /kwɔ:ts/ — кварц

/s/ is not pronounced:

- (1) in the words:

isle /aɪl/ } — остров
 island /'aɪlənd/ }
 aisle /aɪl/ — крыло постройки
 Grosvenor /'grəʊvənə/ — Гросвенор

- (2) in French borrowings:

corps /kɔ:/ — корпус, chamois /'ʃæmɪ/ — замша

/z/ is pronounced when spelt:

- z** zeal /zi:l/ — рвение, puzzle /'pʌzl/ — трудный вопрос
- s** if terminal or followed by vowels or voiced consonants:

houses /'haʊzɪz/ — дома walls /wɔ:lz/ — стены
 husband /'hʌzbənd/ — муж socialism /'səʊʃəɪzəm/ — социализм

- ss** in the words:

dessert /dɪ'zɜ:t/ — десерт
 dissolve /dɪ'zɒlv/ — растворять
 hussar /hu'zɑ:/ — гусар
 possess /pə'zes/ — владеть
 scissors /'sɪzəz/ — ножницы

/f, v/

- I. /f/ is voiceless fortis

/v/ is voiced lenis

- II. labial labio-dental

- III. constrictive noise unicentral with a flat narrowing

- IV. oral

The /f, v/ phonemes are labio-dental because the air passing out of the mouth cavity meets an incomplete obstruction which is formed by the low lip raised to the edge of the upper teeth. The narrowing between the upper teeth and the low lip is flat.

Care should be taken not to device /v/ in the terminal position.

Cf. rove /rouv/ — ров /роф/ of /ɔf/ — шов /шоф/

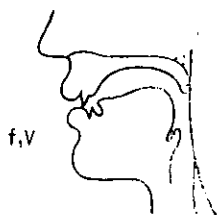


Fig. 30

Graphic Equivalents of the /f, v/ Phonemes

/f/ is pronounced when spelt:

- f** fork /fɔ:k/ — вилка
ff off /ɔ(:)f/ — более удаленный, дальний
ph physics /'fɪzɪks/ — физика
pph sapphire /'sæfəɪə/ — сапфир
ugh enough /ɪ'nʌf/ — достаточный, laugh /la:f/ — смеяться, cough /kɔ:f, kɒf/ — кашлять
 draught /dra:ft/ — сквозняк
 tough /tʌf/ — твердый
 rough /rʌf/ — грубый, неровный

/f/ is not pronounced in the words:

- halfpenny /'heɪp(ə)nɪ/ — полпенса
 американское /lʃu:'tenənt/ и морское /lə'tenənt/ но lieutenant /leɪ'tenənt/ — лейтенант

/v/ is pronounced when spelt:

- v** view /vju:/ — вид
f of — от, о, об (preposition)
ph nephew /'nevju/ но также /'neɪfju/ — племянник
 Stephen /'sti:vɪn/ — Стивен

/θ, ð/

I. /θ/ is voiceless fortis

/ð/ is voiced lenis

II. lingual forelingual apical dental (interdental)

III. constrictive noise unicentral with a flat narrowing

IV. oral

There are no similar sounds in the Russian language. The place of incomplete obstructions is between the tip of the tongue (which may be slightly projected) and the teeth.

There are several mistakes the Russian students make in the articulation of /ð, θ/: they substitute /s, f/ for /θ/ and /z, v/ for /ð/ and similarly — the

Russian /c, φ/ for /θ/ and /в, д/ for /ð/.

1. To avoid the /f/ for /θ/ articulation care should be taken to observe the position of the low lip, which should be separated from the edge of the upper teeth so that the low teeth can be seen.

2. To avoid the /s/ for /θ/ articulation the tip of the tongue should be slightly projected between the teeth (take care not to switch on the vocal cords).

3. To avoid the /z/ for /ð/ articulation observe the second recommendation and make the vocal cords vibrate to produce a voiced consonant /ð/.

4. To avoid the /v/ for /ð/ articulation observe the first recommendation and make the vocal cords vibrate to produce a voiced consonant /ð/.



Fig. 31

The substitution of /s, f, z, v, t, d/ for /θ, ð/ leads to mistakes because those are different phonemes. It can be proved by the following examples of minimal pairs:

| /θ/ vs. /s/ | | /θ/ vs. /t/ |
|-------------|---------|------------------|
| thick | — sick | thick — tick |
| mouth | — mouse | thought — taught |
| thumb | — sum | three — tree |
| worth | — worse | heath — heat |
| | | both — boat |
| | | fourth — fort |

| /ð/ vs. /z/ | | /ð/ vs. /d/ |
|-------------|----------|----------------|
| see the | — sees | then — den |
| lathe | — laze | though — dough |
| clothe | — close | see the — seed |
| breathe | — breeze | there — dare |
| | | other — udder |
| | | worthy — wordy |

Russian learners use the /st, zd/ combinations instead of /θ, ð/. Given below are some exercises that should be done to avoid this mistake.

| | |
|-----------------|-------------------|
| /s/ + /θ/ | this thing, sixth |
| /z/ + /θ/ | his thumb |
| /s/ + /ð/ | pass the |
| /z/ + /ð/ | is this |
| /θ/ + /s/ + /ð/ | Smith's there |
| /ð/ + /z/ + /ð/ | soothes them |

Graphic Equivalents of the /θ, ð/ Phonemes

/θ, ð/ are always spelt **th**:

thick /θɪk/ — толстый
thin /θɪn/ — тонкий
there /ðeə/ — там
with /wɪð/ — с (preposition)

/h/

- I. voiceless fortis
- II. pharyngeal
- III. constrictive noise unicentral with a flat narrowing
- IV. oral

The /h/ phoneme is pronounced when the voice is breathed out of the pharynx. Simultaneously the back wall of the pharynx and the root of the tongue are slightly contracted.

Russian students often use the backlin-

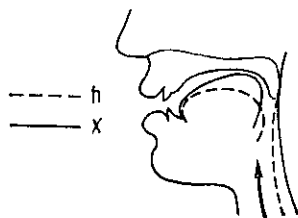


Fig. 32

gual Russian /x/ instead of the pharyngeal ¹ /h/. To avoid this mistake it is advisable to do contrast exercises of the following type:

| | | |
|-------------|-------------|-------------|
| хил — hill | хала — hull | худо — hood |
| холл — hall | хитр — heet | |

Graphic Equivalents of the /h/ Phoneme

/h/ is pronounced when spelt:

h how /hau/ — как, hil /hɪl/ — холл
hate /heit/ — ненависть

wh who /hu:/ — кто, whom /hu:m/ — кому

/h/ is not pronounced in the initial position:

hour /auə/ — час, honest /'ɒnɪst/ — честный
honour /'ɒnə/ — честь, heir /eə/ — наследник
heiress /'eərɪs/ — наследница

in the medial position:

exhaust /ɪg'zɔ:st/ — выпуск, выхлоп
exhibit /ɪg'zɪbɪt/ — экспонат
vehicle /'vi:kl/ — автомобиль

in some final affixes:

shepherd /'ʃepəd/ — пастух

/ʃ, ʒ/

I. /ʃ/ voiceless fortis

/ʒ/ voiced lenis

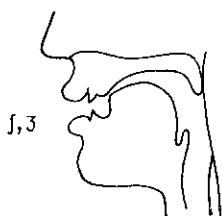


Fig. 33

II. lingual forelingual apical palato-alveolar

III. constrictive noise bicentral with a front secondary focus with a flat narrowing

IV. oral

In the articulation of the /ʃ, ʒ/ phonemes the tip of the tongue is raised to the teethridge, but does not touch it forming a narrow air passage. Simultaneously the middle part of the tongue is raised to the hard palate which results in the soft colouring. The sounds /ʃ, ʒ/ are soft or slightly palatalized.

The Russian /ш, ж/ are hard sounds. They are produced with a back secondary focus and have the /ы/ colouring.

To avoid the pronunciation of the Russian /ж, ш/ for the English /ʃ, ʒ/ which are harder than the English /ʃ, ʒ/ it is useful to do a contrast exercise of the following type:

| | | |
|------------|--------------|---------------|
| шип — ʃi:p | шнт — ʃi:t | ложе — 'pleʒə |
| шин — ʃi:n | кожа — 'meʒə | тоже — 'æʒə |
| шик — ʃi:k | | |

¹ H. A. Gleason calls /h/ "glottal".

Graphic Equivalents of the /ʃ, z/ Phonemes

/ʃ/ is pronounced when spelt:

- sh** she /ʃi:/ — она
s sugar /'ʃʊgə/ — сахар
ss assure /ə'ʃʊə/ — уверять
si Asia /'si:/ — Азия, Persia /'pɜ:ʃə/ — Персия
sion (after consonants):
 pension /'penʃn/ — пенсия, version /'vɜ:ʃn/ — перевод; версия
ssi session /'seʃn/ — сессия, mission /'mɪʃn/ — миссия
ti ration /'ræʃn/ — паек, notion /'nouʃn/ — понятие
se nausea /'nɔ:ʃiə, 'nɔ:siə/ — тошнота
ci suspicion /səs'pɪʃn/ — подозрение
ce ocean /'ouʃn/ — океан
sci + a vowel in the middle of a word after the accented syllable:
 conscience /'kɒnʃəns/ — совесть, conscientious /,kɒnʃi'enʃəs/ — добро-
 совестный, честный
sch schedule /'ʃedju:l/ (/ʃskedju:l/ *Amer.*) — расписание
ch in French borrowings:
 machine /mə'ʃi:n/ — машина, chivalry /'ʃɪvəlri/ — рыцарство,
 champagne /ʃæm'peɪn/ — шампанское, chaise /ʃeɪz/ — почтовая карета
x = /kʃ/ in accented syllables:
 luxury /'lʌkʃəri/ — роскошь, anxious /'æŋkʃəs/ — беспокойный
 but in unaccented syllables:
 luxurious /lʌg'zɪʊəriəs/ — роскошный, anxiety /æŋ(g)'zaɪəti/ — тревога,
 беспокойство

/z/ is pronounced when spelt:

- g** regime /reɪ'zi:m/ — режим, ruge /ru:z/ — румяна
s pleasure /'plezə/ — удовольствие
si decision /dɪ'sɪz(ə)n/ — решение
zi glazier /'gleɪzə/ (*more often* /'gleɪziə/) — стекольщик
zu azure /'æzə/ — голубой, лазурный
ti transition /træn'sɪzən/ — переход; переходный период
zh Zhukov /'zʊkəv/

Questions

1. To what classificatory groups do the /s, z, f, v/ sounds belong according to the I, II, III, IV principles of consonant classification?
2. Why are the /s, z/ consonants considered to be unicentral with a round narrowing?
3. What is the difference in articulation of the English /s, z/ and the Russian /с, з/?
4. Why are the /f, v/ consonants considered to be unicentral with a flat narrowing?
5. What is the articulatory difference between the English /f, v/ and the Russian /ф, в/?
6. What are the graphic equivalents of the consonants /s, z, f, v/?

7. To what classificatory groups do the /θ, ð, h, ʃ, ʒ/ sounds belong according to the I, II, III, IV principles?

8. Why is it difficult to master the pronunciation of /θ, ð/?

9. Why is it difficult to master the pronunciation of /h/?

10. Why do the sounds /ʃ, ʒ/ belong to the subgroup of bicentral with a front secondary focus?

11. What are the difficulties in mastering the /ʃ, ʒ/ pronunciation?

12. What are the graphic equivalents of the consonants /θ, ð, h, ʃ, ʒ/?

Exercises

1. Define the consonant phonemes /s, z, f, v/.

2. State articulatory and phonemic differences between /s — z/, /f — v/, /s — f/, /z — v/.

3. Define the consonant phonemes /θ, ð/.

*4. Read these words, spell them and translate them into Russian.

| | | |
|-------------|-------------|------------------|
| θɪn — sin | θɪk — tik | hi:θ — hi:t |
| θɪk — sik | θɔ:t — to:t | bouθ — bout |
| θɔ:t — so:t | θri: — tri: | fɔ:θ — fɔ:t |
| fɔ:θ — fɔ:s | si:ð — si:z | klouð — klouz |
| mauθ — maus | leɪð — leɪz | bri:ð — bri:z |
| θAm — sAm | ðen — den | ðeə — deə |
| wə:θ — wə:s | ðou — dou | ˈʌðə — ˈʌde |
| | si:ð — si:d | ˈwə:ðɪ — ˈwə:drɪ |

*5. Transcribe these words and read them.

| | | |
|------------------|------------------|----------------|
| found — thousand | fought — thought | Finns — things |
| first — thirst | free — three | deaf — depth |

6. State the articulatory differences between /θ — s/, /θ — t/, /θ — f/, /ð — z/, /ð — v/, /ð — d/.

7. Prove by minimal pairs that /θ — s/, /θ — t/, /ð — z/, /ð — d/ are different phonemes.

8. Define the consonant phoneme /h/.

9. State articulatory differences between the English /h/ and the Russian /x/.

10. Read these words. Mind the pronunciation of /h/ as a pure sound of breath.

help, hall, house, here, hand, harm, heard, hold, head, hear, hot, hills, high, whole, he, his, has, him, 'hardship, 'holiday, 'horror, ho'tel, 'human, 'happy, be'hind, 'hither'to, 'heather, 'handsome, 'hardly, 'horses, 'Henry, 'Holland, 'Hubert, 'Helen

*11. Transcribe these words. Translate them into Russian and read them.

| | | | |
|-------------|------------|--------------|--------------|
| all — hall | it — hit | ought — hot | and — hand |
| ear — hear | ill — hill | is — his | arm — harm |
| out — house | as — has | oust — house | adds — hands |
| art — heart | add — had | | air — hair |

12. Define the consonant phonemes /ʃ, ʒ/.

13. Describe the bicentral position of the tongue in the production of the noise /ʃ, ʒ/ sounds.

*14. Read these words. Spell them and translate them orally into Russian.

| | | | | |
|------------|---------------|---------|---------|------|
| ʃi:p | ʃip | ʃed | ʃeiv | ʃerp |
| ʃi:t | ʃud | ʃel | ʃeid | ʃaɪ |
| ʃi:n | ʃuk | ʃeik | ʃeɪm | ʃaɪn |
| ɪ'lekʃn | kəmpə'tɪʃn | 'pleʒə | 'vɪʒn | |
| kən'dɪʃn | ɔ:gənəɪ'zeɪʃn | 'leʒə | ə'keɪʒn | |
| dɪlɪ'geɪʃn | 'steɪʃn | dɪ'sɪʒn | 'meʒə | |

*15. Transcribe these words and read them.

she, sheep, shut, fish, brush, Irish, fishing, special, station, usual, usually, pleasure, shop, sugar, should, flash, British, English, anxious, anxiously, especially, Angelo, occasion, occasional

*16. Transcribe these words. Use them to explain the /s, z, f, v, θ, ð, h, ʃ, ʒ/ relation to orthography.

pass, certainly, cynic, scythe, Leicester, isle, houses, husband, dessert, hussar, physics, sapphire, enough, draught, lieutenant, nephew, Matthew, Galsworthy, exhaust, vehicle, shepherd, sugar, assure, version, notion, social, conscience, chivalry, chaise, regime, pleasure, decision, azure

CONSTRUCTIVE SONORANTS

/r, j, l, w/

In the articulation of these consonant phonemes voice prevails over noise, therefore all of them are *sonorants*.

/r/

- I. sonorant
- II. lingual forelingual cacuminal post-alveolar
- III. constrictive medial unicentral
- IV. oral

Similarly to all English forelingual consonants /r/ is pronounced with the tip of the tongue against the teethridge. It is the place where the Russian /ж/ is articulated, but the tip of the tongue is curled further backward, behind the back slope of the teethridge. This position of the tip of the tongue is called *post-alveolar*, or *cacuminal*. The air passes out of the mouth cavity along the central, or middle part of the tongue and then through the narrowing formed by the tip and the back slope of the teethridge. This passage is rather wide, so voice prevails over noise and the sound produced is a *sonorant*.

In the /r/ production the tip and the blade of the tongue are not so tense as in the articulation of the Russian /ж/.

Similar Russian sound /p/ (apical sonorant) is characterized by a different manner of the production of noise: the tip of the tongue

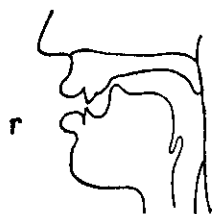


Fig. 34

vibrates in the flow of air and interrupts it repeatedly forming momentary obstructions against the teethridge. The Russian sound /p/ is *rolled*, or *trilled*.

To pronounce /r/ in the proper way care should be taken to hold the tip of the tongue placed in the post-alveolar position while breathing the air out of the mouth cavity.

Combinations with /r + a/ should be practised and learnt: right /rait/, bright /braɪt/, try /traɪ/, dry /draɪ/, grind /graɪnd/; only after that other combinations are to be practised.

Graphic Equivalents of the /r/ Phoneme

/r/ is pronounced when spelt:

- r** red /red/ — красный
- rr** merry /мерɪ/ — веселый
- wr** write /rait/ — писать
- rh** rhythm /рѣѣм/ — ритм

/r/ is not pronounced at the end of the word and before a vowel:

star /stɑ:/ — звезда, first /fə:st/ — первый, door /dɔ:/ — дверь, farm /fɑ:m/ — ферма

/r/ is pronounced at the end of the word if it is followed by another word with an initial vowel:

before I go /bɪ'fɔ:r aɪ'gou/

By analogy this "linking" /r/ intrudes sometimes into the pronunciation of such combinations as: drama and music, India and Pakistan, law and order, area of agreement.

The use of intrusive /r/ should be avoided.

In the American pronunciation /r/ is retroflexed, the tip of the tongue is curled further back behind the back slope of the teethridge and the vowels which precede /r/ acquire the /r/ colouring. The retroflexed allophone of the /r/ phoneme has the symbol [ɹ].

| | | |
|------|--------|---------|
| bird | /bæ:d/ | /bæ:ɹd/ |
| farm | /fɑ:m/ | /fɑ:ɹm/ |
| Lord | /lɔ:d/ | /lɔ:ɹd/ |

/j/

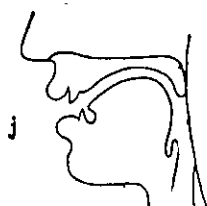


Fig. 35

- I. sonorant
- II. lingual medio-lingual palatal
- III. constrictive medial unicentral
- IV. oral

A. C. Gimson calls it a "semi-vowel" because it is pronounced as "a rapid vocalic glide on to a syllabic sound of a greater steady duration."¹

In the articulation of /j/ the middle part of the

¹ Gimson A. C. Op. cit., p. 207.

tongue is raised to the hard palate but not so high as to produce much friction. The tip of the tongue is lowered. The air passes out of the mouth cavity along the central part of the tongue.

Care should be taken to avoid much noise and not to make the tongue tense when /j/ is articulated, especially in the initial position: yes, yield, yard, you, youth, yawn, yellow

The Russian /й/ is pronounced with more friction, which is the result of the higher position of the middle part of the tongue to the hard palate.

Graphic Equivalents of the /j/ Phoneme

/j/ is pronounced when spelt:

- y yes /jes/, yield /ji:ld/ — уступать, yeast /ji:st/ — дрожжи
- i opinion /'ɒpɪnjən/ — мнение, onion /'ʌnɪjən/ — лук, familiar /fə'mɪljə/ — знакомый
- u (in the initial position):
union /'ju:njən/ — союз, unite /ju:'naɪt/ — объединяться, use /ju:s/ — польза, usual /'ju:ʒuəl/ — обычный
- u (in the medial position):
duty /'dju:tɪ/ — долг, mute /mju:t/ — немой
- eu (in the initial position):
euphony /'ju:fəni/ — благозвучие
(in the medial position):
neuter /'nju:tə/ — средний, feud /'fju:d/ — вражда
- ue rescue /'reskju:/ — спасение, due /dju:/ — должный
- ewe ewe /ju:/ — овца, ewer /'ju:ə/ — кувшин
- eur Europe /'ju:ərəp/ — Европа
- eau beauty /'bju:tɪ/ — красота, beautician /bju:'tɪʃjən/ — косметичка
- ew, iew (in the medial and final positions):
few /fju:/ — немного, new /nju:/ — новый, dew /dju:/ — роса, news /nju:z/ — новости, sewage /'sju:ɪdʒ/ — сточные воды, view /vju:/ — вид

/l/

I. sonorant

II. lingual forelingual apical alveolar

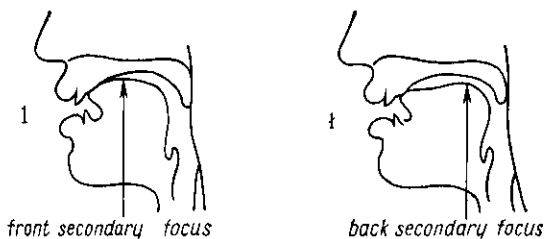


Fig. 36

III. constrictive lateral bicentral front secondary focus [l], back secondary focus [ɫ]

IV. oral

There are two positional allophones of the /l/ phoneme in English (Fig. 36): one is the "clear", or "soft" [l], it is pronounced with the front secondary focus; the other variant of the /l/ phoneme is the "dark" [ɫ], it is pronounced with the back secondary focus.

The "soft" [l] is pronounced before vowels and /j/, the "dark" [ɫ] is pronounced at the end of the words and before consonants.

[l]

[ɫ]

leap, lean, flee, Lewis bill, hill, mill, well, cold

In the articulation of the /l/ phoneme the tip of the tongue is pressed against the teethridge to form a complete obstruction. The air escapes rather freely along the sides of the tongue, which are lowered (usually only one side of the tongue is lowered).

The English "soft" /l/ is not so soft as the Russian /л'/ (in the articulation of the Russian /л'/ the middle part of the tongue is raised still higher to the hard palate). To avoid extra palatalization in the articulation of the English "soft" /l/ the following contrast exercises are recommended:

| | | |
|---------------------|-------------|---------------|
| лев — /left/ | лес — /les/ | лили — /lɪlɪ/ |
| лип — /lɪp/, /li:p/ | люк — /luk/ | |
| лёд — /lɔt/ | лет — /let/ | |

The Russian "soft" and "hard" /л, л'/ are separate phonemes, because each of them serves to differentiate the meaning of words:¹

| | | |
|------------|------------|--------------|
| мол — моль | лот — лёд | ел — ель |
| мел — мель | дал — даль | угол — уголь |

Graphic Equivalents of the /l/ Phoneme

/l/ is pronounced when spelt:

I lay /leɪ/ — класть

II well /wel/ — колодец, родник; хорошо

/l/ is not pronounced in the following cases:

would /wud/ — тяга, желание, should /ʃud/ (*past of shall*), talk /tɔ:k/ — беседа, walk /wɔ:k/ — ходьба, folk /fouk/ — люди, balm /bɑ:m/ — бальзам, calm /kɑ:m/ — тишь, calf /kɑ:f/ — теленок, half /hɑ:f/ — половина, almond /'ɑ:mənd/ — миндаль, salmon /'sæməŋ/ — лосось

/w/

I. sonorant²

II. labial bilabial

III. constrictive bicentral medial with a round narrowing

IV. oral

This sound is bicentral. The first, or primary, focus is formed by the lips which are protruded and rounded. The second, or back secon-

¹ Softness in the Russian soft consonants is the minimal distinctive feature.

² A. C. Gimson terms it a "semi-vowel" as well as /l/.

dary focus is formed by the back part of the tongue, which is raised to the soft palate. The flow of air passes out of the mouth cavity without any audible friction along the middle part of the tongue and through the round narrowing formed by the protruded lips, which instantaneously part. The vocal cords vibrate.

There is no similar sound in the system of Russian consonants.

There is a danger of confusing /w/ with /v/. This mistake is phonemic, because bilabial labio-dental articulatory features in these two phonemes serve to differentiate the meaning of the words, e.g.

| | | | |
|-----------|------------------|------------------|---------------|
| whale кит | — veil вуаль | west запад | — vest нижняя |
| wine вино | — vine виноград- | сорочка; вставка | |
| ная лоза | | worse хуже | — verse стих |

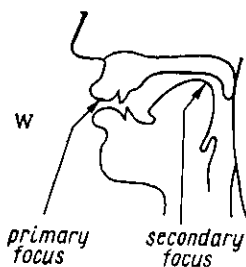


Fig. 37

Graphic Equivalents of the /w/ Phoneme

/w/ is pronounced when spelt:

- w** sweet /swi:t/ — сладкий
wh why /waɪ/ — почему, what /wɒt/ — что, which /wɪtʃ/ — какой
qu quite /kwɪt/ — совсем, square /skwɛə/ — площадь
su persuade /pə'sweɪd/ — убеждать

in the words:

one /wʌn/ — один, once /wʌns/ — однажды, choir /kwaɪə/ — хор

/w/ is not pronounced:

(1) when followed by r:

write /raɪt/ — писать, wrong /rɒŋ/ — зло; неверно

(2) in the words:

who /hu:/ — кто, whose /hu:z/ — чей, чье, whom /hu:m/ — кого,
 whole /həʊl/ — целое, towards /tə:dz, tə'wɔ:dz/ — по направлению к,
 two /tu:/ — два, twopence /'tʌp(ə)ns/ — два пенса, answer /'ɑ:nsə/ — от-
 вет, sword /sɔ:d/ — меч

(3) in the geographical names ending in -wich, -wick:

Greenwich /'grɪnɪdʒ/ — Гринвич, Chiswick /'tʃɪzɪk/ — Чизик

Questions

1. To what classificatory groups do the /r, j, l, w/ sounds belong according to the I, II, III, IV principles of consonant classification?
2. Why are the /r, j, w/ sounds considered medial and the /l, ɫ/ sounds lateral?
3. What are the articulatory differences between the English /r, j, l, ɫ, w/ and the Russian /p, й, л, в/?
4. What are the phonemic differences between the English [ɫ], [ɫ̥] and the Russian /л/, /л'/?
5. Why do the sounds /t, w/ belong to the subgroup of bicentral with a back secondary focus?

6. What are the ways to avoid mistakes the Russian students make in mastering the /r, j, l, w/ pronunciation?

7. How are the English constrictive sonorants related to orthography?

Exercises

1. Define the sonorants /r, j, l, w/.

*2. Read these words. Spell them. Underline the devoiced allophones of the /r/ phoneme.

raɪt, raɪd, raɪp, kraɪ, 'kraɪsɪs, praɪs, greɪ, bred, ri:d, ri:p, 'ri:zn, ri:tʃ, rɪdʒ, rɪsk, frɛnd, fra:ns, rɪŋ, rɒd, ræn, ræŋ, rɒt, rɒŋ, greɪt, traɪ, ru:l, ru:f, ru:m, red, rest, 'redɪ, pres, prɪ'zent, ræʃ, ræg, 'tri:zn, 'rɪtn, rou, roud, 'preznt

*3. Transcribe these words and read them.

rates, red, room, roast, round, rose, record, regular, railway, running, really, Mary, married, friends, Crusoe, drive, prices, true, drowned, dressing, worry, forehead, hundred, temperature, carried, period, borrowed, currents, different, fever, comfort, heather, world, America, cigarette, modern, matter, mother, were, weary, scenery, curly, coloured, never, for, story, figure, work, doors, part, four, car

4. Read these sentences. Mind the linking /r/ in the terminal position before a vowel which begins a new word.

1. Hotels are expensive in the South. 2. You can see Moscow grow before your eyes. 3. There is a theatre and a bar in the building of the new hotel. 4. There are hostels all over the place. 5. The weather gets nicer and nicer. 6. There are a number of small islands on the river. 7. There are more sheep in Wales, than anywhere in the British Isles. 8. In Hyde Park and Kensington Gardens you forget that you are in a big city. 9. Americans are a sociable people they say. 10. The local newspapers were a surprise to me.

*5. Transcribe these words. Read them. Mind the /j/ articulation.

young, youth, your, year, yet, yesterday, used to, news, human, museum, suit, few, reviews, used, capsules

6. Read these words. Observe the "light" [l] before front, mixed and back vowels.

large, lots, look, luck, low, o'clock, looking, absolutely, flushed, following, lost, along, kilometer, fellow, slums, clean, let, late, gladly, realize, lived, letter, plain, blank, learned, willing, left, place, landed, linked, glorious, lovely, lonely, clasp, long, looked, London, clothes, glass, longer, applause, broom

7. Read these words. Observe the "dark" [ɫ] in terminal position and before a consonant (not /j/).

jelp, meals, adult, cold, miles, old, world, rebuilt, will, special, restful, still, rule, wild, twelve, deal, I'll, chuckle, helps, bald, bold

8. Underline the letters, which represent in spelling the "dark" [ɫ] with one line and the "clear" [l] with two lines in the words given below.

felt, hills, always, least, holiday, letter, plans, like, soil, total, gentle, little, left, explain, slack, coloured, lightheaded, small, people, hostel, sleep, believe, lit, reply, model, hotel, article, lasted, longer, looked, lunch, will, special, restful, laughed, long, low, smile, nearly, usual, led, final, place, deal, clapping, fell, loudest

*9. State the articulatory differences between the English and the Russian sounds:

/r/ — /p/
/j/ — /й/
[l] — /л/
[ɫ] — /л'/
/w/ — /в/

*10. Give some examples to prove that the Russian /л/, /л'/ are separate phonemes and the English [l]. [ɫ] are allophones of one and the same phoneme.

*11. What can you prove by the examples given below?

| | |
|-------------|---------------|
| when — van | worse — verse |
| went — vent | west — vest |
| week — Vic | weary — very |

*12. Transcribe these words. Use them to explain how the /r, j, l, w/ sounds are related to orthography.

yes, opinion, onion, unite, mute, neuter, Europe, sewage, would, talk, folk, balm, Lincoln, which, once, choir, whose, towards, sword

OCCLUSIVE-CONSTRUCTIVE NOISE PHONEMES (AFFRICATES) /tʃ, dʒ/

/tʃ, dʒ/

I. /tʃ/ voiceless fortis,
/dʒ/ voiced lenis

II. lingual forelingual apical palato-alveolar

III. occlusive-constructive (affricates) bicentral
(front secondary focus) with a flat narrowing

IV. oral

From the articulatory point of view /tʃ, dʒ/ are indivisible clusters of two sounds: /t/ + /ʃ/ = /tʃ/; /d/ + /ʒ/ = /dʒ/.

/tʃ, dʒ/ are bicentral. The first, or primary focus is formed by the tip of the tongue, which is pressed against the teethridge; the plosion is slowly but immediately released into friction.¹ The second, or front secondary focus is formed by the middle part of the tongue, which is raised to the hard palate.

There are two affricates in the system of Russian consonants — /tʃ/ and /dʒ/. The English /tʃ/ and the Russian /tʃ/ are similar, but the latter is articulated with the dorsal position of the tip of the tongue

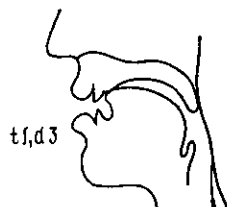


Fig. 38

¹"The friction present in the affricate is of shorter duration, than that, which characterizes the fricative proper." A. C. Gimson. Op. cit., p. 166.

and the secondary focus in /ч/ articulation is formed by raising the middle part of the tongue higher to the hard palate, than in /tʃ/ articulation. The Russian /ч/ is softer than the English /tʃ/.

In order to avoid /tʃ, dʒ/ confusion the following exercise is recommended:

catches ловит — cadges попрошайничает
riches богатства — ridges горные хребты
lunch ленч — lunge бросок
beseech умолять — besiege осаждать

There is no sound in the Russian language similar to /dʒ/, but when the Russian /ч/ is voiced under the influence of the following voiced consonant we hear a sound similar to /dʒ/:

| | |
|------------|--------------|
| меч златой | с плеч долой |
| ключ забыл | врач дома |
| | луч заката |

Care should be taken to pronounce both parts of the affricate /dʒ/ simultaneously. Cf.

Джон — /dʒɒn/ John, Джек — /dʒæk/ Jack, Джейн — /dʒeɪn/ Jane.

Graphic Equivalents of the /tʃ, dʒ/ Phonemes

/tʃ/ is pronounced when spelt:

ch child /tʃaɪld/ — ребенок
tch kitchen /'kɪtʃən/ — кухня
tu nature /'neɪtʃə/ — природа
ti question /'kwɛstʃən/ — вопрос
te righteous /'raɪtʃəs/ — праведный

also in the word mischief /'mɪstʃɪl/ — вред

/dʒ/ is pronounced when spelt:

j joy /dʒɔɪ/ — радость
g before e, i, y in French and Latin borrowings:
giant /'dʒaɪənt/ — гигант, gem /dʒem/ — драгоценный камень, gyps /dʒɪps/ — гипс
ge, gi in the middle of the word in an accented syllable between the vowel sounds:

advantageous /'ædvɑ:n'teɪdʒəs/ — выгодный, legion /'li:dʒən/ — легион
ge at the end of words:

large /lɑ:dʒ/ — большой, singe /sɪndʒ/ — спалить, подпалить; but
rouge /ru:ʒ/ — румяна

dg budget /'bʌdʒɪt/ — бюджет, knowledge /'nɒlɪdʒ/ — знание

du verdure /'vɜ:dʒə/ — зелень

de grandeur /'grændʒə/ — величие, великолепие

di soldier /'souldʒə/ — солдат

ch Greenwich /'grɪnɪdʒ/ — Гринвич, sandwich /'sænwɪdʒ/ — сандвич,
бутерброд

Questions

1. To what classificatory groups do the /tʃ, dʒ/ phonemes belong according to the I, II, III, IV principles of consonant classification?
2. Why are the /tʃ, dʒ/ sounds considered to be affricates?
3. What is the articulatory difference between the English /tʃ, dʒ/ and the Russian /ч, ж/?
4. Is the presence of voice in /dʒ/ a phonemic feature?
5. What are the articulatory difficulties in the /tʃ, dʒ/ production?
6. How are the consonants /tʃ, dʒ/ related to orthography?

Exercises

1. Define the affricates /tʃ, dʒ/.
- *2. State the acoustic, articulatory and phonemic differences between /tʃ, dʒ/ and /tr, dr, ts, tz, tθ, dθ/.

- *3. Read these words. Spell them and translate them into Russian orally.

| | | | | | |
|-------|---------|-------|--------|---------|-----------|
| tʃɪn | 'tʃaɪnə | tʃɒp | dʒɪm | peɪdʒ | dʒeɪn |
| tʃek | tʃaɪld | wɒtʃ | dʒɪn | tʃeɪndʒ | dʒɔ:dʒ |
| tʃes | rɪtʃ | tʃɔ:k | 'dʒɪmɪ | 'dʒeɪnɪ | 'dʒæ:mənɪ |
| tʃeɪn | mætʃ | kəʊtʃ | eɪdʒ | dʒæk | dʒu:n |

- *4. Transcribe these words and read them.

cheap, cheek, chief, chin, channel, gentle, gently, germs, stranger, middle-aged, rich, which, such, much, lunch, watch, age, page, large, college, cottage, sandwiches, Manchester, manufactures, enjoyment, arrangement, engagement, detached, temperature, natural

5. Explain the articulatory differences (a) between the English /tʃ/ and the Russian /ч/; (b) between the English /dʒ/ and similar Russian combinations.

- *6. Transcribe these words. Use them to explain how the /tʃ, dʒ/ sounds are related to orthography.

child, nature, question, righteous, mischief, joy, gem, gyps, advantageous, legion, budget, knowledge, grandeur, soldier, Greenwich

SUBSIDIARY VARIANTS OF THE ENGLISH SEGMENTAL CONSONANT PHONEMES

Allophonic variants of consonants should be analysed from the viewpoint of CV, VC, CC connections. There are some rules to this effect that can be formulated in the following way.

1. In the initial prevocalic position the number of allophones of consonant phonemes is adequate to the number of vowels, that follow them.

2. Voiced consonants in the initial position are gradually voiced (strong end, weak beginning).

3. In terminal post-vocalic position the number of allophones is adequate to the number of vowels, that precede them.

4. Voiced consonants in the terminal position are gradually devoiced (weak end, strong beginning).

5. In the medial position voiced consonants are fully voiced.

6. Consonants are shorter in the initial position, than in the terminal position.

7. Similar voiced consonants are shorter before voiceless, longer before voiced and the longest in free terminal position.

8. In CC transition plosive consonants may lose their plosion or its character may be modified: loss of plosion, nasal lateral plosion.

9. In CC transition constrictive consonants may be pronounced with terminated constriction under the influence of the following consonant.

10. Plosive constrictive and affricates may be modified by the influence of nasal /m, n/, palato alveolar /j/, interdental /θ, ð/, post-alveolar /r/, bilabial /w/, etc.

Given below are the most important allophonic variants of English consonant phonemes.

/p/

1. Aspirated: pass, picture, Peter.

2. Modified by the following vowel: pea, pit, pet, pat, palm, pot, paw, pun, put, pool, purr, parade, pay, pie, pound, poach, peer, pore, poor.

3. Modified by the preceding vowel: lip, leap, step, clap, harp, hip, thorp, stoop, up, chirp, wallop, tape, type, hope, sharp.

4. No release: supped, what place.

5. Release partly lost: spleen, splendid, helps, step, hop, top.

6. Lateral release: people, couple, apple.

7. Nasal release: open, happen.

8. Modified by: /j/ pewter.

/r/ price, surprise, press.

/θ/ depth.

/w/ Pueblo.

/b/

1. Modified by the following vowel: bit, bet, bad, bar, box, bought, but, book, boot, burr, banana, bay, by, bow, boy, beer, boor, bore.

2. Modified by the preceding vowel: grebe, nib, ebb, cab, garb, mob, orb, tube, tub, verb, hubbub, babe, imbibe, globe.

3. Fully voiced: labour, imbue.

4. Partly devoiced a) initially: balm, bee, bet.

b) finally: ebb, nib, cab.

5. No release: rubbed, sob bitterly, ebbcd, stabbed.

6. Lateral release: able, lable, bible.

7. Nasal release: ribbon, stubborn.

8. Modified by: /j/ beauty.

/r/ bright.

/l/ blight.

/w/ Buenos Aires.

/t/

1. Aspirated: table, time, Tim.

2. Modified by the following vowel: tea, tip, ten, tan, tar, top,

tore, tub, took, two, term, tobacco, tale, tie, town, toy, tow, tear, tour, tore.

3. Modified by the preceding vowel: eat, it, ate, at, art, hot, ought, hut, hurt, put, host, but, eight, write, rout, wrote, adroit, licentiate.

4. No release: stop talking.

5. Release partly lost: strong, straw, eats, hoots.

6. Lateral release: bottle, little.

7. Nasal release: written, beaten.

8. Modified by /j/: tube, tuition.

/w/: twice, twenty.

/r/: try, tree, actress.

/ð/: at the.

/θ/: breadth.

/d/

1. Modified by the following vowel: deep, did, dead, dad, darn, dog, door, duck, do, dirt, domination, day, die, down, daily, dome, dear, dare, dour, door.

2. Modified by the preceding vowel: deed, did, dead, dad, hard, odd, horde, hood, brood, bud, bird, had, made, ride, crowd, annoyed, rode, beard, spared, bored, gourd.

3. Fully voiced: udder, ready.

4. Partly devoiced: (a) initially: do, done, down.

(b) finally: hard, hood, mid.

5. No release: good day, what day, walk down.

6. Lateral release: middle, beadle.

7. Nasal release: garden.

8. Modified by /j/ in: duty.

/r/ in: dry, dress.

/ð/ in: read those books.

/k/

1. Aspirated: Kate, kit, come.

2. Modified by the following vowel: key, kin, kept, cap, car, cot, core, cup, cook, cool, curb, contain, cake, kite, cow, coy, coal, care, kursaal, cord.

3. Modified by the preceding vowel: beak, pick, wreck, back, bark, lock, fork, book, duke, duck, quirk, bulwark, take, like, hoik, oak.

4. No release: picked, pecked, liked, act, cook clean, took Kate.

5. Release partly lost: sky, school.

6. Lateral release: tickle, vocal, cycle.

7. Nasal release: taken, bacon, thicken.

8. Modified by /j/: cute.

/w/: quake, quag, quaff.

/r/: cry, crab, cranberry.

/ð/: take them, pick those books.

/g/

1. Modified by the following vowel: geese, give, get, gas, garden, got, gore, gutter, good, goose, girl, galloon, gay, guy, gown, goitre, go, gear, garish, gourd.

2. Modified by the preceding vowel: league, fig, beg, fog, morgue, big, burg, plague, rogue.

3. Fully voiced: agony, again.

4. Partly devoiced:

(a) initially: go, gain, guard.

(b) finally: big, beg, league.

5. No release: begged, plagued, big game.

6. Lateral release: eagle, giggle.

7. Nasal release: dragon.

8. Modified by /j/: Gue.

/r/: great, agree.

/ð/: beg them.

/w/: Gwendolen.

/tʃ/

1. Modified by the following vowel: cheese, chin, chest, champ, chaff, chop, chore, chough, chewing, chew, church, cherubic, chain, child, chow, choice, choke, cheer, chair, chewer.

2. Modified by the preceding vowel: each, itch, fetch, match, march, scotch, scorch, putsch, pouch, much, search, such, aitch, coach.

3. Shortened in the terminal position, when followed by /t/: reached, hitched, fetched, matched, marched, searched, touched.

4. Lateral release: Rachel, satchel.

5. Nasal release: fortune, question.

6. Modified by /r/: teach Robert.

/ð/: teach them.

/dʒ/

1. Modified by the following vowel: gee, gibber, jet, jam, jar, job, jaw, just, July, Jew, journey, Japan, jail, jibe, joule, joy, Joe, jeer, jurist.

2. Modified by the preceding vowel: liege, ridge, ledge, badge, large, dodge, gorge, Gooze, stooge, judge, urge, age, oblige, gouge, voyage, doge.

3. Shortened in the terminal position, when followed by /d/: obliged, forged, urged.

4. Lateral release: cudgel.

5. Nasal release: region.

6. Modified by /r/: urge Robert.

/ð/: judge them.

/f/

1. Modified by the following vowel: fee, fill, fence, fan, far, fox, four, fuss, foot, food, fir, forsake, fail, fine, fowl, foil, foe, fear, fare, fore.

2. Modified by the preceding vowel: leaf, if, chief, giraff, chaff, off, cough, half, rough, turf, safe, life, loaf, coif.

3. Longer in the terminal, than in the initial position, cf. thief — feet.

4. Lateral release: rifle, trifle.

5. Nasal release: often.

6. Modified by

/j/: few.

/r/: fry.

/l/: flag.

/m/: lymph.

/v/

1. Modified by the following vowel: veal, vicar, vest, vaccine, vantage, vocative, vortex, vulgar, vocation, voodoo, virgin, veil, vile, vow, voyage, vote, veer, variance.

2. Modified by the preceding vowel: leave, live, have, starve, of, groove, love, serve, shave, five, rove.

3. Longer in the terminal than in the initial position, cf. veal — eve.

4. Partly devoiced:

(a) initially: vile.

(b) finally: live.

5. Fully voiced: ever.

6. Lateral release: devil.

7. Nasal release: even.

8. Modified by /l/: Vladivostok.

/r/: Vryburg ['vraɪbə:g] (г. Фрайбург в ФРГ)

/j/: view.

/θ/

1. Modified by the following vowel: theme, thin, therapy, thank, thong, thunder, thirteen, Thalia, thane, thigh, thousand, thole, theatre.

2. Modified by the preceding vowel: wreath, myths, death, maths, laths, moths, fourths, tooths, births, faiths, south, Baths, paths.

3. Longer in the terminal, than in the initial position, cf. theme — moth.

4. Nasal release: earthen, lengthen.

5. Modified by /r/: three.

/w/: thwart.

/j/: fourth year.

/n/: south night.

/ð/

1. Modified by the following vowel: thee, this, then, that, thus, they, thy, though, there.

2. Modified by the preceding vowel: breathe, with, booth, bathe, lithe, mouth (v), loathe.

3. Longer in the terminal, than in the initial position, cf. breathe — these.

4. Partly devoiced: (a) initially: these.

(b) finally: writhe.

5. Fully voiced: heathen.

6. Nasal release: rhythm.

7. Modified by /r/: with Rose.

/j/: loathe you.

/n/: bathe Nell.

/s/

1. Modified by the following vowel: see, sit, set, sat, sergeant, sock, saw, suffer, soot, soon, sir, surround, say, sigh, sow, soil, so, sear, Sarah, sourdine, sore.

2. Modified by the preceding vowel: leafs (v), sniffs, chefs, giraffes, chaffs, coughs, cuffs, hoots, serfs, safes, knives (v), coifs, loaf.

3. Longer in the terminal, than in the initial position, cf. sick — kiss.

4. Lateral release: whistle, castle.

5. Nasal release: listen, some /sm/.

6. Modified by /j/: suit, suicide.

/(k)w/: squirm, squish.

/l/: slight, slug, else.

/n/: snarl, snare.

/m/: smoky, smite.

/ð/: miss the train.

/z/

1. Modified by the following vowel: zeal, zinc, zest, Zambia, Zama, zoril, Zutphen, zoological, Zoo, zirconium, Zeeland, zymosis, zounds, zone, zero, Zara.

2. Modified by the preceding vowel: cheese, is, says, has, bars, was, pause, choose, buzz, hers, letters, maize, rise, house (v), poise, rose, hears, theirs, oars.

3. Longer in the terminal, than in the initial position, cf. zoo — oars.

4. Partly devoiced: (a) initially: zoo, zest.

(b) finally: houses, rise.

5. Fully voiced: reason, season.

6. Lateral release: teasel, measles.

7. Nasal release: socialism, reason.

8. Modified by /ð/: is the, is this.

/j/: is yet.

/n/: buns, pines.

/l/: tells, minstrels.

/ʃ/

1. Modified by the following vowel: she, ship, shelf, shall, shaft, shop, shore, shut, should, sheen, shirt, shallot, shape, shy, shower, show, sheer, share, sure.

2. Modified by the preceding vowel: clash, fish, fresh, smash, marsh, wash, push, rush, douche.

3. Longer in the terminal, than in the initial position, cf. ship—fish.

4. Lateral release: special.

5. Nasal release: station, nation.

6. Modified by /ð/: wash them.

/j/: push your table.

/r/: shriek, shred.

/w/: fresh water.

/m/: home ship, warm shop.

/ʒ/

1. Modified by the following vowel: gigue, Genevieve, jabot, gen-darme, jongleur, jupe.

2. Modified by the preceding vowel: prestige, barrage, rouge, beige.

3. Longer in the terminal, than in the initial position, cf. jupe—rouge.

4. Partly devoiced (a) initially: jabot.

(b) finally: rouge.

5. Fully voiced: asure.

6. Lateral release: usual.

7. Nasal release: decision.

8. Modified by /j/: rouge your face.

/n/: sponge, orange, strange.

/h/

1. Modified by the following vowel: he, hit, help, happy, half, hip, horn, hut, hook, who, her, habitual, hay, high, how, hoist, hoe, hear, hare, houri.

2. Modified by

/j/: hew.

/w/: why, which, when, whack, what, whirl, whey, while, wheel.¹

3. Voiced in medial position: behind, inhabit, boyhood.

/w/

1. Modified by the following vowel: we, wit, wax, waft, was, war, worry, wood, woo, were, way, why, wow, woe, weir, ware, wooer, wore (it occurs only initially).

2. Devoiced: tweed, twenty, twice, quite, queen, sweet, sweat, why, when, thwack, thwart, thwaite.

¹ Some authors consider this allophone of the /w/ phoneme to be a separate phoneme /ʍ/.

3. Fully voiced: awake, dwale, dwindle.
4. Modified by /l/: equal.

/j/

1. Modified by the following vowel: ye, Yiddish, yes, Yankee, yard, yonder, your, young, you, youth, year, yourself, Yale, yoick, yokel, yare (it occurs only initially).
2. Devoiced by the preceding consonant: piano, tube, curious, few, thews, suitable, hew.
3. Nasalized: mule, munition, new.

/r/

1. Modified by the following vowel: read, rid, rest, rat, raft, rock, raw, rust, rook, roof, Röntgen, racoon, ray, right, row, roister, rear, rare, rural, roar.
2. Devoiced: prick, practice, tree, trim, cry, crisp, free, frisk, shriek, shred, three, thrift.
3. Fully voiced: oral, airy.
4. Modified by /n/: parent, errand.
/l/: herald, squirrel.

/l/

1. Modified by the following vowel: lee, lit, let, lack, lark, lot, law, luck, look, loop, lurch, lagoon, lay, lie, loud, loiter, low, lear, lair, lure, lore (light allophones).
2. Modified by the preceding vowel: feel, fill, fell, pal, snarl, doll, fall, dull, bull, fool, earl, jewel, wale, while, owl, oil, pole, ideal, annual (dark allophones).
3. Devoiced: plea, plenty, clean, clever, flee, flag, sleek, slap.
4. Fully voiced: Alice, fills, holes.
5. Shorter before the terminal voiceless consonants, than before the terminal voiced consonants and the terminal proper, cf.

| | | | | | |
|---------|-------------|------|----------|----------|-------|
| hilt | — healed — | doll | insult — | bald — | Carl |
| belt | — build — | bull | spoilt — | bulled — | jewel |
| asphalt | — spelled — | bill | holt — | fooled — | vale |
| salt | — snarled — | bell | false — | hurled — | well |
| fault | — lolled — | Neil | | | |

/m/

1. Modified by the following vowel: me, mill, mad, mar, mop, more, much, moustache, moon, murky, maroon, may, my, mouse, moist, mow, mere, mare, moor.
2. Modified by the preceding vowel: seem, him, them, ham, harm, bomb, storm, room, broom, drum, worm, loathsome, name, time, home.
3. Shorter before the terminal voiceless, than before the terminal voiced and the terminal proper, cf.

| | | | | | |
|--------|--------|-----|--------|---------|------|
| limp — | limb — | ham | bump — | harms — | beam |
|--------|--------|-----|--------|---------|------|

hemp — dims — drum
lamp — stems — boom

lymph — aims — come

4. Lateral release: camel.

/n/

1. Modified by the following vowel: knee, knit, nest, gnat, nasty, not, nor, nut, nook, noon, nurse, narrate, nay, nigh, now, noise, no, near, Nares, Nora.

2. Modified by the preceding vowel: spleen, pin, pen, pan, darn, upon, born, fun, June, burn, London, pain, fine, down, join, own, antipodean, Pitcairn, bourn, mourn, Brünnhilde.

3. Shorter before the terminal voiceless, than before the terminal voiced and the terminal proper, cf. tent — turned — ban.

4. Lateral release: panel, channel.

5. Modified by /ʃ/: ocean.

/ʒ/: occasion.

/l/: kiln.

/ŋ/

1. Modified by the preceding vowel (never occurs initially): thing, song, restaurant, wrong, young, orang, lengthy.

2. Shorter before the terminal voiceless, than before the terminal voiced and the terminal proper, cf. sink — singed — sing.

3. Modified by /k/: bacon (it forms a syllable with the preceding /k/).

Questions

1. How should the allophones of the consonant phonemes be viewed and analysed?

2. What general rules do you know about the allophonic distribution of the consonant phonemes?

3. How can you prove that in the initial prevocalic position the number of allophones of the consonant phonemes correspond to the number of the vowels that follow them?

4. How can you prove that the voiced consonants in the initial position are gradually voiced?

5. How can you prove that the number of allophones of the consonant phonemes is adequate to the number of the vowels that precede them?

6. How can you prove that the voiced consonants in the terminal position are gradually devoiced?

7. How can you prove that in the medial position the voiced consonants are fully voiced?

8. How can you prove that the consonants are shorter in the initial position, than in the terminal?

9. Is the quantity of constrictives altered under the influence of the following consonant?

10. How do the phonemes /m, n, l, θ, ð, w, r/ modify the consonants that follow or precede them?

11. Is the quantity of similar consonants different when they are followed by the voiceless and voiced consonants?

12. In what position are the voiced consonants characterized by maximal length?

Exercises

1. Read these word combinations and words. Observe (a) loss of plosion, (b) lateral plosion, (c) nasal plosion.

| (a) /p/ | (b) /p/ | (c) /p/ |
|----------------|---------|----------|
| supped | people | open |
| top people | couple | happen |
| stop talking | apple | |
| /b/ | /b/ | /b/ |
| rubbed | able | ribbon |
| ebbed | label | stubborn |
| stabbed | ladle | |
| sob bitterly | | |
| /t/ | /t/ | /t/ |
| He went to see | bottle | written |
| I want to go | little | bitten |
| /k/ | /k/ | /k/ |
| cook clean | tickle | taken |
| took Kate | cycle | bacon |
| | vocal | thicken |
| /d/ | /d/ | /d/ |
| good day | middle | garden |
| what day | beadle | pardon |
| walk down | riddle | warden |
| /g/ | /g/ | /g/ |
| begged | eagle | dragon |
| plagued | giggle | wagon |
| big game | beagle | Morgan |

2. Read these words. Observe the character of the voiced consonants (a) in the fully voiced position, (b) in the initial position, (c) in the final position.

| (a) /b/ | (b) /b/ | (c) /b/ |
|---------|---------|---------|
| labour | balm | ebb |
| imbue | bee | nib |
| | bet | cab |

| | | |
|-------|-------|--------|
| /d/ | /d/ | /d/ |
| udder | do | hard |
| ready | done | hood |
| | down | mid |
| /g/ | /g/ | /g/ |
| agony | go | big |
| again | gain | beg |
| | guard | league |

3. Read these words. Observe (a) the longer character of the /tʃ, dʒ/ phonemes in the terminal position and (b) the shorter character of the /tʃ, dʒ/ phonemes in the pre-terminal position (when they are followed by /t, d/).

(a) each, fetch, match, scorch, putch, pouch, much, liege, ridge, badge, large, lodge, gorge, George

(b) reached, hitched, fetched, matched, searched, obliged, forged, urged, judged

4. Read these words. Observe the longer character of the terminal allophones of the /f, v, s, z/ phonemes and their shorter character in the initial position.

/f/ — leaf, if, off, cough, half, rough, safe, life

— fee, fill, fence, fan, far, fox, four, fuss, food

/v/ — leave, live, have, of, groove, love, serve

— veal, vest, vulgar, veil, vile, vow, vote, vet

/s/ — face, tennis, various, piece, since, kiss, guess

— sister, sea, sincerely, sick, sitting, see, sake

/z/ — is, his, birds, days, guards, fees, please

— zeal, zebra, zed, zero, zest, zip, Zion, zone, Zouave.

5. Read these words. Pay attention to (a) the palato-alveolar character of the consonant modified by the following phoneme /j/; (b) the post-alveolar character of the consonant modified by the following phoneme /r/; (c) the lateral character of the consonant modified by the following phoneme /l/; (d) the labialized character of the consonant modified by the following phoneme /w/.

(a) beauty, tube, cute, duty, Gue, few

(b) bright, try, cry, dry, great, fry

(c) blight, little, clever, middle, giggle, devil

(d) twice, twenty, queen, Gwendolen, thwart

6. Read these word combinations. Pay attention to the consonant modified by the following interdental /θ, ð/.

at the institute
that's the latest news
on the hook
at the club
repairs the plug

and the children
opened the window
on the radio
about the house
in the bathroom

Control Task

*Classify these word combinations according to the nature of modification within the group or at the end of it: (a) a loss of plosion, (b) an alveolar replaced by a dental, (c) the "clear" and "dark" /ɪ/.
will you read louder, will you please sit down, read text I, write down, next time, repeat the noun, in the noun, at the blackboard, clean the board, glad to see you, what can I do, like to have it, on the seventh, round the city, and the guest, on this, what country, good time, tea and cake, many people, don't like, I'd like, on the boy's plate, just thirsty, mashed potatoes. mustard please, got to eat, that pub, will you tell me, tell the girl, work now, difficult to deal, silk dress, but good, hit nose

SEGMENTAL VOWEL PHONEMES. DESCRIPTION OF PRINCIPAL VARIANTS

(a) Monophthongs and Diphthongoids

Vowels are best of all learnt when the teacher directs the attention of the pupils to the position of the tongue and the lips. The description of the vowels should be accompanied by appropriate diagrams of the tongue position, because a vowel is "voice modified by different shapes of the supra glottal passages, especially, the mouth and the lips".¹

No. 1 /i:/

The bulk of the tongue is in the front part of the mouth cavity, the space in the back part of the mouth cavity is empty.

The middle and the fore parts of the tongue are raised to the front part of the hard palate, but not so high, as in the pronunciation of the Russian /и/.

In the course of the /i:/ articulation the bulk of the tongue moves from a more retracted and low position, to the more front and advanced position, /i:/ is a diphthongoid. The slight movement of the tongue, which results in the instability of the /i:/ articulation occurs within the front and high position (narrow variation) of the bulk of the tongue.

"The front of the tongue starts at the /ɪ/ position and glides up and toward to the /i:/ position, sometimes even overshooting it and ending up in the /j/ position. Thus, this diphthongoid may be represented in allophonic transcription as follows: iɪ:²

/i:/ can be defined as:

I. unrounded

II. front (a) fully front, high

(b) narrow variation of the high position of the tongue

¹ Sweet H. Op. cit., p. 22.

² Vassilyev V. A. Op. cit., p. 95.

- III. tense (free)
- IV. long
- V. diphthongoid

In the English /i:/ articulation the lips are spread, so that the edges of the upper and lower teeth are visible. This position of the lips resembles a smile. The Russian /и/ is pronounced with the almost neutral position of the lips.

Care should be taken not to confuse the English /i:/ with the Russian /и/, because in the latter case the consonants that precede /и/ are palatalized, cf.

Russian English

пил — pi:l
 рис — rees
 низ — niece
 сил — seal
 чик — cheek

In the pronunciation of /i:/ its positional length should be observed: the longest — in the open position, shorter — in the position before a voiced consonant, the shortest — before a voiceless consonant, cf. bee — bead — beat, see p. 65.

Graphic Equivalents of the /i:/ Phoneme

/i:/ is pronounced when spelt:

- e be /bi:/ — быть
- ee see /si:/ — видеть
- ea tea /ti:/ — чай
- ie piece /pi:s/ — кусок
- ei ceiling /'si:lɪŋ/ — потолок
- i in French borrowings:
 machine /mə'ʃi:n/ — машина
 in Latin and Greek words:
- ae Caesar /'si:zə/ — Цезарь
- oe Oedipus /'i:di:pəs/ — Эдип
- ey key /ki:/ — ключ
- ay quay /ki:/ — набережная
- eo people /'pi:pl/ — народ

No. 2 /ɪ/

The bulk of the tongue is in the position, which is the starting point for the /i:/ articulation. The lips are spread and neutral. The position of the bulk of the tongue does not change considerably during its articulation.

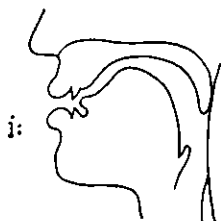


Fig. 39

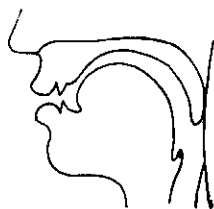


Fig. 40

- /ɪ/ can be defined as:
- I. unrounded
 - II. front (a) front-retracted
(b) broad variation of the high position of the tongue
 - III. lax
 - IV. short
 - V. monophthong

/i:/ and /ɪ/ are different phonemes. This can be proved by the minimal pairs:

| | | | |
|--------------|--------------|-------------|-------------|
| eat — it | sheep — ship | beet — bit | seek — sick |
| feel — fill | eel — ill | lead — lid | deed — did |
| heat — hit | meal — mill | leek — lik | bead — bid |
| leave — live | feet — fit | peak — pick | peel — pill |

Graphic Equivalents of the /ɪ/ Phoneme

/ɪ/ is pronounced when spelt:

| | | |
|------|---|----------------------------------|
| i | lid /lɪd/ — крышка | |
| y | very /'veri/ — очень, | lymph /lɪmf/ — лимфа, |
| | gladly /'glædlɪ/ — охотно | |
| ey | whiskey /'wɪskɪ/ — виски | |
| e, a | before /brɪ'fɔ:/ — прежде | |
| | touches /'tʌtʃɪz/ — трогает, | courage /'kʌrɪdʒ/ — смелость |
| ie | studies /'stʌdɪz/ — изучает, | sieve /sɪv/ — сито |
| ai | captain /'kæptɪn/ — капитан, | mountain /'maʊntɪn/ — гора |
| ui | biscuit /'bɪskɪt/ — сухое печенье, | circuit /'sɜ:kɪt/ — цепь, контур |
| ei | forfeit /'fɔ:feit/ — лишиться чего-либо | |

It is also pronounced in the following words:

| | |
|---------------------------------|------------------------------------|
| busy /'bɪzɪ/ — занятый | forehead /'fɒrɪd/ — лоб |
| minute /'mɪnɪt/ — минута | breeches /'bri:(:)tʃɪz/ — бриджи |
| Sunday /'sʌndɪ/ — воскресенье | coffee /'kɒfɪ/ — кофе |
| Monday /'mʌndɪ/ — понедельник | England /'ɪŋɡlənd/ — Англия |
| Tuesday /'tju:zd(e)ɪ/ — вторник | the English /'ɪŋɡlɪʃ/ — англичане |
| Wednesday /'wenzd(e)ɪ/ — среда | business /'bɪznɪs/ — дело, занятие |
| Thursday /'θɜ:zd(e)ɪ/ — четверг | women /'wɪmɪn/ — женщины |
| Friday /'fraɪdɪ/ — пятница | mischief /'mɪstʃɪf/ — вред |
| Saturday /'sætəd(e)ɪ/ — суббота | |

No. 3 /e/

The bulk of the tongue is in the front part of the mouth cavity. The middle of the tongue is raised to the hard palate but not so high as in the /ɪ/ production. The lips are slightly spread. The position of the bulk of the tongue does not change considerably during the /e/ articulation.

/e/ can be defined as:

- I. unrounded
- II. front (a) fully front, mid-open
(b) narrow variation of the medium position of the tongue
- III. lax
- IV. short
- V. monophthong

To practise the /e/ articulation contrast exercises are very helpful:

| | |
|-------------|--------------------|
| bit — bet | beet — bit — bet |
| lid — led | lead — lid — led |
| pick — peck | peak — pick — peck |
| Sid — said | seed — Sid — said |
| knit — net | neat — knit — net |
| hid — head | heed — hid — head |

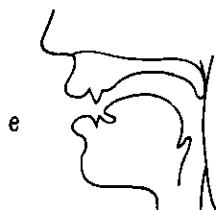


Fig. 41

Graphic Equivalents of the /e/ Phoneme

/e/ is pronounced when spelt:

| | |
|----|--------------------------------------|
| e | red /red/ — красный |
| ea | bread /bred/ — хлеб |
| eo | jeopardy /'dʒerədi/ — опасность |
| ei | leisure /'lezə/ — досуг |
| ie | friend /frend/ — друг |
| ai | said /sed/ — сказал |
| ay | says /sez/ — говорит |
| a | any /'eni/ — какой-нибудь, несколько |
| u | bury /'beri/ — зарывать, хоронить |
| ee | threepenny /'θerəni/ — трехпенсовик |

No. 4 /æ/

The bulk of the tongue is in the front part of the mouth cavity, but rather low, because the low jaw is quickly and energetically lowered as soon as the vocal cords start vibrating. The lips are neutral. The length considerably varies in different positions: /æ/ is shorter before voiceless consonants and longer—before voiced consonants, cf. bat—bad.

/æ/ can be defined as:

- I. unrounded
- II. front (a) fully front low
(b) broad variation of the low position of the tongue
- III. lax
- IV. short
- V. monophthong

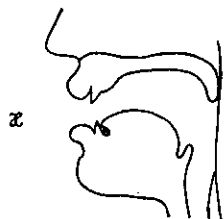


Fig. 42

To practise the /æ/ articulation contrast exercises are very helpful:

| | | |
|------------------------|---------------------------|------------|
| guess — gas | bed — bad | net — gnāt |
| set — sat | said — sad | met — mat |
| bet — bat | men — man | head — had |
| beet — bit — bed — bad | peak — pick — peck — pack | |
| lead — lid — led — lad | seek — sick — sec — sack | |
| leek — lick — lack | deed — did — dead — dad | |

Graphic Equivalents of the /æ/ Phoneme

/æ/ is pronounced when spelt:

a sat /sæt/ — сидел

ai plaid /plæd/ — плед

It is also pronounced in the following words:

champagne /ʃæm'peɪn/ — шампанское

absolutely /æbsə'lu:tli/

/æbsə'lju:tli/ — абсолютно

abstract /'æbstrækt/ — абстрактный

ambition /æm'bɪʃn/ — честолюбие

No. 5 /ɑ:/

The bulk of the tongue is low and rather far back in the mouth cavity. The back part of the tongue is raised. The lips are neutral. The mouth is open (the opening between the jaws is rather wide). It is long, but the position of the bulk of the tongue does not change considerably during its articulation (as in /i:/, for example).

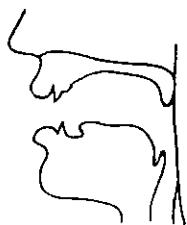


Fig. 43

/ɑ:/ can be defined as:

I. unrounded

II. back (a) back-advanced

open (b) broad variation of the low position of the tongue

III. tense

IV. long

V. monophthong

To practise the /ɑ:/ articulation contrast exercises are recommended:

| | |
|---------------|-----------|
| bead — bard | bee — bar |
| lead — lard | tea — tar |
| heat — heart | fee — far |
| sheep — sharp | key — car |

Graphic Equivalents of the /ɑ:/ Phoneme

/ɑ:/ is pronounced when spelt:

a staff /stɑ:f/ — штаб

ar far /fɑ:/ — далекий

| | |
|------------|-----------------------|
| au | aunt /a:nt/ — тетя |
| er | clerk /kla:k/ — клерк |
| ear | heart /ha:t/ — сердце |

No. 6 /ɔ/

The bulk of the tongue is low in the mouth cavity, but not so low as in the /a:/ articulation. It is farther in the mouth cavity than in the /a:/ articulation. This sound is short and is pronounced with the energetic downward movement of the low jaw. The lips are slightly rounded.

/ɔ/ can be defined as:

- I. slightly rounded
- II. back (a) fully back
open (b) broad variation of the low position of the tongue
- III. lax
- IV. short
- V. monophthong

To practise the /ɔ/ articulation contrast exercise should be done (see No. 7 /ɔ:/ hereinafter).



Fig. 44

Graphic Equivalents of the /ɔ/ Phoneme

/ɔ/ is pronounced when spelt:

- | | |
|-----------|-------------------------------|
| o | not /nɒt/ — не |
| a | what /wɒt/ — что |
| au | because /bɪ'kɔz/ — потому что |

It is pronounced in the words:

Gloucester /'glɒstə/ — Глостер, knowledge /'nɒlɪdʒ/ — знание, yacht /jɒt/ — яхта, Warwick /'wɒrɪk/ — г. Уорик, Washington /'wɒʃɪŋtən/ — г. Вашингтон

No. 7 /ɔ:/

The bulk of the tongue is in the back part of the mouth cavity, but the back part of the tongue is raised a little higher to the soft palate than in the /ɔ/ articulation. This vowel is long.

/ɔ:/ can be defined as:

- I. rounded
- II. back (a) fully back
open (b) narrow variation of the open position of the tongue
- III. tense
- IV. long
- V. monophthong

The Russian /o/ is pronounced with the more rounded and protruded lips. The bulk of the tongue in the articulation of the Russian /o/ occupies the

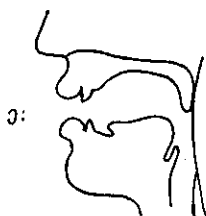


Fig. 45

mid-open position. It is a diphthongoid because it begins with the /y/ glide. Its allophonic transcription is [ʏ]. Not to confuse /ɔ:/ with /ɔ/ the following contrast exercise can be recommended:

| | | | | | |
|--------|---|-----|--------|---|------|
| cord | — | cod | sport | — | spot |
| caught | — | cot | naught | — | not |
| port | — | pot | sought | — | sot |

Graphic Equivalents of the /ɔ:/ Phoneme

/ɔ:/ is pronounced, when spelt:

| | | | | |
|------|--|--------------|---|---------|
| o | (before r) | horse /hɔ:s/ | — | лошадь |
| oo | " | floor /flɔ:/ | — | пол |
| ou | " | your /jɔ:/ | — | ваш |
| oa | " | oar /ɔ:/ | — | весло |
| a | " | war /wɔ:/ | — | война |
| eo | in the word Georgia /'dʒɔ:dʒɪə/ — Грузия и штат Джорджия в США | | | |
| oa | broad | /brɔ:d/ | — | широкий |
| ough | thought | /θɔ:t/ | — | мысль |
| a | water | /'wɔ:tə/ | — | вода |
| au | pause | /pɔ:z/ | — | пауза |
| augh | taught | /tɔ:t/ | — | учил |
| al | walk | /wɔ:k/ | — | ходить |
| aw | law | /lɔ:/ | — | закон |

No. 8 /u/

The bulk of the tongue is in the back part of the mouth cavity. It is raised, but not so high as in the /u:/ articulation. The beginning of the /u:/ articulation is the point where /u/ is pronounced a little bit lower and advanced than /u:/.

/u/ can be defined as:

- I. slightly rounded
- II. back (a) back-advanced
(b) broad variation of the high position of the tongue
- III. lax
- IV. short
- V. monophthong

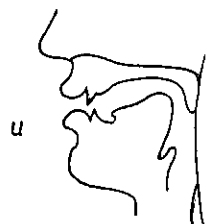


Fig. 46

Graphic Equivalents of the /u/ Phoneme

/u/ is pronounced when spelt:

| | | | |
|----|----------------|---|----------|
| u | put /put/ | — | класть |
| o | woman /'wʊmən/ | — | женщина |
| oo | book /buk/ | — | книга |
| ou | could /kud/ | — | мог (бы) |

The bulk of the tongue in the /u:/ articulation is in the back part of the mouth cavity, but raised high in the direction of the soft palate (still higher than in the /a:, ɔ, ɔ:/ production). This sound is a diphthongoid, because its beginning is a short /u/, which glides to more tense and labialized /u:/, which in the end has a /w/ glide. Allophonic transcription of /u:/ can be represented as follows: [ʊu^w]. The English diphthongoids /i:, u:/ are of the narrowing type, because the bulk of the tongue in their articulation glides from a more open and retracted position to a more close one. The Russian diphthongoids are of a widening type, in their articulation the bulk of the tongue glides from a more close to a more open position. The Russian /y/ is pronounced with the lips more rounded and protruded. The bulk of the tongue is not so back, as in the articulation of the English /u:/.

The English /u:/ can be defined as:

- I. rounded
- II. back (a) fully back
high (b) narrow variation of the high position of the tongue
- III. tense
- IV. long
- V. diphthongoid

In order not to confuse the pronunciation of /u:/ and /u/ which are separate phonemes, the following exercises are recommended:

| | | |
|--------------|--------------|-------------|
| pool — pull | toot — took | fool — full |
| coot — could | goose — good | |
| pood — good | boot — book | |

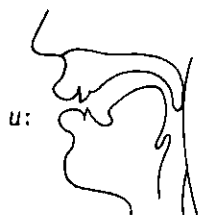


Fig. 47

Graphic Equivalents of the /u:/ Phoneme

/u:/ is pronounced when spelt:

- | | | |
|----|--------------------------|---------------------|
| u | true /tru:/ | — верный |
| oo | tool /tu:l/ | — инструмент |
| o | who /hu:/ | — который |
| ou | soup /su:p/ | — суп |
| ui | fruit /fru:t/ | — плод |
| eu | rheumatism /'ru:mætɪzəm/ | — ревматизм |
| | sleuth /slu:θ/ | — сыщик |
| ew | crew /kru:/ | — команда (корабля) |

/ju:/ is pronounced when spelt:

- | | | |
|-----|--------------------|------------------|
| u | tune /tju:n/ | — мелодия |
| ue | due /dju:/ | — надлежащий |
| ugn | impugn /ɪm'prju:n/ | — оспаривать |
| ui | suit /sju:t/ | — мужской костюм |
| eau | beauty /'bju:ti/ | — красота |

No. 10 /ʌ/

The bulk of the tongue is in the back part of the mouth cavity, but neither high, nor low. It is in the back, mid position. /ʌ/ is not fully back, the tongue is a little bit advanced from the back position.

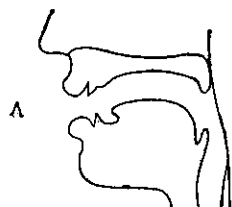


Fig. 48

/ʌ/ can be defined as:

- I. unrounded
- II. back (a) back-advanced
mid (b) narrow variation of the low position of the tongue
- III. lax
- IV. short
- V. monophthong

To practise the /ʌ/ articulation contrast exercises are very helpful:

| | | | |
|------------|-------------|--------------|--------------|
| Bart — but | darn — done | march — much | carp — cup |
| cart — cut | calm — come | dark — duck | charm — chum |

Graphic Equivalents of the /ʌ/ Phoneme

/ʌ/ is pronounced when spelt:

- u** sun /sʌn/ — солнце
- o** come /kʌm/ — приходит, London /'lʌndən/ — Лондон
- oo** blood /blʌd/ — кровь
- ou** touch /tʌtʃ/ — трогать
- enough /ɪ'naʃ/ — довольно, достаточно

No. 11 /ə:/

The bulk of the tongue is neither raised nor lowered. Its surface is more or less flat. The tongue is in the medium position and the lips are spread. Since we cannot say that the bulk of the tongue occupies the front or back position, it is convenient to define this position of the tongue in the /ə:/ articulation as mixed.

/ə:/ can be defined as:

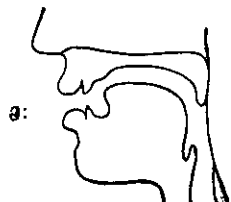


Fig. 49

- I. unrounded
- II. (a) mixed
(b) narrow variation of the mid-open position of the tongue
- III. tense
- IV. long
- V. monophthong

To practise the /ə:/ articulation it is useful to do the following contrast exercises:

| | | | |
|------------|-------------|--------------|--------------|
| bed — bird | all — earl | torn — turn | full — furl |
| ten — turn | four — fur | board — bird | pull — pearl |
| Ben — burn | form — firm | court — curt | took — Turk |

Graphic Equivalents of the /ə:/ Phoneme

/ə:/ is pronounced when spelt:

| | |
|-----|-------------------------------------|
| ir | birth /bæθ/ — рождение |
| yr | myrtle /'mæ:tl/ — мирт |
| er | serve /sə:v/ — служить |
| ear | earn /ə:n/ — зарабатывать |
| or | word /wə:d/ — слово |
| our | journey /'dʒə:n/ — путешествие |
| ur | turn /tə:n/ — вертеть, поворачивать |

No. 12 /ə/

It is difficult to describe this vowel as a separate phoneme because in speech it is easily affected by the neighbouring sounds and acquires different shades which are subdivided by G. P. Torsuyev¹ into (1) /Λ/ shade, (2) /ə:/ shade, (3) /ы/ shade, (4) /ə'/ shade.

1. /Λ/ shade of /ə/ phoneme is observed in the final position, before a pause: comma /'kəmə/, butter /'bʌtə/.
2. /ə:/ shade is observed in all positions, with the exception of those, mentioned (as 1, 3), for example: above /ə'bʌv/, along /ə'lɒŋ/.
3. /ы/ shade is observed when /ə/ is preceded or followed by the /k, g/ phonemes: again /ə'geɪn/, canal /kə'næl/.
4. /ə'/ shade is observed before the terminal /z, d/: letters /'letəz/, covered /'kʌvəd/.

This observation of /ə/ variants made by G. P. Torsuyev is very interesting but is done on the basis of auditory impression.

/ə/ can be defined as:

- I. unrounded
- II. (a) mixed
(b) broad variation of the mid-open position of the tongue
- III. tense
- IV. short
- V. monophthong

Graphic Equivalents of the /ə/ Phoneme

It can be stated, that almost every vowel in the unstressed position can be pronounced as /ə/, for example:

| | |
|------|--|
| /e/ | sense /sens/ смысл — nonsense /'nɒnsəns/ бессмыслица |
| /æ/ | man /mæn/ человек — milkman /'mɪlkman/ молочник |
| /ɔ:/ | ford /fɔ:d/ бред — Oxford /'ɒksfəd/ Оксфорд |
| /ə:/ | sir /sə:/ сударь — yes, sir /'jes sə/ да, сударь |
| /eɪ/ | relation /rɪ'leɪʃn/ отношение, связь — relative /'relatɪv/ родственник, etc. |

¹ Турсуев Г. П. Фонетика английского языка. М., 1950, с. 103.

Questions

1. Why is it important to direct the attention of the pupils to the movement of the lips and the tongue in teaching vowels?
2. What do you know about vowel No. 1?
(a) description of the articulation; (b) definition; (c) comparison with the similar Russian vowel /и/; (d) the rules of reading.
3. What do you know about vowel No. 2?
(a) description of the articulation; (b) definition; (c) comparison with vowel No. 1; (d) the rules of reading.
4. What do you know about vowel No. 3?
(a) description of the articulation; (b) definition; (c) comparison with vowel No. 2; (d) the rules of reading.
5. What do you know about vowel No. 4?
(a) description of the articulation; (b) definition; (c) comparison with vowels Nos 3, 1, 2; (d) the rules of reading.
6. What do you know about vowel No. 5?
(a) description of the articulation; (b) definition; (c) comparison with vowel No. 1; (d) the rules of reading.
7. What do you know about vowel No. 6?
(a) description of the articulation; (b) definition; (c) comparison with vowel No. 7; (d) the rules of reading.
8. What do you know about vowel No. 7?
(a) description of the articulation; (b) definition; (c) comparison with the Russian /о/; (d) the rules of reading.
9. What do you know about vowel No. 8?
(a) description of the articulation; (b) definition; (c) comparison with vowel No. 9; (d) the rules of reading.
10. What do you know about vowel No. 9?
(a) description of the articulation; (b) definition; (c) comparison with Russian /y/ and English /i:/; (d) the rules of reading.
11. What do you know about vowel No. 10?
(a) description of the articulation; (b) definition; (c) comparison with vowel No. 5; (d) the rules of reading.
12. What do you know about vowel No. 11?
(a) description of the articulation; (b) definition; (c) the rules of reading.
13. What do you know about vowel No. 12?
(a) description of the articulation; (b) definition; (c) the rules of reading.

Exercises¹

*1. Transcribe these words. Read them. Observe positional length of the vowel /i:/.

- (a) see, we, tree, be, me, he, fee

¹ Contrast exercises can be taken from "Description of principal variants", p. 104—112. Ex. 3, 5, 7, 9, 11, 13, 15, 17, 20, 22, 24—if necessary consult a dictionary for translation.

- (b) seem, read, clean, seen, deal, people, easily
(c) cheep, sweep, chief, treat, least, creek, week

***2. Transcribe these words. Use them to explain the relation of the /i:/ phoneme to orthography.**

she, eve, concrete, feet, meat, niece, receive, fatigue, aesthete, key, quay

3. Transcribe these words. Read and translate them into Russian.

in, ill, big, wings, pit, stick, cliffs, spring, thing, sick, wrist, silly, building, England, basking, bushes, guineas, lovely, busy, minutes, going, dishes, begins, college, women, commit, mercey, Britain, window, missis, symptoms, holiday, interested, excited, anything, hesitate, privilege, criticism, imitate, medicine

***4. Transcribe these words. Use them to explain the relation of the /ɪ/ phoneme to orthography.**

did, lid, gladly, freely, lynx, courage, village, washes, rouges, boxes, worries, copies, loaded, fountain, biscuit, Friday, sieve, lettuce, forehead, forfeit, coffee

***5. Transcribe these words. Read and translate them into Russian.**

bed, said, help, tell, yet, head, tennis, weather, member, letter, dressed, setter, helping, anyway, envied, pleasure, friendly, dressing, desolate, separate, hesitate, myself, remember, endeavour, hotel, instead, forget, eleven

***6. Transcribe these words. Use them to explain the relation of the /e/ phoneme to orthography.**

red, get, ten, seven, head, dead, ate, the Thames, burial

***7. Transcribe these words. Read and translate them into Russian.**

glad, bad, plan, can, swam, blank, drank, act, sat, fancy, gladly, shallow, added, anxious, badly, traffic, happen, Daddy, sadness, began, exactly, imagine, vocabulary, programme, sandwiches, manufactures, balcony, sacrifice

***8. Transcribe these words. Use them to explain the relation of the /æ/ phoneme to orthography.**

carry, ample, have, salmon, plaid, champagne, absolutely, abstract, ambition

***9. Transcribe these words. Read and translate them into Russian.**

are, bar, far, car, arm, ask, card, past, farm, half, part, large, France, grass, dark, guard, park, start, smart, last, hard, mask, dancing, basking, laughing, rather, hardly, harbour, answer, artist, father, basket, classes, articles, archangel, departure, enlarge, at last

***10. Transcribe these words. Use them to explain the relation of the /ɑ:/ phoneme to orthography.**

mast, answer, last, tar, part, laugh, Berkley, Hertford, heart

***11. Transcribe these words. Read and translate them into Russian.**

on, nod, was, rod, want, gone, job, hot, long, song, bother, bonnet, doctor, model, hostel, honest, nodded, body, offer, Holland, rocky, solid, cannot, occupy, cottages, prosperous, geometry, following, holiday, wasn't, seen off

***12. Transcribe these words. Use them to explain the relation of the /ɔ/ phoneme to orthography.**

hot, sorry, foreign, quality, almanac, sausage, knowledge, yacht

***13. Transcribe these words. Read and translate them into Russian.**

more, draw, all, call, bore, thought, horse, talk, sort, bought, George, shore, always, forward, water, walking, morning, before, also, exports, importance, awfully, audience, orchestra, altogether, of course, forty-four

***14. Transcribe these words. Use them to explain the relation of the /ɔ:/ phoneme to orthography.**

port, fort, floor, door, course, court, four, pour, roar, war, broad, bought, wrath, cause, fall, yawn, paw, thaw

***15. Transcribe these words. Read and translate them into Russian.**

good, room, would, cook, foot, took, put, soot, shook, looked, bushes, manufactures, wooden, couldn't, wouldn't, Woodland, restful, woman, put out, put on, good-bye, naturally, recapitulate, carefully

***16. Transcribe these words. Use them to explain the relation of the /u/ phoneme to orthography.**

put, push, pull, worsted, wolf, look, stood, took, could, should, courier

***17. Transcribe these words. Read and translate them into Russian.**

flue, zoo, too, who, two, use, you, few, true, food, soon, school, youth, move, rule, huge, knew, usually, absolutely, pneumonia, moving, avenue, humour, beautiful, review, ruined, suicide, value, regular, pupils, human, assumed, constitution

18. Transcribe these words. Use them to explain the relation of the /u:/ phoneme to orthography.

blue, rude, rule, June, cool, tomb, group, wound, bruise, brew, manoeuvre

***19. Transcribe these words and use them to explain the relation of the /u:/ phoneme to orthography.**

tune, humour, use, cue, Tuesday, suit, neuter, few, beauty, Hughes

***20. Transcribe these words. Read and translate them into Russian.**

one, run, fun, shut, bus, much, ton, young, come, other, summer, brother, mother, another, currents, chuckle, worry, hundred, nothing, money, funny, lovely, country, compass, must, just, trouble, wonderful, wonderland, instructor, introduction, meaning

***21. Transcribe these words. Use them to explain the relation of the /ʌ/ phoneme to orthography.**

must, unjust, judge, humbug, does, front, among, money, flood, couple, rough, tough

***22. Transcribe these words. Read and translate them into Russian.**

were, heard, word, workers, thirty, stir, turned, turning, Burton, her, years, Burlow, girls, birds, work, turkey, curtain, first, world, worse, Sherlock, certainly, worth, dirt, perfect

***23. Transcribe these words. Read them. Use them to explain the relation of the /ə:/ phoneme to orthography.**

stir, myrtle, kernel, heard, worker, turner, nurse, fur

24. Transcribe these words. Read and translate them into Russian.

again, along, about, across, obey, upon, forget, surprise, cigarette, Piccadilly, confess, perhaps, suppose, condition, percent, herself, to please, to stop, the song, to do, to fish, the girls, permanent, probably, finally, wonderland, woodland, decorate, glimmering, Manchester, desolate, recognize, traveller, balcony

25. Give examples to prove that the sound /ə/ is the core of the unstressed vocalism in modern English.

Control Tasks

Transcribe and read the passages.¹ Underline the vowels, which relate to the sounds /i:/, i, e, æ, u:, ʊ, ɔ:, u, ʌ, ə:, ə/. Give their articulatory characteristics.

No. 1 /i:/

1. People seem to like it. 2. They help by sweeping and cleaning the rooms. 3. That doesn't mean sleeping and eating in tents. 4. The hotel at the seaside will cost you at least thirty pounds a week.

No. 2 /ɪ/

1. "What is it?" I asked him. 2. He looked a sick and miserable boy. 3. He left different medicines with instructions for giving them. 4. The medicine will bring down the fever.

No. 3 /e/

1. It took him ten minutes to get to Kensington Gardens. 2. There's a special burial ground for dogs there. 3. You forget about Kensington Gardens, you could spend a couple of hours there. 4. They drive on the left side of the road instead of the right.

¹ The extracts are borrowed from *Practical Course of English (Second Year)*. Ed. by Arakin V. D. M., 1973, p. 310.

No. 4 /æ/

1. Ann and Mary were happy in their new hats. 2. The fact is Mother packed the sandwiches herself. 3. He waved his hand back to her, till he hit his hand on the back edge. 4. She'd have gladly sacrificed anything for the family's sake. 5. The plate of sandwiches is standing on the mantelpiece.

No. 5 /ɑ:/

1. Arnold laughed at the artist. 2. She started to have classes last autumn. 3. Last time Arnold asked if they could have classes with the artist. 4. Arnold can't enlarge his vocabulary by starting to toss dictionaries into a waste basket. 5. To enlarge your knowledge in art you must start reading at once.

No. 6 /ɔ/

1. I hadn't got a vacancy in my office. 2. Who made that offer of a job? 3. I was shocked when he offered to sell his watch. 4. Oh, my god! What a lot of people come to his office to ask for a job. 5. "Do you want a job?" He nodded. "At my office I haven't got anything to offer you."

No. 7 /ɔ:/

1. The water near Norway is not warm. 2. It is very important that the water of the North Sea near England is warm. 3. There are no more good waterways in the north. 4. Shallow water is warmer than deep water and helps to keep the shores from the cold of Norway. 5. The North Sea is not more than 600 feet deep. So the water in the North Sea is shallow and warm.

No. 8 /u/

1. He is a good cook. 2. Should I look for the sugar? 3. He'd put on weight and looked solid. 4. The woman put on her new dress and asked if it was good. 5. The good woman put on her hat, looked at herself and said that if she could go, she would.

No. 9 /u:/

1. The youth soon found two very good seats for the two. 2. The youth is truly fond of new music. 3. Soon the two were through too. 4. You like their new costumes, don't you?

No. 10 /ʌ/

1. Mother is coming to see us this summer. 2. My brother likes running very much. 3. Every summer hundreds of people come to the

South. 4. He said he would come another time and I saw he was worried about something.

No. 11 /ə:/

1. You are perfectly sure to meet factory workers, office workers and shop girls there. 2. First of all you must know that holiday camps are permanent buildings. 3. Perhaps when you were here last year you heard something about my girl-friend.

No. 12 /ə/

1. I was rather surprised. 2. I looked at him for a bit. 3. It was such an insane answer to give. 4. I got some glimmering of what he was driving at. 5. He was rather taken aback. 6. It's over three miles and it's rather difficult on account of the currents round the beacon.

(b) Diphthongs

Closing Diphthongs

No. 13 /eɪ/

The nucleus of the diphthong /eɪ/ is vowel No. 3 /e/, which is closely connected with the second element of the diphthong — the glide /ɪ/. In the articulation of the diphthong /eɪ/ the bulk of the tongue glides from the /e/ to the /ɪ/ position, but the full formation of /ɪ/ is not accomplished. Since the movement of the tongue in the articulation of /eɪ/ is from a more open to a more close position, /eɪ/ is called a *closing diphthong* with the front, mid-open unrounded nucleus (Fig. 50).

To practise the /eɪ/ articulation the following exercises are recommended:

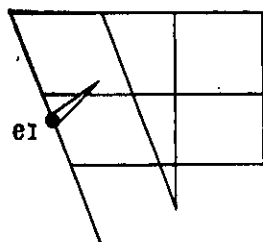


Fig. 50

peel — pail — pile
weel — wail — while
mean — main — mine
feet — fate — fight
leak — lake — like

able — cable — table
pain — came — game
play — plays — pace

pay — paid — pain
may — made — mate
day — date

say — same — sake
gay — game — gait
bay — bait

Graphic Equivalents of the /eɪ/ Diphthong

/eɪ/ is pronounced when spelt:

- a take /teɪk/ — брать
- ai wait /weɪt/ — ждать
- ay say /seɪ/ — сказать
- ei vein /veɪn/ — жила
- ey they /ðeɪ/ — они
- ea great /greɪt/ — большой

/eɪ/ is also pronounced in the words:

- jail /dʒeɪl/ — тюрьма
- gauge /geɪdʒ/ — мера, вымерять
- chaos /'keɪɒs/ — хаос
- aorta /eɪ'ɔ:tə/ — аорта

No. 14 /ou/

The nucleus of the diphthong /ou/ starts at vowel No. 11 /ə:/, the articulation of which is closely connected with the second element of the diphthong, the glide /u/. In the articulation of /ou/ the bulk of the tongue glides from the /ə/ to the /u/ position, but the full formation of /u/ is not accomplished. Since the movement of the tongue in the articulation of /ou/ is from a more open to a more close position, /ou/ is called a *closing diphthong* with a mid (narrow variation of the medium position of the tongue) nucleus (Fig. 51).

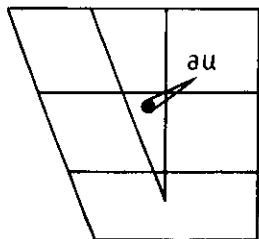


Fig. 51

To practise the /ou/ articulation the following exercises are recommended:

| | | | | | | |
|--------|------|-------|-----------|--------|--------|-----------|
| oak | own | open | old | over | only | go |
| snow | no | so | show | low | ago | October |
| Moscow | also | tempo | window | flow | coal | home |
| hold | cold | close | telephone | Soviet | slogan | socialist |

Graphic Equivalents of the /ou/ Diphthong

/ou/ is pronounced when spelt:

- o so /sou/ — так
- oe foe /fou/ — враг
- oa road /roud/ — дорога
- ou soul /sou/ — душа
- ough though /ðou/ — хотя
- dough /dou/ — тесто
- ew sew /sou/ — шить
- ow know /nou/ — знать

/ou/ is also pronounced in the words:

- omit /o(u)'mɪt/ — упускать
- Olympic /ou'ɪmpɪk/ — олимпийский

No. 15 /aɪ/

The nucleus of the diphthong /aɪ/ is the front open /a/ (more open and retracted than vowel No. 4 /æ/), which glides to /ɪ/. In the articulation of /aɪ/ the bulk of the tongue moves from a more open /a/ position to a more close /ɪ/ position. The amplitude of this movement is bigger than that in the /eɪ/ and /ou/ articulation.

Definition: /aɪ/ is a closing diphthong with the front, open (broad variation of the open, or low, position of the tongue) unrounded nucleus (Fig. 52).

To practise the pronunciation of the diphthong /aɪ/ the following exercises are recommended:

| | | | |
|-------|---------|------|--------|
| I | mine | tide | fight |
| tie | time | tile | sight |
| die | dime | size | like |
| pie | pine | lies | pipe |
| my | nine | wide | might |
| lie | line | died | night |
| fain | — faign | by | — bay |
| line | — lain | like | — lake |
| fight | — fate | my | — may |
| mine | — mane | die | — day |

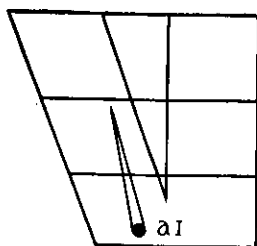


Fig. 52

Graphic Equivalents of the /aɪ/ Diphthong

/aɪ/ is pronounced when spelt:

| | |
|------|------------------------|
| i | time /taɪm/ — время |
| igh | night /naɪt/ — ночь |
| eigh | height /haɪt/ — высота |
| y | my /maɪ/ — мой |

/aɪ/ is also pronounced in the words:

| | |
|-------|----------------|
| buy | /baɪ/ — купить |
| guide | /gaɪd/ — гид |
| eye | /aɪ/ — глаз |

No. 16 /aʊ/

The nucleus of the diphthong /aʊ/ is /a/, which is more back than /a/ in /aɪ/. According to the data given by foreign authors, the nucleus of the diphthong /aʊ/ is a back-advanced low /a/, which glides to /u/. The amplitude of the glide is bigger, than in the /aɪ/ articulation.

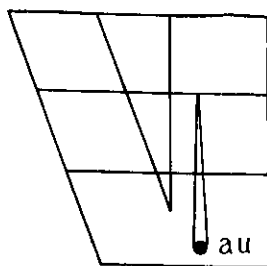


Fig. 53

Definition: /au/ is a closing diphthong with the back (back-advanced), low unrounded nucleus (Fig. 53).

To practise the /au/ articulation, the following exercises are recommended:

| | | | | |
|------|------|-------|--------------|-------------|
| cow | gown | howl | mice — mouse | lied — loud |
| now | bow | house | lice — louse | night — now |
| town | row | mouth | shy — shout | gye — gout |
| down | loud | allow | die — doubt | rye — rout |
| | | | I — owl | thy — thou |

Graphic Equivalents of the /au/ Diphthong

/au/ is pronounced when spelt:

| | |
|-------------|------------------------|
| ou | house /haus/ — дом |
| ough | plough /plau/ — пахать |
| ow | how /hau/ — как |

No. 17 /ɔɪ/

The nucleus of the diphthong /ɔɪ/ is /ɔ/ which is neither No. 6 /ɔ/ proper, nor No. 7 /ɔ:/. The position of the bulk of the tongue is between /ɔ/ and /ɪ/. The tongue glides from this back and low position to the front and mid-open position, which is necessary to accomplish the glide. The amplitude of the glide from /ɔ/ to /ɪ/ is rather big and its direction is: from the back and low to the front and high part of the mouth cavity.

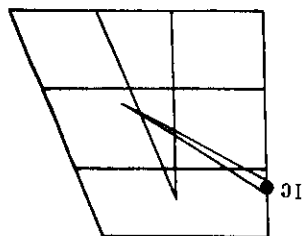


Fig. 54

Definition: /ɔɪ/ is a closing diphthong with the back, low (narrow variation) rounded nucleus (Fig. 54).

To practise the /ɔɪ/ articulation the following exercises are recommended:

| | | |
|---------------|---------------|---------------|
| oil | voice | avoid |
| coil | join | spoil |
| boy | toy | destroy |
| boy — bay | foil — fail | point — paint |
| deily — daily | hoist — haste | soil — sail |

Graphic Equivalents of the /ɔɪ/ Diphthong

/ɔɪ/ is pronounced when spelt:

| | |
|-----------|------------------------------|
| oi | point /pɔɪnt/ — пункт, точка |
| | boil /bɔɪl/ — кипеть |
| | coin /kɔɪn/ — монета |
| oy | boy /bɔɪ/ — мальчик |
| | joy /dʒɔɪ/ — радость |

Centring Diphthongs¹

No. 18 /ɪə/

The nucleus of this diphthong is vowel No. 2 /ɪ/. The bulk of the tongue moves from the /ɪ/ position to the position, which it occupies in the /ə/ articulation, the full formation of it is not accomplished.

Definition: /ɪə/ is a centring diphthong with the high (broad variation of the high position of the tongue) front-retracted, unrounded nucleus (Fig. 55).

To practise the /ɪə/ articulation the following exercises are recommended:

ear, hear, year, dear, near, clear, engineer, really

| | | |
|------------|--------------|-------------|
| he — hear | me — mere | fee — fear |
| tea — tear | bead — beard | she — sheer |
| be — beer | we — weir | pea — peer |

Graphic Equivalents of the /ɪə/ Diphthong

/ɪə/ is pronounced when spelt:

er here /hɪə/ — здесь
 eer beer /bɪə/ — пиво
 ier pier /pɪə/ — набережная
 ir fakir /fə'kɪə/, /'fɑ:kɪə/ — факир
 ear year /jɪə(jə:)/ — год
 ea before other consonants:
 real /rɪə/ — настоящий
 e before unaccented a, u:
 idea /aɪ'dɪə/ — идея
 geum /dʒɪəm/ — бот. гавилат

No. 19 /ɛə/

The bulk of the tongue starts from the position intermediate between vowels No. 2 /e/ and No. 4 /æ/, then it glides to articulate /ə/, the full formation of which is not accomplished.

Definition: /ɛə/ is a centring diphthong with the front, mid-open (broad variation of the medium position of the tongue), unrounded nucleus (Fig. 56).

To practise the /ɛə/ articulation the following exercises are recommended:

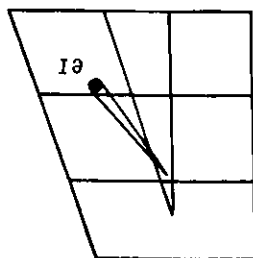


Fig. 55

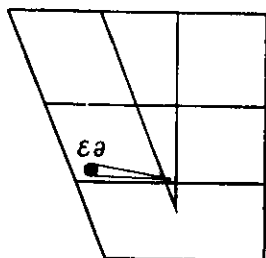


Fig. 56

¹ The term *centring* is connected with the glide /ə/, which is considered to be *central*. In this book it is referred to as *mixed*.

In Gleason's transcription they are represented as /ɪh/, /eh/, /oh/, /uh/.

| | | |
|------------|--------------|------------|
| chair | ware | hair |
| care | square | fair |
| their | mare | pair |
| dare | | declare |
| far — fare | mar — mare | car — care |
| bar — bare | char — chair | tar — tare |

Graphic Equivalents of the /ɛə/ Diphthong

/ɛə/ is pronounced when spelt:

| | |
|---------------|---|
| a before r | care /kɛə/ — забота |
| ai „ | air /ɛə/ — воздух |
| e „ | there /ðɛə/ — там |
| ei „ | their /ðɛə/ — их, свой |
| ea „ | tear /tɛə/ — раздирать, рвать |
| ae „ | aerate /'ɛəreɪt/, /'eɪəreɪt/ — проветривать |
| ay before or: | |
| mayor | /mɛə/ — мэп |

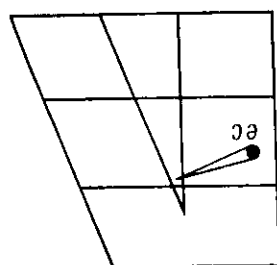


Fig. 57

No. 20 /ɔə/

The nucleus of the phoneme /ɔə/ is a low back /ɔ/, which glides to the /ə/ phoneme, the full formation of which is not accomplished.

Definition: /ɔə/ is a centring diphthong with the back, low nucleus (Fig. 57).

In speech the diphthong /ɔə/ is often replaced by /ɔ:/. This fact makes it possible to consider /ɔə/ to be a facultative phoneme, cf.

| | |
|---------------------|-----------------|
| sore /sɔə, sɔ:/ | pore /pɔə, pɔ:/ |
| course /kɔəs, kɔ:s/ | lore /lɔə, lɔ:/ |

For orthography see No. 7 /ɔ:/.

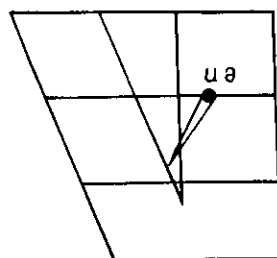


Fig. 58

No. 21 /uə/

The nucleus of the phoneme /uə/ is a high back /u/, which gradually glides to /ə/.

Definition: /uə/ is a centring diphthong with the back-advanced, close (broad variation of the high position of the tongue), slightly rounded, short and lax nucleus (Fig. 58).

Care should be taken not to confuse the diphthong /uə/ with the diphthongoid /u:/. To avoid this mistake the following exercise is recommended:

| | | |
|-------------|-------------|--------------|
| shoe — sure | pool — poor | crew — cruel |
| two — tour | do — doer | |

Graphic Equivalents of the /uə/ Diphthong

/uə/ is pronounced when spelt:

| | | |
|----|----------|-----------------------------|
| oo | before r | poor /puə/ — бедный |
| oe | " | doer /duə/ — деятель |
| ou | " | tourist /'tuərist/ — турист |
| u | " | sure /ʃuə/ — верный |

also in the words: steward /'stjuəd/ — управляющий
sewer /sjuə/ — сточная труба

SUBSIDIARY VARIANTS OF THE ENGLISH SEGMENTAL VOWEL PHONEMES

(a) Monophthongs, Diphthongoids

Allophonic differences in the vowel system of the English language are conditioned by their distributional characteristics. All of them may occur in the initial position.

| | | | |
|--------------|--------------|-------------|------------|
| /i:/ economy | /ɑ:/ arc | /u:/ Uganda | /e:/ eight |
| /ɪ/ image | /ɔ/ on | /ʌ/ utter | /aɪ/ idea |
| /e/ editor | /ɔ:/ all | /ə:/ earn | /aʊ/ hour |
| /æ/ acid | /u/ Uruguay | /ə/ about | /ɔ:/ oily |
| | /ɪə/ earshot | | |
| | /ɛə/ airway | | |
| | /uə/ Urdu | | |
| | /ɔə/ ore | | |

In the initial position the vowel is more or less free from the influence of the next consonant phoneme.

Vowels may be nasalized, (a) more — if they precede the nasal sound and (b) less — when they follow it.

| | | | | |
|----------|-----|-----|--------------|------|
| (a) tʃɪn | pen | hæm | (b) mi: nætʃ | mæp |
| kin | ten | bɒm | mæd | nest |
| | | | mɒb | |

Low vowels are more affected by nasal consonants than mid and high vowels.

| | |
|--------|-------|
| noon | nine |
| noodle | neat |
| moon | clean |
| mar | mean |
| farm | fine |

Allophonic differences in the vowel system are mostly in quantity, or length. The quantity of vowels depends on the following factors:

1. position of a vowel in a word: (1) free; (2) terminated by a voiced, or a voiceless consonant;
2. position of a vowel in relation to word accent;
3. position of a vowel in relation to sentence stress and rhythm;

4. there are extra linguistic factors that may affect the length of vowels. They are connected with emotional characteristics. For example, if we compare similar vowels in the following sentences we may observe quantitative dependence of vowels on the emotional colouring.

The 'Man of Property by 'John Galsworthy (title)

"A 'Forsyte," replied 'young 'Jolyon, "is 'not an un'common 'animal..."

/ɔ:/ in the word *Forsyte* is longer than /ɔ:/ in the word *Galsworthy*.

Connection of a vowel with word accent is another characteristic feature, peculiar to the English language. A vowel in unstressed position may change not only its quantity but it undergoes qualitative changes, which may result not only in its reduction but in the occurrence of the neutral vowel /ə/.

It should be borne in mind that unstressed vowels in English may preserve their quantity. They may be fully long: emission /i:'mɪʃn/, orchestral /ɔ:'kestrəl/, etc.

This is never the case with the Russian language, where all unstressed vowels are reduced, according to their position in the word.

For example, the Russian /a, o/ are reduced to /ʌ/ in the first pretonic syllable and to /ъ/ in other unaccented syllables: с/ʌ/сна́, д/ʌ/рѣ́, го́л/ъ/ву, сто́р/ъ/ну, э/ъ/ го́ро́й.

The Russian /e/ is pronounced as /ы^o/ after /ж, ш/ in the first pretonic syllable: ж/ы^o/на́, ж/ы^o/ва́ть. In other pretonic syllables /e/ is pronounced as /ь/: ж/ь/лти́зна́.

The Russian /a/ is pronounced as /и^o/ after the soft /ч, ш/ in the first pretonic syllable: ч/и^o/сѣ́.

The Russian /e/ is pronounced as /э/ after soft consonants in posttonic position: вѣн/э/су, бѣ/э/редь.

The quality of English vowels of full formation is very stable and definite (especially that of monophthongs).

Articulatory differences of vowel phonemes depend on (1) the place of articulation of the adjacent consonant and on (2) the active organ of speech of the adjacent consonant.

*Complementary distribution of English diphthongoids
and monophthongs in terms of CV, VC relations*

/i:/

The phoneme /i:/ may occur in the initial and in the terminal positions of a word:

epoch /i:pɒk/, tea /ti:/

/i:/ is preceded by the consonants characterized as:

labial

bilabial — pee, be, we
labio-dental — feet, veal
lingual, forelingual
dental, interdental — theme, the

alveolar — tea, deal, sea, zeal, lee, neat
palato-alveolar — she, cheese
post-alveolar, cacuminal — read

lingual

medio-lingual — yeld
lingual, backlingual — key

pharyngeal

pharyngeal (glottal) — he

/i:/ is followed by the consonants characterized as:

labial

bilabial — leap, seem
labio-dental — leaf

lingual, forelingual

dental, interdental — sheath, breathe
alveolar — eat, deed, spleen
palato-alveolar — leash, each
lingual, backlingual — leak, league

/ɪ/

The phoneme /ɪ/ occurs in the initial and in the terminal position of a word:

enough /ɪ'naʃ/, pity /'pɪtɪ/

/ɪ/ is preceded by the consonants characterized as:

labial

bilabial — pit, wit
labio-dental — fit, vic

lingual, forelingual, apical

dental, interdental — thin, this
alveolar — tin, din, knit
palato-alveolar — ship, chin
post-alveolar, cacuminal — rid
lingual, medio-lingual — yin, yill
lingual, backlingual — kin, give

pharyngeal

pharyngeal — hit

/ɪ/ is followed by the consonants characterized as:

labial

bilabial — lip, nib
labio-dental — if, live

lingual, forelingual, apical

dental, interdental — myth
alveolar — it, did, this
palato-alveolar — fish, ridge
lingual, backlingual — pick, big

/e/

The phoneme /e/ may occur in the initial position, but it never occurs in the terminal position.

/e/ is preceded by the consonants characterized as:

labial

bilabial — pet, bet
labio-dental — fence, vest

lingual, forelingual, apical

alveolar — ten, dead
palato-alveolar — shelf, chest
post-alveolar, cacuminal — rest
lingual, medio-lingual — yes
lingual, backlingual — kept

pharyngeal

pharyngeal (glottal) — help

/e/ is followed by the consonants characterized as:

labial

bilabial — step, ebb
labio-dental — chef

lingual, forelingual, apical

dental, interdental — death
alveolar — ate, dead, less
palato-alveolar — fresh, fetch
lingual, backlingual — wreck, beg

/æ/

The phoneme /æ/ may occur in the initial position of a word, but it never occurs in the terminal position.

/æ/ is preceded by the consonants characterized as:

labial

bilabial — pat, bad
labio-dental — fan

lingual, forelingual, apical

dental, interdental — thank, that
alveolar — tan, dad
palato-alveolar — shall, jam
post-alveolar, cacuminal — ran
lingual, medio-lingual — Yankee
lingual, backlingual — cat

pharyngeal

pharyngeal (glottal) — ham

/æ/ is followed by the consonants characterized as:

labial

bilabial — clap, cab
labio-dental — have

lingual, forelingual, apical

dental, interdental — hath
alveolar — hat, dad

palato-alveolar — smash, badge
lingual, backlingual — back, bag, sang

/ɑ:/

The phoneme /ɑ:/ may occur in the initial and in the terminal position of a word:

army /'ɑ:mɪ/, far /fɑ:/

/ɑ:/ is preceded by the consonants characterized as:

labial

bilabial — palm, bar, war

labio-dental — far, vast

lingual, forelingual, apical

alveolar — tar, lark

palato-alveolar — shaft, chance, jar

post-alveolar, cacuminal — raft

lingual, medio-lingual — yard

lingual, backlingual — car, garden

pharyngeal

pharyngeal (glottal) — harm

/ɑ:/ is followed by the consonants characterized as:

labial

bilabial — harp

labio-dental — starve

lingual, forelingual, apical

dental, interdental — health

alveolar — heart, hard

palato-alveolar — marsh, large

lingual, backlingual — bark, restaurant

/ɔ/

The phoneme /ɔ/ may occur in the initial position of a word, but it never occurs in the terminal position.

/ɔ/ is preceded by the consonants characterized as:

labial

bilabial — pot, box

labio-dental — fox, fog

lingual, forelingual, apical

dental, interdental — thong

alveolar — top, dog, sock

palato-alveolar — chop, job

post-alveolar, cacuminal — rob

lingual, medio-lingual — yonder

lingual, backlingual — cot, got

pharyngeal

pharyngeal (glottal) — hot

/ɔ/ is followed by the consonants characterized as:

labial

bilabial — hop, mob

labio-dental — off, of

lingual, forelingual, apical

dental, interdental — moth
alveolar — hot, old, was
palato-alveolar — wash
lingual, backlingual — lock, fog, wrong

/ɔ:/

The phoneme /ɔ:/ may occur in the initial and in the terminal position of a word:

orbit /'ɔ:bit/, saw /sɔ:/

/ɔ:/ is preceded by the consonants characterized as:

labial

bilabial — port, bought, war
labio-dental — for

lingual, forelingual, apical

dental, interdental — thorn
alveolar — talk, door, saw
palato-alveolar — shore, jaw
post-alveolar, cacuminal — raw
lingual, medio-lingual — your
lingual, backlingual — core

pharyngeal

pharyngeal (glottal) — horn

/ɔ:/ may be followed by the consonants characterized as:

labial

bilabial — orb
labio-dental — cough

lingual, forelingual, apical

dental, interdental — north
alveolar — ought, pause
palato-alveolar — scorch, gorge
lingual, backlingual — fork

/ʌ/

The phoneme /ʌ/ occurs in the initial position, but it never occurs in the terminal position of a word.

/ʌ/ may be preceded by the consonants:

labial

bilabial — but, worry
labio-dental — fuss, vulgar

lingual, forelingual, apical

dental, interdental — thunder, thus
alveolar — tub, duck
palato-alveolar — shut, just
post-alveolar, cacuminal — run
lingual, medio-lingual — young
lingual, backlingual — cut

pharyngeal

pharyngeal (glottal) — hut

/ʌ/ may be followed by the following consonants:

labial

bilabial — up, tub
labio-dental — rough, love

lingual, forelingual, apical

dental, interdental — doth
alveolar — bud, but
palato-alveolar — rush, judge
lingual, backlingual — duck, bug, young

/u/

The phoneme /u/ occurs only in the initial position of proper names of foreign origin, e.g. Uruguay.

/u/ occurs in the terminal position only in the reduced forms of the preposition *to*, of the verb *do* and the personal pronoun *you*.

/u/ may be preceded by the consonants characterized as:

labial

bilabial — put, book
labio-dental — foot

lingual, forelingual, apical

alveolar — took, soot
palato-alveolar — should, July
post-alveolar, cacuminal — rook
lingual, medio-lingual — you
lingual, backlingual — cook, good

pharyngeal

pharyngeal (glottal) — hook

/u/ may be followed by the consonants characterized as:

labial

bilabial — room

lingual, forelingual, apical

alveolar — put, hood
palato-alveolar — push
lingual, backlingual — took

/u:/

The phoneme /u:/ may occur in the initial and in the terminal position of a word:

ooze /u:z/, undo /'ʌn'du:/

/u:/ may be preceded by the consonants characterized as:

labial

bilabial — pool, boot
labio-dental — food

lingual, forelingual, apical

alveolar — two, do, noon
post-alveolar, cacuminal — roof
palato-alveolar — shoe, June
lingual, medio-lingual — youth
lingual, backlingual — cool, goose

pharyngal

pharyngal (glottal) — who

/u:/ may be followed by the consonants characterized as:

labial

bilabial — stoop

labio-dental — hoof

lingual, forelingual, apical

dental, interdental — tooth

alveolar — boot, choose, moon, fool

palato-alveolar — douch, rouge, pooch

lingual, backlingual — duke

/ə/

The /ə:/ phoneme occurs in the initial and in the terminal position of a word:

early /'ə:lɪ/, fur /fə:/, further /'fə:ðə/, refer /rɪ'fə:/

/ə:/ may be preceded by the consonants characterized as:

labial

bilabial — purr, burr

labio-dental — fir, verge

lingual, forelingual, apical

dental, interdental — thirst

alveolar — term, dirt, sir

post-alveolar (cacuminal) — Röntgen

palato-alveolar — shirt

lingual, medio-lingual — year

lingual, backlingual — curb, girl

pharyngal

pharyngal (glottal) — her

/ə:/ may be followed by the consonants characterized as:

labial

bilabial — kerb, worm

labio-dental — turf, serve

lingual, forelingual, apical

dental, interdental — mirth

alveolar — hurt, bird

palato-alveolar — urge

lingual, backlingual — burg

/ə/

The /ə/ phoneme occurs in the initial and the terminal position of a word:

about /ə'baʊt/, sofa /'soufə/

/ə/ may be preceded by the consonants characterized as:

labial

bilabial — banana, was

labio-dental — forsake, vocation

lingual, forelingual, apical

dental, interdental — Thalia

alveolar — tobacco, domination
 post-alveolar (cacuminal) — racoon
 palato-alveolar — Japan
 lingual, medio-lingual — yourself
 lingual, backlingual — contain, galloon

pharyngeal

pharyngeal (glottal) — habitual

/ə/ may be followed by the consonants characterized as:
labial

bilabial — wallop
 labio-dental — of

lingual, forelingual, apical

dental, interdental — Plymouth
 alveolar — but, had, London
 palato-alveolar — such
 lingual, backlingual — bulwark

Questions

1. What is the basis of the vowel allophonic differences?
2. In what position are the vowels free from the influence of other sounds?
3. What vowel distributional characteristics are affected in a greater degree: qualitative or quantitative?
4. In what way are the vowels influenced by the neighbouring nasal consonants?
5. What are the factors that may affect the vowel quantitative characteristics?
6. What is the "positional length" of the vowels?
7. How is the vowel quantity connected with accent?
8. Is the vowel quality connected with the neutral vowel phoneme /ə/?
9. Is the vowel quantity connected with sentence stress and rhythm?
10. How do the extra linguistic factors affect the length of vowels?
11. What is the difference between the English and the Russian unstressed vowels in terms of their qualitative characteristics?
12. How do adjacent consonants affect vowels? Which classificatory characteristics of consonants are the most important in this respect?

Exercises

* 1. Transcribe these words. Use them to illustrate the distributional characteristics of the /l:/ phoneme. Define the consonants which (a) precede and (b) follow it.

(a) we, fever, theme, sea, deal, cheeks, reaches, yield, he, meals, me, needn't

(b) grebe, leave, sheath, breathe, eat, feel, leash, each, beak, league, seem, spleen

*** 2. Transcribe these words. Use them to illustrate the distributional characteristics of the /i/ phoneme. Define the consonants which (a) precede and (b) follow it.**

- (a) mist, big, fish, thinks, thing, did, sit, lift, gibber, rich, kill, hid
- (b) him, if, live, myth, with, is, bill, tin, ridge, pick, big

3. Transcribe these words. Use them to illustrate the distributional characteristics of the /e/ phoneme. Define the consonants which (a) precede and (b) follow it.

- a) wet, met, vest, then, rest, left, nest, chest, jet, read, yes, get, help
- b) ebb, them, chef, death, says, tell, pen, fetch, ledge, lengthy

4. Transcribe these words. Use them to illustrate the distributional characteristics of the /æ/ phoneme. Define the consonants which (a) precede and (b) follow it.

- (a) van, that, lamb, gnat, champ, jam, rank, Yankee, gas, ham
- (b) have, hath, match, badge, bag, sang

5. Transcribe these words. Use them to illustrate the distributional characteristics of the /ɑ:/ phoneme. Define the consonants which (a) precede and (b) follow it.

- (a) waft, mar, vast, tsar, lark, nasty, chance, jar, raft, yard, garden
- (b) harm, starve, hearth, pass, bars, snarl, march, large

6. Transcribe these words. Use them to illustrate the distributional characteristics of the /ɔ/ phoneme. Define the consonants which (a) precede and (b) follow it.

- (a) was, mop, vocative, thong, lot, not, chop, job, rob, yonder, got, god, hot
- (b) mock, bomb, of, moth, was, doll, upon, scotch, dodge, fog, wrong

7. Transcribe these words. Use them to illustrate the distributional characteristics of the /ɔ:/ phoneme. Define the consonants which (a) precede and (b) follow it.

- (a) war, more, vortex, thorn, saw, law, nor, chore, jaw, raw, your, core, gore, horn
- (b) orb, storm, cough, north, horde, horse, all, thorn, gorge, morgue

8. Transcribe these words. Use them to illustrate the distributional characteristics of the /ʌ/ phoneme. Define the consonants which (a) precede and (b) follow it.

- (a) worry, much, vulgar, thunder, thus, luck, nut, just, rub, young, gutter, hut
- (b) tub, come, love, doth, buzz, dull, none, much, judge, bug, young

9. Transcribe these words. Use them to illustrate the distributional characteristics of the /u/ phoneme. Define the consonants which (a) precede or (b) follow it.

- (a) wood, foot, soot, hook, July, rook, good, cook
- (b) room, puss, bull, putch, took

10. Transcribe these words. Use them to illustrate the distributional characteristics of the /u:/ phoneme. Define the consonants which (a) precede and (b) follow it.

- (a) woo, food, you, zoom, loop, noon, roof, chew, June, youth, goose, who, zoo
- (b) broom, groove, booth, goose, choose, moon, stooge, duke, Bug

11. Transcribe these words. Use them to illustrate the distributional characteristics of the /ə:/ phoneme. Define the consonants which (a) precede and (b) follow it.

(a) were, murky, virgin, thirst, lurch, nurse, Röntgen, church, journey, year, girl, her

(b) kerb, worm, serve, mirth, earl, burn, urge, quirk, burg

12. Transcribe these words. Use them to illustrate the distributional characteristics of the /ə/ phoneme. Define the consonants which (a) precede and (b) follow it.

(a) maroon, vocation, Thalia, lagoon, narrate, racoon, Japan, galloon, habitual

(b) loathsome, of, Plymouth, jewel, letters, bulwark, agnostik

Control Tasks

* 1. Describe the allophonic differences of the vowel phonemes /i:/, ɪ, e, æ, a:/, ʌ, ɔ, ɔ:/, u, u:/, ə:/ in these words.

No. 1 /i:/

easily, sea, we, meals, cheaper, tree, fever, sleet, speaker, he, teach, keep, sheep

No. 2 /ɪ/

in, ill, big, pit, silly, middle, shilling, thing, rivers, lived, hill

No. 3 /e/

help, bed, ten, said, pence, weather, eleven, anyway, them, very, dead, debt

No. 4 /æ/

bad, plan, sad, exam, natural, imagine, shallow, strand, channel, Jack, hats, pal, cab

No. 5 /ɑ:/

bar, far, started, dancing, large, grass, half, harbour, card, yard

No. 6 /ɔ/

o'clock, body, watch, solid, nodded, crop, coughing, shocked, long, dollar, bomb, John, gone, yonder, hot, pot

No. 7 /ɔ:/

bore, door, talk, thought, sorts, shore, record, water, George, altogether, norm, fall, more

No. 8 /u/

put, books, would, took, looked, soot, room, should, awfully, goodbye, cook

No. 9 /u:/

blue, beautiful, move, food, soon, ruined, cool, hoof, boot, chew, shoe, too

No. 10 /ʌ/

bus, must, nothing, funny, summer, instructor, luck, just, come, chuckle, wonderful, vulgar, thunder, thus, shut

No. 11 /ɜ:/

bird, turned, girl, sir, heard, Sherlock, workers, Germany, churches, curly, nurse, dirt, year, murky, purr

No. 12 /ə/

along, about, upon, to see, perhaps, summer, August, London, desolate, condition, consist, speaker, letter, never, anxious, human

* 2. Transcribe these words. Present the rules of reading of the vowel-phonemes in bold type. Single out the words which are exceptions from the rules.

holidays, Maria, forward, sightseeing, mouth, comfort, café, billiards, workers, Crusoe, Sherlock, Matthew, Earnest, forehead, pneumonia, detached, bothers, head, varnished, Priestley, puzzling, pieces, asylum, record, Maugham, Fridy, woodland, newspaper, taxis, unbelievable, purpose, un'fortunately, awful, year, hotel, pieces, awkward, coughing, emp'loyee

(b) Diphthongs

/eɪ/

The phoneme /eɪ/ may occur in the initial and in the terminal position:

aorta /eɪ'ɔ:tə/, day /deɪ/

/eɪ/ is preceded by the following consonants:

labial

bilabial — pay, bay

labio-dental — fail

lingual, forelingual, apical

dental, interdental — thane

alveolar — tale, day

post-alveolar, cacuminal — ray

palato-alveolar — shape, chain

lingual, medio-lingual — Yale

pharyngal

lingual, backlingual — cake

pharyngal (glottal) — hay

/eɪ/ is followed by the consonants characterized as:

labial

bilabial — ape

labio-dental — pave

lingual, forelingual, apical

dental, interdental — bathe
alveolar — ate, pace, laid, raise, ale, mane
palato-alveolar — age
lingual, backlingual — vague

/aɪ/

The phoneme /aɪ/ may occur in the initial and in the terminal position:

idea /aɪ'diə/, my /maɪ/

/aɪ/ is preceded by the consonants characterized as:

labial

bilabial — pie, by
labio-dental — fight

lingual, forelingual, apical

dental, interdental — thigh
alveolar — tie, die
post-alveolar, cacuminal — right
palato-alveolar — shy, child
lingual, backlingual — kite

pharyngeal

pharyngeal (glottal) — high

/aɪ/ is followed by the consonants characterized as:

labial

bilabial — type, time
labio-dental — life

lingual, forelingual, apical

dental, interdental — scythe
alveolar — night, ride
palato-alveolar — oblige
lingual, backlingual — like

/au/

The phoneme /au/ may occur in the initial and in the terminal position:

owlish /'aʊlɪʃ/, now /naʊ/

/au/ is preceded by the consonants characterized as:

labial

bilabial — pound, bound
labio-dental — fowl

lingual, forelingual, apical

dental, interdental — thousand
alveolar — town, down
post-alveolar, cacuminal — round
palato-alveolar — shout
lingual, backlingual — cow

pharyngeal

pharyngeal (glottal) — how

/au/ is followed by the consonants characterized as:

lingual, forelingual, apical

dental, interdental — mouth
alveolar — rout, crowd
palato-alveolar — pouch

/ɔɪ/

The phoneme /ɔɪ/ may occur in the initial and in the terminal position:

oily /'ɔɪli/, boy /bɔɪ/

/ɔɪ/ is preceded by the consonants characterized as:

labial

bilabial — point, boy
labio-dental — foil

lingual, forelingual, apical

alveolar — toy, doily
post-alveolar, cacuminal — roister
lingual, medio-lingual — yoick
lingual, backlingual — coy

pharyngeal

pharyngeal (glottal) — hoist

/ɔɪ/ is followed by the consonants characterized as:

labial

labio-dental — coif

lingual, forelingual, apical

alveolar — adroit, annoyed
palato-alveolar — voyage
lingual, backlingual — hoik

/ou/

The phoneme /ou/ may occur in the initial and in the terminal position:

obey /ou'beɪ/, no /nou/

/ou/ is preceded by the consonants characterized as:

labial

bilabial — poach, bow
labio-dental — foe

lingual, forelingual, apical

dental, interdental — thole
alveolar — tow, dome
post-alveolar, cacuminal — road
palato-alveolar — show, choke
lingual, backlingual — coal, go

pharyngeal

pharyngeal (glottal) — hoe

/ou/ is followed by the consonants characterized as:

labial

bilabial — hope
labio-dental — loaf

lingual, forelingual, apical

dental, interdental — growth
alveolar — wrote, rode
palato-alveolar — coach
lingual, backlingual — oak

/ɪə/

The phoneme /ɪə/ may occur in the initial and in the terminal position:

eery /'ɪəri/, idea /aɪ'dɪə/

/ɪə/ is preceded by the consonants characterized as:

labial

bilabial — peer, beer
labio-dental — fear

lingual, forelingual, apical

dental, interdental — theatre
alveolar — tear, dear
post-alveolar, cacuminal — rear
palato-alveolar — sheer
lingual, medio-lingual — year
lingual, backlingual — Keary

pharyngeal

pharyngeal (glottal) — hear

/ɪə/ is followed by alveolar consonants and sonorants /m, n, r, l/:

labial

bilabial — museum

lingual, forelingual, apical

alveolar — beard, fierce, librarian, centennial
post-alveolar — appearing

This phoneme is highly variable, because the glide /ə/ is more sonorous, than the nucleus /ɪ/. Thus /ɪə/ may be divided morphologically into the nucleus and the glide in unstressed position, e. g.

theoretical /θɪə'retɪkəl, θɪ-ə'retɪkəl/

Greater sonority of the glide may lead to the /jə/ instead of /ɪə/ articulation, e. g.

frontier /'frantɪə, frantjə/

/ɪə/ may turn into /ɪ/ in the terminal position:

real /rɪəl, rɪl/

/ɛə/

The phoneme /ɛə/ may occur in the initial and in the terminal position:

airway /'ɛəweɪ/, air /ɛə/

/ɛə/ is preceded by the consonants characterized as:

labial

bilabial — pear, bear
labio-dental — fare

lingual, forelingual, apical

dental, interdental — there
alveolar — tear, dare
post-alveolar, cacuminal — rare
palato-alveolar — share
lingual, medio-lingual — Yare
lingual, backlingual — care

pharyngeal

pharyngeal (glottal) — hare

/εə/ is followed by:

labial

bilabial — Shaïrp

lingual, forelingual, apical

alveolar — spared, scarce

/uə/

The phoneme /uə/ may occur in the initial and in the terminal position:

Urdu /uədʊ/, poor /puə/

/uə/ is preceded by the consonants characterized as:

labial

bilabial — poor, boor

lingual, forelingual, apical

alveolar — tour, dour
post-alveolar, cacuminal — rural
palato-alveolar — sure
lingual, medio-lingual — your
lingual, backlingual — kursaal

pharyngeal

pharyngeal (glottal) — houri

/uə/ is followed by:

labial

bilabial — gourmand

lingual, forelingual, apical

alveolar — bourn
post-alveolar, cacuminal — rural

The phoneme /uə/ is highly variable because the nucleus of this diphthong is more sonorous than the glide. Its pronunciation may lead to phonological disintegration of /uə/ into /u/ and /ə/: influence /'ɪnflu-əns/. In this case the morphological division takes place within the diphthong /uə/.

The greater sonority of the glide may also lead to the substitution of /u/ by /w/: influence /'ɪnfluwəns/.

In an accented syllable /uə/ may turn into /oə/ and even /ɔ/ which is a diaphone of the genuine diphthong /ɔə/. Cf.

sure /ʃuə/ — /ʃoe/ — /ʃɔ/

doer /duə/ — /doə/ — /dɔ/,

where assimilation of the glide results in: /ʃɔ/ /dɔ/.

The phoneme /uə/ may turn into /u/: usual /'juzuəl/ → /'juzuɪ/.

The phoneme /ɔə/ may occur in the terminal position and between two consonants: sore /sɔə/, coarse /kɔəs/.

/ɔə/ is preceded by the consonants characterized as:

labial

bilabial — more, pore

labio-dental — fore

lingual, forelingual, apical

lingual, apical, alveolar — tour, door

post-alveolar, cacuminal — roar

palato-alveolar — shore

lingual, medio-lingual — your

lingual, backlingual — core

pharyngeal

pharyngeal (glottal) — where

/ɔə/ may occur between two consonants:

fourth, bored, course

The phoneme /ɔə/ may undergo the following auditory modifications: (1) the glide is more prominent in the terminal position; (2) the phoneme /ɔə/ may turn into a nasal allophone, when preceded or followed by a nasal consonant.

One of the most important features of /ɔə/ phoneme is that it can always be pronounced as /ɔ/, cf.

pore /pɔə/, /pɔ/, lore /lɔə/, /lɔ/, sore /sɔə/, /sɔ/

Questions

1. What is the difference between the closing and the centring diphthongs?
2. Define the diphthong /eɪ/. Describe its articulation.
3. Define the diphthong /ou/. Describe its articulation.
4. Define the diphthong /aɪ/. Describe its articulation.
5. Define the diphthong /au/. Describe its articulation.
6. Define the diphthong /ɔɪ/. Describe its articulation.

Exercises

* 1. Transcribe these words. Read them. Use them to illustrate the distributional characteristics of the /eɪ/ phoneme. State how /eɪ/ is influenced by the consonants which (a) precede and (b) follow it.

(a) way, may, veil, they, lay, nay, rate, jail, Yale, gay, hate

(b) babe, shave, bathe, pace, maize, pain, age, plague

* 2. Transcribe these words. Read them. Use them to illustrate the distributional characteristics of the /aɪ/ phoneme. Define the consonants which (a) precede and (b) follow it.

(a) why, my, vile, thy, lie, night, ride, jibe, kind, high

(b) imbibe, time, five, lithe, mice, rise, nine, oblige, Mike

*** 3. Transcribe these words. Read them. Use them to illustrate the distributional characteristics of the /au/ phoneme. Define the consonants which (a) precede and (b) follow it.**

- (a) wow, mouse, vow, thou, loud, now, round, chow, gown, how
- (b) mouth (v), crowd, mouse, owl, down, gouge

*** 4. Transcribe these words. Read them. Use them to illustrate the distributional characteristics of the /ɔɪ/ phoneme. Define the consonants which (a) precede and (b) follow it.**

- (a) moist, voyage, soil, loiter, roister, joy, yoick, goiter, hoist
- (b) coif, choice, oil, join, voyage, hoik

*** 5. Transcribe these words. Read them. Use them to illustrate the distributional characteristics of the /ou/ phoneme. Define the consonants which (a) precede and (b) follow it.**

- (a) woe, mow, vote, though, so, zone, low, no, rope, joke, yolk, go, hoe, known
- (b) home, rove, loathe, rode, close, pole, own, doge, rogue

*** 6. Transcribe these words. Read them. Use them to illustrate the distributional characteristics of the /ɪə/ phoneme. Define the consonants which (a) precede and (b) follow it.**

- (a) weir, mere, veer, theatre, sear, zero, lear, near, rear, cheer, jeer, year, gear, hear
- (b) licentiate, beard, fierce, hear, ideals, antipodean

*** 7. Transcribe these words. Read them. Use them to illustrate the distributional characteristics of the /eə/ phoneme. Define the consonants which (a) precede and (b) follow it.**

- (a) ware, mare, variance, there, Zara, lair, Nares, rare, chair, Yare, garish, hare
- (b) Shairp, theirs, Pitcairn

*** 8. Transcribe these words. Read them. Use them to illustrate the distributional characteristics of the /uə/ phoneme. Define the consonants which (a) precede and (b) follow it.**

- (a) wooer, moot, zoological, luer, rural, chewer, jurist, your, gourd
- (b) gourd, arduous, Boers, annual, bourn

*** 9. Transcribe these words. Read them. Use them to illustrate the distributional characteristics of the /ɔə/ phoneme. Define the consonants which (a) precede and (b) follow it.**

- (a) bore, wore, fore, lore, Nore, roar, chore, your, gore
- (b) bored, coarse, oars, mourn

Control Tasks

*** 1. Sort out these words according to the distributional characteristics of the phonemes /eɪ, ou, aɪ, au, ɔɪ, ɪə, eə, uə/ in relation to the A. preceding or B. following consonants. Follow the order of consonant classification: 1. Labial a) bilabial, b) labio-dental. 2. Lingual, forelingual a) apical, (inter)dental, b) apical alveolar,**

c) apical palato-alveolar, d) cacuminal post-alveolar. 3. Lingual medio-lingual. 4. Lingual backlingual. 5. Pharyngeal (glottal)

/eɪ/

stay, pay, game, again, make, lake, lay, pain, case, day, weigh, rain, famous, ray, able, way, ache, late, lain, David, age, waste, pale, sane, taken, Wales, shape, face, gave, paint

/ou/

go, over, hope, boating, hotel, snow, hold, only, follow, road, shoulder, poker, foe, gold, don't, old, cold, both, motor, total, bureau, social, though, low, poet, yolk, motive, so, nose, cosy, jokes, noticed

/aɪ/

why, high, kind, wife, wild, mild, lie, die, nine, while, silence, profile, right, eye, side, like, kindly, isles, eyes, idea, rise, climb, quite, my, bright, Michael, kite

/au/

how, thousand, south, now, down, round, pound, mouth, drown, out, couch, found, loud

/ɔɪ/

join, enjoy, boy, point, coin, destroy, soil, employ, noise, joint

/ɪə/

dear, near, year, idea, Crimea, here, severe, museum, accordion, fear, clear, ears, cheer, theatre, real, realize, appear, period, tear, weary

/ɛə/

there, parents, anywhere, care, stare, bare, area, various, despair, square, stairs, carefully, pair, Mary, dare, farewell

/uə/

sure, poor, tour, during, usual, moor, Europe

*2. Transcribe these words. Use them as examples to explain the rules of reading of the letters in bold type which represent the diphthongs /eɪ, ou, aɪ, au, ɔɪ, ɪə, ɛə, ɔə, uə/.

South, billiards, sincerely, strangely, facilitated, noticeable, winding, poor, following, realize, motor, heighten, potatoes, overnight, theatre, jurist, Mary, chore, Michael Angelo, Jane Eyre, enjoyment, typhoid, Europe, pour

IV. ARTICULATORY TRANSITIONS OF VOWEL AND CONSONANT PHONEMES

In the process of speech, that is in the process of transition from the articulatory work of one sound to the articulatory work of the neighbouring one, sounds are modified. The adaptation of the articulatory work of the two neighbouring sounds may result in *assimilation*. Assimilation may be not only *contact*, but also *distant* when distant sounds are affected. On the phonological level the sounds modified in the process of assimilation are analysed as *positional variants of vowel and consonant phonemes*.

Assimilation which occurs in everyday speech nowadays is called *living*, assimilation the results of which can be traced on the diachronic level is called *historical*. For example, the words *permission* and *measure* were pronounced as /pə'r'mɪʃən/, /'mezʃur/. In the course of time /sʃ/, /zʃ/ turned into /ʃ/ and /z/. Present day assimilation can be subdivided into *partial* and *complete*. Complete assimilation is characterized by complete similarity of the two sounds, e.g. cupboard /'kʌbəd/, in this word the sound /p/ is completely assimilated to /b/. Partial assimilation is characterized by partial similarity of one sound to the other. It can be subdivided into: a) progressive, b) regressive, c) reciprocal.

Assimilation is *progressive* when the first of the two sounds affected by assimilation makes the second sound similar to itself, e.g. *desks*, *pens*, the sounds /k/ and /n/ make the plural inflection /s/ similar to themselves: voiceless in /desks/ and voiced in /penz/.

Assimilation is *regressive* when the assimilated sound precedes the conditioning sound, for example, in the combination *in the* /n/ becomes dental assimilated to the next interdental /θ/. Assimilation is *reciprocal* when both sounds are equally affected by assimilation, e.g. *twice*, /t/ is rounded under the influence of /w/ and the latter in its turn becomes partly devoiced under the influence of voiceless /t/.

To make the mechanism of articulatory transitions clear it should be viewed in detail in terms of the articulatory work of the speech producing mechanisms.

Each sound pronounced in isolation has three stages in its articulation. During the first stage the organs of speech move to the position which is necessary to pronounce the sound. It is called differently by different authors: *initial*, *on-glide*, *excursion*. During the second stage

the organs of speech are kept for some time in the position necessary to pronounce the sound. This stage is called: *medial, stop-stage, retention stage, the hold*. During the third stage the organs of speech move away to the neutral position. This stage is called *final, off-glide, recursion, release*.

There are two ways of joining the sounds: (1) *merging of stages*—when the final stage of the first sound merges with the initial stage of the second sound, and (2) *interpenetration of stages*—when the medial stage of the second sound “penetrates” into the medial stage of the first sound.

Merging of stages usually takes place when sounds of different nature are joined together: vowels and consonants, for instance.

Figure 59 represents graphically three stages of a sound articulation: A_1 —initial stage, A_2 —medial stage, A_3 —final stage. Merging of stages in terms mentioned above can be represented graphically (Fig. 60) where B_1 , B_2 , B_3 are the three stages of the following sound, as e. g. in the word *law* the two sounds /l/ and /ɔ:/ are joined by way of merging their stages.

The first stage for /l/ is the raising of the front edge of the tongue to the alveolar ridge and simultaneous lifting of the middle part of the tongue to the hard palate (the soft palate is raised). As soon as the tip of the tongue touches the teethridge and the sides of the tongue are lowered forming lateral passages, the vocal cords are brought together and made tense, the air passing between the vocal cords makes them vibrate; the vibrating air fills the pharynx, the mouth cavity and

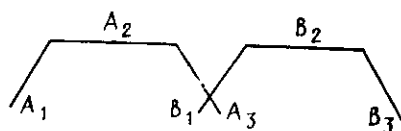


Fig. 59

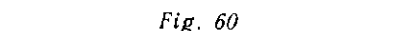


Fig. 60

escapes through the lateral passages producing a clear allophone [l] of the /l/ phoneme—it is the medial stage of the lateral sonorant /l/. After that the final stage begins; the tongue is separated from the teethridge and lowered together with the lower jaw, at this very moment—when the tongue takes up the back low narrow position and the lips begin to get rounded for the /ɔ:/ articulation—the first, or initial, stage of /ɔ:/ takes place. When the bulk of the tongue is kept for some time in the position, mentioned above, with the lips slightly rounded, the air passes through the pharynx and the mouth cavity, acquiring the quality of the English /ɔ:/—the second, or medial, stage for /ɔ:/ begins. When the hold of the monophthong /ɔ:/ is over, the vibration of the vocal cords stops—the final stage is accomplished.

In the word /lɔ:/ /l/ is followed by /l/₂, and /l/₃ coincides with /ɔ:/₁, then follows /ɔ:/₂ and /ɔ:/₃. Graphically it looks like this (Fig. 61).

Interpenetration of stages takes place when sounds of a similar or identical nature are joined together. In terms mentioned above interpenetration of stages will be represented graphically in the following way (Fig. 62).

For example, in the word *bottle* the sounds /t/ and /l/ are joined interpenetrating their stages. It happens in the following way: at the moment of the hold of /t/, that is, during its medial stage, when the tip of the tongue is pressed against the teethridge, the sides of the tongue are lowered, letting the air pass through these narrow air passages (or one passage, if only one side of the tongue is lowered), the lateral plosion is the second, medial stage of the /l/ articulation. At this moment the vocal cords vibrate and the air passes through the pharynx and the mouth cavity along the lateral passages, producing the dark allophone [ɫ] of the /l/ phoneme.

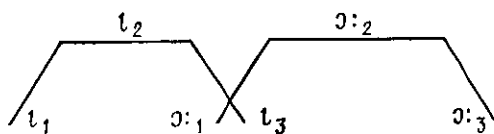


Fig. 61

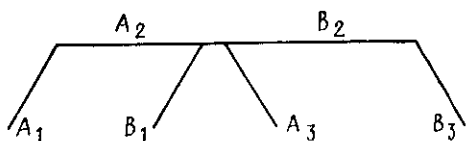


Fig. 62

After the hold of /l/ is accomplished, the final stage of /l/ begins, that is the tongue returns to the neutral position and the vocal cords stop to vibrate. Graphically it looks like this (Fig. 63).

The articulatory peculiarity of the /t/ to /l/ transition results in the loss of plosion in the /t/ production.

This way of the /t/ to /l/ transition is called *lateral plosion*.

Articulatory transitions may be different in the English and in the Russian languages from the point of view of the timing of the work of the power, vibrator, resonator and obstructor mechanisms. If the medial stage of the first sound coincides with the initial stage of the second sound, this type of articulatory transition is called *close*, if the final stage of the first sound is followed by the initial stage of the second sound this transition is called *loose*.

In the cluster alveolar + interdental the hold of an alveolar sound coincides with the excursion and the hold of a dental sound — close CC¹ transition, the alveolar sound becomes dental. In the cluster an alveolar sound + a cacuminal one, similarly — the alveolar sound becomes post-alveolar.

Pure plosive /p/ is pronounced with the nasal plosion in /pn/: the soft palate is lowered already during the hold of /p/ — nasal plosion — close CC transition. The Russian /nn/ transition is loose: *зуннос* — /n/ is a pure plosive though finally slightly nasalized: the soft palate

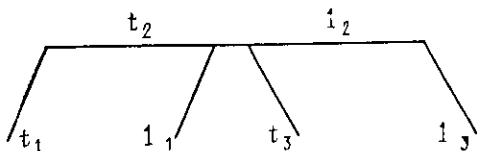


Fig. 63

¹ The letter C stands for "consonant", the letter V — for "vowel".

starts to low down during the recursion of /п/. Cases of similar CC transition are observed in /tm, bn/ /тм, бн/ combinations—they are the cases of close CC transition, because pure plosive /b, t, б, т/ are pronounced with the nasal plosion: /'rɪbən/, /'ætməsfɪə/, обман, шумм. See p. 148.

PECULIARITIES OF THE CC, CV, VC, VV ARTICULATORY TRANSITIONS IN ENGLISH AND IN RUSSIAN

(1) Aspiration

One of the features which are peculiar to CV transition in English is aspiration. This phenomenon does not exist in Russian. In English it is observed in the pronunciation of the initial *p, t, k* followed by an accented vowel. If *p, t, k* are preceded by *s*, there is no aspiration.

Gimson¹ defines aspiration as a "voiceless interval consisting of strongly expelled breath between the release of the plosive and the onset of the following vowel". It is phonemically relevant in pairs: *try—dry, crate—great* etc. because these pairs are distinguished by the presence of aspiration rather than through the presence of voice. If we represent /p + a:/ in *part* graphically, Fig. 64, then we may say that p_1 is followed by $p_2 + a$ puff of breath and only then p_3 follows. Some phoneticians mark aspiration by a raised *h*. Aspiration is stronger if *p, t, k* are followed by a long vowel, compare *Pete, pit*. Aspiration can be characterized as a case of a loose CV transition. Aspiration does not exist in Russian speech.

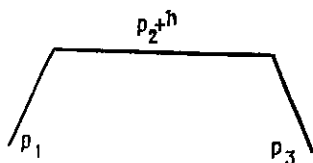


Fig. 64

The Russian initial *n, m, к* are differentiated before vowels only due to the allophonic differences of the vowel phonemes which follow them.²

(2) Palatalization

Another feature peculiar to the CV, CC transition in English is palatalization. It is the adaptation of dental or velar consonants to the high front vowels /i:, ɪ/ or the sonant /j/. Some phoneticians mark palatalized sounds by a raised *y*, e. g. *ky*.

Thus in *key*, for example, /k/ is slightly palatalized: the contact for /k/₂ is made on the most forward part of the soft palate since the tongue is getting ready to pronounce the following sound, to be more exact /i:/.

¹ Gimson A. C. An Introduction to the Pronunciation of English. I.dn., 1964, p. 147.

² Зиндер Л. Р. Общая фонетика. Л., 1960, с. 231.

If the Russian learners make the contact for /k/ in /ki:/ too front this results in a very soft, palatalized /k/, which is a mistake. This mistake results from the fact that palatalization in the Russian language is a phonemically relevant distinctive feature, this can be proved by minimal pairs, e. g.

вол --- вёл, ров --- рёв,
выл --- ви́л, удар --- ударь

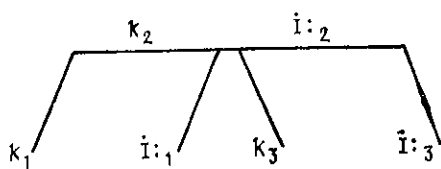


Fig. 65

Russian soft consonants followed by и е ю ё я are very soft because the middle part of the tongue is raised to the hard palate already during the medial stage of the consonant which precedes them, e. g. сядь, тень, нить /с'а"т'/, /т'нэ"н'/, /н'ит'/.¹

In our examples these consonants are: с, т, н.

If we compare these processes in English and in Russian we may state that in English the CV transition is "loose" and in Russian "close". The Russian vowels, preceded by soft consonants acquire an *h*-glide, they become diphthongized.

(3) Labialization

One more peculiar feature of the CV, CC transition in English and in Russian is labialization, which is the assimilation of a consonant to the following rounded vowel and the sonorant /w/ — regressive assimilation. For example, in the word *cool* the lips are rounded already at the medial stage of /k/ (Fig. 66).

This type of the CV, CC transition is close both in English and in Russian. Care should be taken not to protrude the lips too much for the English /u:, ʊ:/, which is characteristic of the Russian /y, o/, compare: *cool* — *ку́ль*, *tool* — *ту́ль*. Some authors mark labialized sounds by a raised *w*.

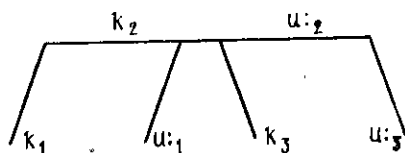


Fig. 66

(4) Nasalization and Other Qualitative Changes of Vowels in CV, VV Transition

One of the features peculiar to the CV transition in English is nasalization. All English vowels are oral, that is they are pronounced with the raised soft palate. But if the soft palate is lowered at the medial stage of the nasal sonorant, followed by a vowel, the air escapes through the nasal cavity, this makes the vowel nasal, e. g. /ɔ:/ is

¹ The symbols of palatalization in Russian are raised (').

nasalized in *morning*—progressive assimilation, close CV transition. Vowels may also change their quality under the influence of the dark /l/, which follows them and in sequences after /j/. For example, the vowel sound /e/ becomes more open before dark /l/ in the word *bell*, than in the word *bed*—VC transition, regressive assimilation.

The vowel sound /u:/ becomes more front preceded by /j/, compare: *use*, *ooze*. In the first word /u:/ is more front—CV transition.

The VV articulatory transition in English is characterized by regressive assimilation. It can be observed, for example, in the pronunciation of the article *the* and the preposition *to* before vowels: the apple /ðɪ 'æpl/, to Uruguay /tu 'urugwaɪ/. The peculiar feature of the VV transition in English is the presence of a glottal stop /ʔ/ between two vowels in cases like: *the apple*, *we all*, when they are mispronounced as /wɪ ʔ ɔ:l/, /ðɪ ʔ æpl/. The glottal stop is pronounced in GA in words like *certainly* /'sə:ʔnli/ instead of /'sə:tnli/ in RP.

(5) Nasal Plosion

Assimilation may affect not only the work of the soft palate; in the combination of a plosive + a nasal sonant it also affects the manner of noise production and the CC transition in English results in the nasal plosion. For example, in the word *recognize* the final stage of /g/ coincides with the medial stage of the sound /n/ which follows it—regressive assimilation. In Russian similar combinations are pronounced with the oral plosion of the plosive consonants which are followed by nasals, compare: *recognize*—close CC transition, *оени*—loose CC transition.

(6) Lateral Plosion

The manner of noise production is affected by assimilation in the combinations a plosive + the lateral sonant *l*. This type of articulatory transition is called *lateral plosion*, see p. 146. Russian learners mispronounce these combinations inserting /ə/ inside the clusters /tl/, /dl/. In the Russian language *мл*, *дл* clusters occur in the initial position and are pronounced with close CC transition: *тля*, *для*.

(7) Loss of Plosion

Assimilation affects the manner of noise production in the combinations of two English plosives: /pt, pd, bd, pk, bk, tp, tk, kp, kt, gd/ and in the combination /ktʃ/ in which the first consonant loses its plosion. For example in the word *helped* the final stage of /p/ coincides with the medial stage of /t/ which follows it—close CC transition. In Russian similar combinations are pronounced with the loose CC transition, compare: *apt* in which /p/ is plosionless and *антека* where *n* and *m* are pronounced with plosions.

(8) Voicing and Devoicing of English and Russian Consonants Affected by Assimilation

In the English CC articulatory transitions the work of the vocal cords is affected by incomplete assimilation, the cases when one of the two adjacent consonants becomes voiced under the influence of the neighbouring voiced consonant, or voiceless — under the influence of the neighbouring voiceless consonant are rare. For example, in the word *gooseberry* /s/ became voiced under the influence of the next voiced /b/ — regressive assimilation. In the combination *what's this* the voiced /z/ became voiceless under the influence of the preceding voiceless /t/ — progressive assimilation.

In the process of speech the sonants /m, n, l, r, j, w/ are partly devoiced before a vowel, preceded by the voiceless consonant phonemes /s, p, t, k/, e. g. *plate, slowly, twice, cry*. In this case partial progressive assimilation affects the work of the vocal cords both in English and in Russian; compare the above examples with the Russian: *пламя, смена, кров*.

In Russian voiceless-voiced distinction can be completely lost, compare *сун, субпродукты* where *б* undergoes complete regressive assimilation to *н* which follows it. Russian learners should be careful about the cases where regressive assimilation may fully affect the work of the vocal cords due to the Russian habit of regressive voicing or devoicing, for example: *blackboard* — no voicing of /k/, *set back* — no voicing of /t/, *these people* — no devoicing of /z/.

(9) The Active Organ of Speech and the Place of Articulation Affected by Assimilation

In the CC articulatory transition assimilation may affect the active organ of speech and the place of articulation. Thus forelingual apical /t, d, n, l, s, z/ become dental followed by the interdental voiced /ð/ or voiceless /θ/. For example, in *month* the medial stage of /n/ articulation is not accomplished assimilated to the interdental /θ/ which follows it, /n/ becomes dental — regressive assimilation, close CC transition.

Regressive assimilation affects the place of articulation and the manner of noise production when the alveolar /t, d/ are followed by the post-alveolar /r/. For example, in the word *trip* /t/ becomes post-alveolar and /r/ is pronounced with an alveolar tap — progressively assimilated to the plosive /t/. In the word *comfort* the bilabial /m/ becomes labio-dental regressively affected by /f/. Assimilation affects the active organ of speech and the place of articulation in the words with the accented prefix *con-* followed by /k, g/, for example: *Congress, conquest* /'kɒŋɡres, 'kɒŋkwɛst/. In these words the alveolar /n/ turns into backlingual /ŋ/ which is pronounced in a different manner.

Assimilation can be obligatory (the points described above) and occasional, resulting from careless speech. For example, *this shop, of course, don't care* in careless speech can be pronounced as /'ðɪʃ 'ʃɒp, əv 'kɔʃ, 'daʊŋ 'keə/. Such cases should be avoided. On the other hand

in rapid colloquial speech some sounds are usually not pronounced. This is called *elision*.

The vowels /ɪ, u, ə/ may be omitted in posttonic and pretonic syllables: *university* /ˌjuːnɪˈvəːs(ɪ)ti/, *believe* /b(ɪ)ˈliːv/ ([bəˈli]), *awfully* /ˈɔːf(u)li/, *territory* /ˈterɪt(ə)rɪ/.

The consonants /t, d/ are never pronounced between other plosives: *locked gate* /ˈlɒk ˈgeɪt/, *stopped behind* /ˈstɒp bɪˈhaɪnd/, *strict teacher* /ˈstriːk ˈtiːtʃə/, *rubbed down* /ˈrʌb ˈdaʊn/.

The consonants /t, d/ may be omitted in the following combinations: /st, ft, ʃt, nd, ld, zd, ɒd, vd/ if they are followed by a consonant, e. g. *next day* /ˈneks ˈdeɪ/, *just one* /ˈdʒʌs ˈwʌn/, *finished now* /ˈfɪnɪʃ ˈnaʊ/.

/t/ is often omitted before the abbreviated negation /nt/, e. g. *you mustn't do it* /ju ˈmʌsn ˈduː ɪt/.

Loss of /h/ is observed when it is non-initial and unstressed: *tell him he is wanted* /ˈtel (h)ɪm (h)ɪ ɪz ˌwɒntɪd/. But /h/ is pronounced when stressed or preceded by a silence: *he is wanted* /hɪ ɪz ˌwɒntɪd/, *her answer is wrong* /hə ˈɑːnsə ɪz ˌrɒŋ/, *who was it?* /ˈhuː ˌwɒz ɪt/.

It is very important to know and be able to pronounce the subsidiary variants of vowel and consonant phonemes resulting from different types of assimilation because as H. Sweet¹ puts it "distinctness and correctness are important as well as freshness and freedom of speech ... but ... an exaggerated correctness may lead to misunderstanding ... The result would be a language which in many respects would be better than the existing English but it would no longer be English."

Questions

1. What is assimilation?
2. What types of assimilation do you know?
3. What are the stages of a single sound articulation?
4. What is merging of stages?
5. What is interpenetration of stages?
6. What is the difference between the close and loose type of articulatory transitions?
7. What do you know about the mechanism of aspiration?
8. Is the process of palatalization similar in English and in Russian, does it differ from the functional point of view?
9. What is the difference between labialization in English and in Russian?
10. What is lateral plosion?
11. What is loss of plosion?
12. How does assimilation affect the work of the vocal cords in English and in Russian?
13. How does assimilation affect the place of articulation and the manner of noise production in English and in Russian?

¹ Sweet H. The Sounds of English. Oxford, 1929, p. 76.

14. What's the difference between obligatory assimilation and assimilation which appears in careless speech?

15. What is elision?

16. Why is it important to know about the subsidiary variants of vowel and consonant phonemes?

Exercises

1. Read the words, observe the stronger aspiration of /p, t, k/ before long vowels, diphthongs and diphthongoids. Compare with the Russian /п, т, к/ pronounced without aspiration.

| | | | |
|-------|-------|-------|------|
| port | tar | car | порт |
| Pete | table | cable | топт |
| power | tower | cow | кот |
| pit | tip | cat | пап |

*2. Describe the difference in the transition from /p/ to /ɔ/ in the word *port* and from /s/ to /p/ in the word *spot*.

*3. Read the pairs of words, describe the mechanism of voiceless-fortis, voiced-lenis difference, which is functional here.

| | | |
|-----------------|-------------|----------------|
| plight — blight | try — dry | crate — great |
| found — bound | tune — dune | piece — bees |
| penny — Benny | park — bark | twelve — dwell |

4. Read the pairs of words, observe the absence of palatalization in the English words.

| | |
|----------------------|--------------------|
| Pete — pit — пить | neat — knit — нить |
| beat — bit — бить | seen — sin — синь |
| meal — mill — мил | teem — Tim — Тим |
| keeper — kill — киль | leap — lip — лип |
| veal — vig — вил | |

Describe the difference in the transition from /п/ to /и/ in Russian and from /p/ to /i:/ in English.

5. Read the pairs of words, observe the degree of labialization in English and in Russian.

| | | | |
|------------|-------------|-------------|-------------|
| Paul — пол | tool — Тула | tall — тол | pull — пуля |
| call — кол | boor — бур | cool — куль | book — бука |

Describe the difference in the CV transition in English and in Russian.

6. Describe the mechanism of the articulatory difference between the /e/ in *hen*, *hell* and between the /u:/ in *tool*, *tune*.

7. Read the pairs of words. Observe the nasally exploded English and orally exploded Russian stops.

| | | | |
|----------------|-----------------|-------------|-------------|
| hypnosis | — гипноз | atmosphere | — атмосфера |
| administration | — администрация | acknowledge | — окно |
| recognize | — огни | | |

Describe the difference in the transition from a plosive + a nasal in English and in Russian.

8. Read the word combinations below. Observe plosionless stops.

| | |
|---------------|----------------|
| help Peter | сноп пшеницы |
| club building | клуб был полон |
| at times | оттуда |
| good day | под домом |
| black coffee | как когда |

*9. What mechanism is affected by assimilation in the pronunciation of /r/ in the words: *string, strike*, — of /m/ in the words: *smell, smoke*, — of /ʃ/ in the words: *student, suit*?

*10. Explain the mechanism of /k/ to /ð/ transition in the combination *like that*. What mistake can be made by the Russian students in the articulation of /kð/?

*11. Pronounce the words and word combination. Underline the sounds affected by assimilation, describe its type.

breadth, wealth, at that, afraid, apron, thrive

12. Pronounce the words correctly, underline the two plosives, explain the articulatory difference in the CC transition in English and in Russian.

apt — аптека helped — обточка fact — факт
shopkeeper — шапка begged — когда

13. Pronounce the words and word combinations below. Underline the sounds that can be omitted in rapid colloquial speech.

university, believe, awfully, territory, locked gate, stopped behind, strict teacher, rubbed down, next day

Give your own examples of vowel and consonant elision.

Control Tasks

*1. Arrange these English and Russian words under the headings: (1) aspiration, no aspiration, (2) palatalization a) loose CV transition, b) close CV transition, (3) labialization, labialization with the lip protrusion.

top, bee, pit, built, port, meal, cope, deep, beauty, tarn, port, corn, music, pepper, onion, peace, come, lean, car, cable, lion, dean, топь, поле, тина, Коля, тесто, роль, сила, лом, ток, день, пень, соль, ряд, пел, рёв, бук, кило, мел, вилы, полк, ком, дуло, соор, tool, tall, call, gorge, goose, doom, dawn, room, thorn

*2. Arrange these words under the headings: (1) lateral plosion, (2) nasal plosion, (3) absence of plosion (two plosionless stops).

actor, curdles, muddle, needless, mottled, Britain, begged, oughtn't, at last, what kind, admit, back to back, madness, witness, big books, partner, slept, cotton, great numbers, sudden, captain, top coat, red light, black goat, ripe cheese, huddle, at night, good looks

*3. Explain how assimilation affects the place of articulation in the underlined sounds.

/tɑ: — kɑ:, ki: — kɑ:, ku:l — ki:n, jes — pju:tə, i:l — ki:p/

*4. Transcribe these words and word combinations. Read them. Explain possible mistakes in the close CC transition.

anecdote, birthday, blackboard, medicine, this book, let's go, what's the time, sixth, his thing, pass them, is that, fifths, Smith's there, soothes them, in the

5. Give your own examples and explain the difference between the English and Russian articulatory transitions in cases of (1) aspiration, (2) palatalization, (3) labialization.

6. Give your own examples and explain the difference between the English and Russian articulatory transitions in cases of assimilation affecting (1) the work of the vocal cords, (2) the place of articulation and the active organ of speech, (3) the manner of noise production, (4) the work of the soft palate.

7. Give your own examples and explain the difference between the English and Russian articulatory transitions in cases of the (1) nasal, (2) lateral, (3) loss of plosion.

V. ENGLISH SEGMENTAL PHONEMES IN WRITING

Language performs its function as a means of intercommunication not only in oral form but also in written form. Therefore it is important to establish the relationship between sounds and letters, which represent them.

A letter or letter combination representing a phoneme, or a sequence of phonemes in writing is called a *grapheme*. A graphemic symbol is included into triangular brackets $\langle \rangle$.

Graphemes in English seldom have reference to single phonemes. One-to-one correspondence (1 grapheme per 1 phoneme) is ideal, but in real writing systems hardly exists.

There are very few consonants which have one-to-one graphemic reference, e. g.

(a) single-valued graphemes

w \longleftrightarrow way
b \longleftrightarrow bay
l \longleftrightarrow lid

As a rule, one grapheme has many phonemic references, e. g.

(b) multi-valued graphemes

| | | | | | |
|---------------------|-----|--------|------------------------|-----|---------|
| $\langle a \rangle$ | —ə | banana | $\langle ough \rangle$ | —ɔ: | thought |
| | —eɪ | baby | | —u: | through |
| | —æ | back | | —ou | though |
| | —ɑ: | bask | | —ə | borough |
| | —ɔ: | ball | | | |
| | —ɒ | wash | | | |

Graphemes may be *simple*, e. g. $\langle a \rangle$, and *complex*, e. g. $\langle ough \rangle$.

A grapheme, consisting of one letter, which corresponds to one phoneme is called a *monograph*; two, three and four letter graphemes, which correspond to one phoneme are called *digraph*, *trigraph* and *polygraph*—accordingly. E. g. a—/eɪ/, b—/bi:/ are monographs; ng—/ŋ/, ck—/k/ are digraphs; tch—/tʃ/, sch—/ʃ/ are trigraphs; aigh—/eɪ/, ough—/ɔ:/ are polygraphs.

If we analyse a word from the viewpoint of orthographic—phonemic

and graphemic reference, the discrepancy between them will be almost universal. E. g. the word *stretch* consists of:

5 phonemes: /s/ /t/ /r/ /e/ /tʃ/
5 graphemes s t r e t c h
7 letters s — t — r — e — t — c — h
The word *mouth* consists of:
3 phonemes /m/ /au/ /θ/
3 graphemes m o u t h
5 letters m — o — u — t — h

From the phonological point of view, a grapheme has a considerable number of references, due to the complementary distribution or free variation, in which a phoneme occurs. For example, the grapheme <o> in *box* is in the reference with a more front allophone [ɔ] than in *cot*, where [ɔ] is more back. The grapheme <t> in *twice* is in the reference with a rounded allophone of [t] and with [t] post alveolar in *tree*.

Morphemic reference of graphemes is many-sided. Any graphic difference must be considered as having an independent morphemic reference. E. g.

boys /bɔɪz/ — boys' /bɔɪz'/ — boy's /bɔɪ'z/
/z/, /z'/, /'z/ have different morphemic reference:
/z/ indicates the plural form,
/z'/ indicates the plural form, possessive case,
/'z/ indicates the possessive case of the singular form.

Changes in orthography are much slower than changes in phonology.

Spelling difficulties in English are conditioned by conservative principles of orthography due to which the English writing system preserves many traits of this language's historical development. Therefore there are a large number of the rules of reading in modern English which are to be remembered. However, orthography helps to differentiate homophones, e. g.

sight /saɪt/ — зрение, вид
cite /saɪt/ — ссылаться, приводить, цитировать
site /saɪt/ — местоположение

There are also cases when words coincide in their plural and singular forms so far as the spelling and pronunciation are concerned. They may be distinguished only by the abbreviated forms, e. g. *species* /'spi:ʃi:z/ (вид, порода) the singular and plural of this word are pronounced alike. The abbreviation *sp.* stands for the singular and *spp.* stands for the plural.¹

Graphemes in the English language may indicate the phonemic reference of a preceding, or the following grapheme. They perform diacritic functions. E. g.

1. The doubling of consonants:

¹ Gleason H. A. An Introduction to Descriptive Linguistics, p. 436.

(a) indicates the shortness of the preceding vowel and differentiates the meaning of words:

planed — planned
noted — knotted

(b) differentiates the meaning of words:

assent — a cent appear — a pier
arrival — a rival occur — a cure

(c) lengthens the preceding vowel:

barred, stirred, furred

2. The use of a “mute” e or r:

(a) indicates the alphabetical reading of the preceding vowel and performs differentiatory functions:

rat — rate fin — fine
pet — Pete

(b) differentiates homophones:

born — borne pleas — please
step — steppe do /dou/¹ — doe

(c) indicates the lengthening or the diphthongal nature of a preceding vowel:

are toe awe pore mere
were due cure fury sire

There are two terms in phonological literature which are connected with the division of words into syllables and into morphemes. They are: (a) syllabograph and (b) morphograph. The parts of a word which represent syllables graphically are called *syllabographs*. They may consist of a vowel, or a combination of vowels and consonants which corresponds to a syllable or syllables within the graphic norms of the analysed word. E. g.

| Words | Syllabographs |
|------------|---------------|
| higher | high-er |
| barring | bar-ring |
| bankrupt | bank-rupt |
| refinement | re-fine-ment |

A *morphograph* is that part of a word which represents a morpheme graphically, e. g. the suffix *ing* is a morphograph in the word *singing*; the suffix *ed* is a morphograph in the word *long-legged*, etc.

The sounds are indicated in writing by means of transcription.

Transcription is quite indispensable in transliteration of names of persons, geographical names, magazines, names of ships, etc. Transliteration is writing a word, or words, of one language in the letters of some other language.

¹ It is a noun denoting a musical note, but not the verb *do*.

Transliteration differs from transcription: it is more simple and may use additional symbols. E. g. Bath is transcribed as /bɑ:θ/ but transliterated as Бар (the length of /ɑ:/ and the sound /θ/ are ignored).

Given below is a list of Russian equivalents for English letters and letter combinations and phonetic renderings.

| <i>English</i> | <i>Russian</i> | <i>English</i> | <i>Russian</i> |
|----------------|----------------------------------|----------------|------------------------------------|
| a | — а, ей, и, о, э, эй | l | — л, иногда не передается |
| ae | — а, е, э, и, ии | m | — м |
| ai | — ей, эй | n | — н |
| au | — ау, о, оу, оо | ng | — нг |
| aw | — о, оо | o | — о, у, э, а, оу |
| ay | — ей, и, эй | o | — о |
| b | — б, иногда не передается | oa | — о, оу |
| c | — к, с, ш | oe | — о, у, оу |
| ch | — к, х, ч, ш | oo | — а, о, у, уу |
| d | — д | ou | — а, ау, оу, у |
| e | — е, и, э; иногда не передается | ough | — аф |
| ea | — е, и, ии | ow | — ау, оу |
| ee | — и, ии | p | — п, иногда не передается |
| ei | — ей, и, эй, ии | ph | — ф |
| eight | — и, эй, ай | q | — к |
| eo | — е, ии | r | — р |
| eu | — ю, ью | s | — ж, с, ш |
| ew | — ю, ью | sh | — ш |
| ey | — ей, и, эй | t | — т |
| f | — ф | u | — а, е, у, ю; иногда не передается |
| g | — г, дж, ж; иногда не передается | ui | — и, у |
| gg | — гг, гж | ur | — ер, эр |
| h | — х, иногда не передается | v | — в |
| i | — ай, е, и, э | w | — в, у; иногда не передается |
| ia | — айа, на, ия | wor | — уэр |
| ie | — айе, и, ии | x | — гз, з, кс |
| io | — айо, ио | y | — ай, е, и, й |
| j | — дж | z | — з |
| k | — к, иногда не передается | | |

For example:

| | |
|--------------------|------------------|
| exact /ɪɡ'zækt/ | игзэкт |
| Exmoor /'eksmuə/ | Эксмур |
| Levy /'li:vɪ/ | Ливи |
| Dyson /'daɪsn/ | Дайсон |
| Byrd /bɜ:d/ | Берд |
| Vyrnwy /'vɜ:nwɪ/ | Вернуи |
| Worthing /'wɜ:ðɪŋ/ | Уэртинг, Вортинг |
| Urban /'ɜ:bən/ | Эрбан |
| Whistler /'wɪslə/ | Уислер |

| | |
|-------------------------|--|
| Furness /'fə:nɪs/ | Фернесс |
| Proserpine /'prɒsəpaɪn/ | Просерпайн, Прозерпина (<i>миф.</i>) (название судна) |
| Louth /lauθ/ | Лаут |
| Southend /'sauθ'end/ | Саутенд |
| Highmoor /'haɪmuə/ | Хаймур, etc. |

Given below are several "difficult" Russian letters, which are transliterated in English in the following way:

| | |
|-------------|----------------------------------|
| ш — sh | Sholokhov |
| ж — zh | Zhukov |
| ч — tch, ch | Tchekov, Tchaikovsky, Cheboksary |
| щ — shch | Shcherba |
| ы — y | Bykov |
| х — kh | Kharkov |
| я — ya | Yalta |

Questions

- How are phonemes connected with letters?
- What are the types of graphemic reference?
- What are the single-valued graphemes? What is a monograph?
- What are the multivalued graphemes? What is a digraph, trigraph, polygraph?
- What are the simple and complex graphemes?
- How are graphemes connected with phonology?
- How are graphemes connected with morphology?
- How is orthography connected with lexicology, grammar?
- What conditions spelling difficulties in English?
- What diacritic functions of graphemes do you know?
- What is a syllabograph?
- What is a morphograph?
- What is the difference between transcription and transliteration?

Exercises

*1. Give graphemic symbols of the phonemes:

| | |
|---------|----------------------------|
| /s/ | in the word <i>city</i> |
| /k/ | in the word <i>cat</i> |
| /ʃ/ | in the word <i>oceanic</i> |
| /(j)u:/ | in the word <i>beauty</i> |
| /ʌ/ | in the word <i>courage</i> |
| /ə/ | in the word <i>borough</i> |

2. Give some examples of English graphemes.

*3. Analyse these words from the viewpoint of the inventory of graphemes, phonemes, letters.

baobab, vest, duly, ship, dish, awful, dawn, light, high, work, archaic, airy, laugh, watched

***4. Give explanation of the phonemic reference of the graphemes <r>, <our> <ear> in the words:**

right, afraid, pray, try, tour, tear, very, dry

***5. Give the phonetic reference of the morphograph ed in the words:**

worked, limited, pinned, begged, added, liked, barred, cared, pinned

***6. Transcribe these homophones. Translate them into Russian to prove the differentiatory function of graphemes.**

| | | | | | |
|---------|-----------|---------|-----------|------------|--------------|
| pack | — packed | feat | — feet | vain | — vein |
| barred | — bard | witch | — which | | — vane |
| pair | — pare | dear | — deer | sell | — cell |
| | — pear | | | sail | — sale |
| franc | — frank | bow | — bough | compliment | — complement |
| wear | — where | bread | — bred | hair | — hare |
| weather | — whether | right | — write | blue | — blew |
| | | | — rite | | |
| scene | — seen | peer | — pier | sea | — see |
| berth | — birth | beach | — beech | meat | — meet |
| ceiling | — sealing | hear | — here | heal | — heel |
| sole | — soul | fur | — fir | fare | — fair |
| bare | — bear | tale | — tail | cent | — sent |
| pray | — prey | male | — mail | | — scent |
| rain | — reign | sun | — son | rode | — road |
| | — rein | | | team | — team |
| pail | — pale | beat | — beet | hoarse | — horse |
| air | — heir | break | — brake | berry | — bury |
| finned | — find | maize | — maze | gate | — gait |
| pains | — panes | weak | — week | plain | — plane |
| teas | — tease | currant | — current | key | — quay |
| peace | — piece | serial | — cereal | | |

***7. Divide these words into (a) syllabographs and (b) morphographs.**

(a) meter, caring, beauty, sourly, surely, teacher, crying, sixty

(b) prays, praise, child's, readable, misrule, penniless, unknown, dislike, immortal, irrational

***8. Explain the diacritic function of the graphemes <e>, <r>, <ss>, <rr>, <tt>, <nn> by comparing these pairs of words.**

| | | |
|---------------|-----------|-------------|
| a) man — mane | hear — he | pope — pore |
| met — mete | her — hen | bar — bare |
| sit — site | sir — sit | sort — sour |

| | |
|-----------------|-----------------|
| b) tony — bonny | lazy — lassy |
| car — carry | noted — knotted |
| mar — merry | wrote — rotten |
| her — hurry | later — latter |
| cut — cutter | fuse — fussy |

***9. Transliterate these names by Russian letters.**

Abel, Andrew, Ann, Baldwin, Bernard, Dorothy, Esther, Gerald, Hugo, Ira, Jean, Jeremiah, Keith, Lionel, Mabel, Martha, Pius

Control Tasks

***1. Divide these words into morphographs.**

faces, facing, nicer, choicest, racy, princess, ages, raging, larger, urgent, bulgy, burgess, raged, changeling, outrageous, faced, nicely, hugely, engagement, changeable

***2. Divide these words into a) morphographs, b) syllabographs. Transcribe them to illustrate phonemic references to syllabographs.**

curing, fires, cheerless, cured, occurred, stirring, stirred, pining, pined, worker, working, worked, thoroughly, culture, nation, city, redder, cheering

***3. Transcribe these words. Show the phonemic reference of digraphs and polygraphs.**

aid, fairy, said, fountain, portrait, villain, straight, August, sauce, laugh, authority, taught, east, tea, delay, beige, threepence, leopard, people, freight, weigh

***4. Fill in the blanks with the appropriate homophone.**

(*sealing, ceiling*) 1. We had difficulty in ... the leak. 2. The spider made its web on the 3. The ... of the room is high.

(*sole, soul*) 1. My old boots need new 2. He was the ... executor named in the will. 3. We had a nice ... for lunch. 4. He has a hard job to keep body and ... together. 5. He put his heart and ... into work.

(*bare, bear*) 1. In winter the garden looked 2. The pain was almost more than he could 3. I can't ... that man. 4. He moved with the grace of a trained 5. The ice won't ... your weight.

(*pear, pair*) 1. I have bought a ... of shoes. 2. Please give me a ..., I prefer them to apples. 3. They went away in

(*right, write*) 1. Don't ... on both sides of the paper. 2. What's the ... time? 3. In England traffic keeps to the left side of the road, not to the ... as in other countries. 5. I hope you know the difference between ... and wrong.

(*vain, vein, vane*) 1. All our work was in 2. She is a ... young girl, always giving herself airs. 3. One of the ... of the propeller was broken. 4. They found a ... of gold in the rock. 5. He became so angry that the ... on his forehead swelled.

VI. SYLLABLE

A syllable is a speech unit higher than a sound, because sounds are not pronounced separately but are usually formed into syllables, which, in their turn, are joined into words, phrases and sentences. A syllable is the minimal unit of sounding speech.

The syllable can be analysed from the acoustic and auditory, articulatory and functional points of view. It can be viewed in connection with its graphic representation.

(1) Acoustically and auditorily a syllable is characterized by the force of utterance, or accent, pitch of the voice, sonority and length,¹ that is by prosodic features.

(2) Articulatory characteristics of a syllable are connected with sound juncture and with the theories of syllable formation and syllable division.

(3) Functional, or phonemic, characteristics of a syllable are connected with the constitutive, recognitive and distinctive properties of a syllable.

(4) Syllables in writing are called syllabographs and are closely connected with the morphemic structure of words.

A syllable can be a single word: *chair* /tʃeə/, part of a word: *English* /'ɪŋ — glɪʃ/, or part of the grammatical form of a word: *later* /'leɪ — tə/.

A syllable can be formed by a vowel: (V) in English, (Г) in Russian; by a vowel and a consonant: (VC) in English, (ГC) in Russian; by a consonant and a sonorant (CS) — such structure characterizes only the English syllabic system.

Г, V — types of syllable called *uncovered open*,

ГC, VC — types of syllable called *closed uncovered*,

ГCГ, CVC — types of syllable called *closed, covered*,

СГ, CV — types of syllable called *covered open*.²

G. P. Torsuyev suggests to differentiate the following types of syllabic structures:

Г, V type: fully open,

ГCГ, CVC type: fully closed,

¹ Length is marked with /ː/, shortness — with /ʼ/. E.g. \bar{V} is a historically long vowel. \check{V} is a historically short vowel.

² Vassilyev V. A. English Phonetics, p. 232.

CG, CV type: initially covered,

ГC, VC type: finally covered.¹

The CV, CG type of syllable is more characteristic of the English and the Russian languages, than syllables of the "covered" type. This is proved by experimental data on the material of the Russian language. In syllables of ут, ук, ун—type (ГC), the terminal т, к, н acquire a vowel element—ГC^r.²

The structure of the English and Russian syllable is similar.

| English | | Russian | |
|---------|----------|---------|---------|
| V | err | Г | и |
| CVC | pit | ГГC | пол |
| CVCC | fact | ГГCC | воплъ |
| CVCCC | lapsed | ГГCCC | текст |
| CCVC | plan | CCГC | жнец |
| CCCVC | spleen | CCCGC | взлом |
| CCVCC | twiddle | CCГCC | фланг |
| CCVCCC | stamps | CCГCCC | спектр |
| CCCVCC | spleens | CCCGCC | вдрызг |
| CVCCCC | texts | ГГCCCC | монстр |
| VCVCCCC | attempts | ГГГCCCC | удобств |
| CV | dew | ГГ | но |
| CCV | spy | CCГ | дно |
| CCCVC | straw | CCCG | мгла |
| VC | eat | ГC | ад |
| VCC | act | ГCC | акр |
| ▼CCC | asks | ГCCC | астр |

The English sonorants can form syllables with consonants preceding them, and the Russian sonorants are non-syllabic with the exception of some special cases (see p. 167).

The structural patterns of syllables formed by sonorants with a preceding consonant in English are similar to V+C patterns:

| | |
|--------|-----------------------|
| CS | written /'rɪtn/ |
| CVSC | licence /'laɪsəns/ |
| CCVSC | sanctions /'sæŋkʃənz/ |
| CVSCC | scaffolds /'skæfəldz/ |
| CSVSCC | entrants /'entrənts/ |

The peak of the syllable is usually formed by a vowel or a sonorant (it is also called the *crest*), and the consonants which precede the peak and follow it are called *slopes*.

According to G. P. Torsuyev's data the syllabic structure in the English language of the combination *consonant (or consonants) + a sonorant* is characterized by the following data:

¹ Турсуев Г. П. Структура слога и аллофоны в английском языке. М., 1975.

² Бондарко Л. В. Звуковой строй современного русского языка. М., 1977, с. 126.

CS type—40 combinations, CSC type—90 combinations, CCCC type—15 combinations, CCCCC type—1 combination.¹

Syllable-forming sonorants in the combinations of the CS type are terminal /m, n, ŋ, l/. E.g.

| | | | |
|---------|---------|--------|----------|
| earthen | channel | April | equal |
| people | garden | often | nation |
| written | eagle | even | decision |
| taken | fortune | listen | rhythm |
| able | angel | season | camel |

The combinability of syllable forming sonorants is the following: /l/ combines with all consonants except /θ, ð/; /n/ combines with all consonants except /m, n/; /m/ combines only with /θ, ð, s, z, p/; /ŋ/ combines with /k/.

The distribution of consonants in the syllables of the CSC type is characterized by the following features: initial consonants may be represented by /p, b, t, d, k, g, f, v, θ, ð, s, z, ʃ, ʒ, tʃ, dʒ, m, r, w, n/; the medial sonorants may be represented by /n, m, l/; final consonants are represented by /t, d, s, z, θ/. E.g.

| | | | | |
|--------------|---------|----------|-----------|----------|
| opens | vacant | goggles | ovens | patient |
| marbles | enables | merchant | arrivals | angels |
| patterns | mortals | urgent | heathens | equalled |
| coupled | student | softened | rhythms | motions |
| peoples (v.) | gardens | servant | decent | whistles |
| officials | | eleventh | present | persons |
| | | | pannelled | |

The distribution of consonants in the syllables of the CCCC type is characterized by the following features: the initial consonant may be represented by /p, t, d, tʃ, dʒ, f, v, s, z, ʃ, ʒ, r/. The peak of the syllable is represented by the sonorants /n, l/, they are immediately followed by /t, d, s/; final consonants are represented by /t, s, z/. E.g.

| | | | | |
|-----------|-----------|----------|-----------|---------|
| innocents | agents | patents | tangents | parents |
| serpents | students | servants | pheasants | errands |
| patients | scaffolds | licensed | merchants | heralds |

The syllables of the CCCCC type are formed by /t, r, n, t, s/ as in the word *entrants*. In the words *emigrants, minstrels, hydrants* the terminal combinations /grnts, strlz, drnts/ can be pronounced as CCCC type.

Acoustic properties of syllables, such as: duration, pitch and the force of utterance are connected with the inherent prominence (sonority) of syllable forming phonemes. E.g., when the Russian vowels /a, o, ə, y, u/ are pronounced on one and the same level, their acoustic intensity is different: the strongest is /a/, then go /o, ə, y, u/.

O. Jespersen established the scale of sonority of English sounds,

¹Торсуев Г. П. Цит. соч., с. 50—58.

that is the scale of their inherent prominence. According to this scale the most sonorous are back vowels (low, mid, high), then go semi-vowels and sonorants, then — voiced and voiceless consonants.

Scale of sonority

1. low vowels /a:, ɔ:, ɒ, æ/
2. mid vowels /e, ə:, ə, ʌ/
3. high vowels /i:, ɪ, u:, ʊ/
4. semi-vowels /w, j/
5. sonorants /l, r, m, n/
6. voiced constrictive consonants /v, z, ʒ/
7. voiced plosive consonants /b, d, g/
8. voiceless constrictive consonants and affricates /ʃ, tʃ, f, s, h/
9. voiceless plosive consonants /p, t, k/

The conception of inherent prominence is the basis of the sonority theory (see below), but in actual speech, force, or dynamic stress, is of primary importance: vowels are longer in a stressed syllable compared with the vowels in the unstressed position.

THEORIES OF SYLLABLE FORMATION AND SYLLABLE DIVISION

There are different points of view on syllable formation which are briefly the following:

1. The most ancient theory states that there are as many syllables in a word as there are vowels. This theory is primitive and insufficient since it does not take into consideration consonants which also can form syllables in some languages, neither does it explain the boundary of syllables.

2. The expiratory theory states that there are as many syllables in a word as there are expiration pulses. The borderline between the syllables is, according to this theory, the moment of the weakest expiration. This theory is inconsistent because it is quite possible to pronounce several syllables in one articulatory effort or expiration.

Prof. L.R. Zinder, one of L.V. Shcherba's disciples, did a lot in the analysis of speech by graphic methods. He states that the kymographs of sounds pronounced in syllables and words should be analysed both from articulatory-auditory and phonetic-phonological points of view.

The flow of air, for example, is not necessarily stopped with the complete obstruction for occlusive consonants. «В фонетике мы изучаем движения произносительных органов не как нечто самодовлеющее, а как источник определенных звуковых эффектов.»¹

3. The sonority theory states that there are as many syllables in a word as there are peaks of prominence according to the scale of sonority.

¹ Зиндер Л. Р. Общая фонетика. Л., 1960, с. 242.

Thus, in the word *sudden* the most sonorous is the vowel /ʌ/, then goes the nasal sonorant /n/ which forms the second peak of prominence, /s/ and /d/ are sounds of low sonority, they cannot be considered as syllable forming sounds (Fig. 67).

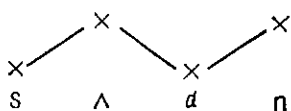


Fig. 67

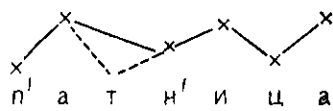


Fig. 68

In the Russian word *пятница* there are three peaks of sonority and accordingly three syllables (Fig. 68).

The sonority theory helps to establish the number of syllables in a word, but fails to explain the mechanism of syllable division because it does not state to which syllable the weak sound at the boundary of two syllables belongs.

4. The "arc of loudness" or "arc of articulatory tension" theory is based on L. V. Shcherba's statement that the centre of a syllable is the syllable-forming phoneme. Sounds which precede or follow it constitute a chain or an arc which is weak in the beginning and in the end and strong in the middle.

If a syllable consists of one vowel, then its strength increases in the beginning, reaches the maximum of loudness and then, gradually decreases. Graphically it can be represented by an arc of loudness or an arc of an articulatory effort (Fig. 69).

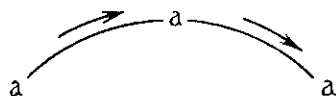


Fig. 69

According to the "arc of loudness" theory consonants in the structural pattern, mentioned above, can be viewed as:

finally strong (initially weak),

finally weak (initially strong),

double peaked (combination of two similar sounds).

For example, in the words *cab*, *за* the consonants /k/ and /z/, that begin the syllable, are finally strong, that is articulatory strength increases to the end of /k/ and /z/ (they are also called *initially weak*). These consonants begin the "arc of loudness" (which is equal to one syllable).

In the words *cab*, *воз* the final consonants /b/ and /z/, that end the "arc of loudness" or syllable, are finally weak, that is, articulatory strength decreases to the end of /b/, /z/ (they are also called *initially strong*, finally weak).

In terms of the "arc of loudness" theory there are as many syllables in a word as there are "arcs of loudness" and the point of syllable division corresponds to the moment, when the arc of loudness begins or ends, that is: initially weak consonants begin a syllable, finally weak — end it. (Finally strong consonants begin a syllable, initially strong end it.) For example, the word *mistake* consists of two arcs of

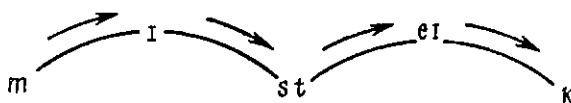


Fig. 70

loudness in which /m/ and /t/ are finally strong consonants and /s/ and /k/ are finally weak. /s/ constitutes the end of the "arc of loudness", /t/ constitutes the beginning (Fig. 70).

In the word *misspell* the double peaked /ss/ occurs at the junction of two syllables (Fig. 71). The sound /s/ is strong at both ends and

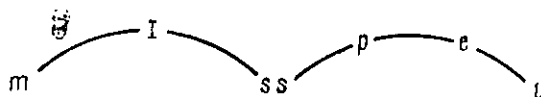


Fig. 71

weak in the middle, phonologically it consists of two successive allophones of the same phoneme.

A syllable can be defined as a phonetic unit, which is pronounced by one articulatory effort, by one muscular contraction, which results auditorily in one uninterrupted arc of loudness.

Correct syllable formation and syllable division is of great practical importance, because similarly to phonemes syllables perform constitutive, distinctive and recognitive functions.

FUNCTIONAL CHARACTERISTICS OF SYLLABLES

The constitutive function of syllable formation and syllable division is inseparably connected with its materiality, because the syllable is a material carrier of words, phrases and sentences.

The distinctive function of syllable formation can be seen on the example of minimal pairs, in which the vowel sound /ə/ is opposed to a zero phoneme:

abed (in bed) /ə'bed/ — в постели
 a bed (bed) /ə[↑]bed/ — кровать
 attend /ə'tend/ — посещать
 tend /[↑]tend/ — иметь тенденцию, заботиться

In the minimal pair

lightning /'laɪtnɪŋ/ — молния
 lightening /'laɪtnɪŋ/ — освещение

the members are opposed due to the presence or absence of the syllabic sonorant /ŋ/.

In Russian poetry syllabic — non-syllabic sonorants may be opposed for rhythmical purposes. Such words as *корабль*, *сентябрь* are some-

times used as consisting of three syllables, and the words like *вихрь*, *люстр* — as consisting of two syllables. E.g.

- (1) Была в Останкине зима,
Декабрь, число тридцатое.
- (2) Была в Останкине зима,
Декабрь,
Тридцать первое.

In the first variant /p/ in *декабрь* is non-syllabic, in the second variant /p/ in the same word is syllabic.

Oppositions: syllabic—non-syllabic sonorant can be seen on the examples of free variation, ex. RP listening /'lɪsɪŋ/, /lɪsɪŋ/; GA listening /'lɪsənɪŋ/.

The distinctive function of syllable division can be proved by a few examples which are usually given in textbooks on English pronunciation:

I 'scream я кричу — 'ice 'cream мороженое
a 'notion понятие — an 'ocean океан

To underline the distinctive difference in the break of such pairs American descriptivists use an extra, *juncture phoneme* and mark it /+/.¹ Then the break between *a name* and *an aim* can be characterized as the *plus*, or *open juncture*.

Similar cases exist in the Russian language: О Толе, от Оли; in speech the point of syllable division is a fresh articulatory effort.

The close juncture is not marked, it occurs between sounds, which belong to one syllable, e.g. /n/ and /eɪ/ in *a name*, /t/ and /o/ in *on* *Оли*.

The existence of such pairs demands special attention in teaching practice to avoid wrong perception.

GRAPHIC CHARACTERISTICS OF SYLLABLES

The auditory image of a syllable can be shown in transcription: unknown /'ʌn — 'noun/, liner /'laɪ — nə/, maker /'meɪ — kə/

Parts of orthographic and phonetic syllables do not always coincide. E.g.

| Word | Phonetic syllables | Orthographic syllables |
|-----------|--------------------|------------------------|
| table | /'teɪ-bl/ | ta-ble |
| laden | /'leɪ-dn/ | la-den |
| programme | /'prou-græm/ | pro-gramme |
| poet | /'pou-ɪt/ | po-et |

It is very important to observe correct syllable division when necessity arises to divide a word in writing. Division of words into syllables in writing (syllabographs) is based on morphological principles. The morphological principle of word division in orthography demands that

¹ Gleason H. A. Op. cit., p. 43.

the part of a word, which is separated, should be either a prefix, or a suffix, or a root (morphograph): un-divided, utter-ance, pun-ish, be-fore, limit-ed, smil-ing.

However, if there are two or three consonants before *-ing*, these consonants may be separated in writing, e.g. gras-ping, puz-zling.

The suffix *-ed* can be separated in writing only if it is preceded by t, d, e.g.

divid-ed, decid-ed

Polygraphs are not separated in writing, e.g.

dial, ancient, patience, thoroughly

Two or more consonants before a suffix that begins with a vowel may be separated in writing, e.g.

gras-ping, trick-ling, big-ger

If we compare the system of syllable division and syllable formation in Russian and in English, we can draw the following conclusions:

(1) The principles and means of syllable formation and syllable division are the same in both languages.

(2) The single intervocal consonant between two phonetic syllables belongs to the next vowel in both languages:

muddy /ma-di/

мо-ре

cosy /kou-zi/

во-ля

occasion /ə-kei-ʒn/

во-ло-ком

But there is a tendency in the Russian language to accomplish syllable division before a sound of minimal sonority, e.g.

то-ла-па, мор-ской, конь-ки, бо-чка и т.д.

(3) The /e, æ, ɔ, u/ vowels may occur in the end of the syllable in English, but not in the end of a word.¹

(4) All consonants may begin a syllable in English, the only exception is the sound /ŋ/. In the system of the Russian language all consonants may begin a syllable.

(5) Syllables of the initial CC type constitute more than 50 combinations in English (except affricates and double consonants). Syllables of the initial CC type in Russian constitute 236 combinations (affricates and double consonants including), e.g. *speech*, *вчера*.

(6) Syllables of the initial CCC type constitute 14 combinations in English and 97 in Russian, e.g. *street*, *вскинуть*.

(7) A number of combinations of the initial CCCC type constitute syllables only in Russian, there are no similar combinations in English, e.g. *всплакнуть*, *взгляд*, *вздоргнуть*.

Questions

1. What are the three points according to which a syllable can be analysed?

2. How are syllables formed?

¹According to G. P. Torsuyev's data the so-called "checked" vowels in English may occur in the end of the syllable, op. cit., p. 102. «Строение слога и аллофоны в англ. яз.»

3. What are the standard types of syllables?
4. What similar syllabic structures do you know in English and in Russian?
5. What is the role of sonorants in English and Russian syllable formation?
6. What do you know about the CS type of a syllable in English?
7. What do you know about the CSC type of a syllable in English?
8. What do you know about the CSCC and CCSCC types of a syllable in English?
9. How are acoustic properties of syllables connected with their sonority?
10. What is the difference between the "vowel-forming theory" and "expiratory theory" in syllable formation?
11. What is "sonority theory"?
12. What consonants are initially weak (finally strong) according to "the arc of loudness theory"?
13. What consonants are finally weak (initially strong) according to "the arc of loudness" or "an arc of an articulatory effort theory"?
14. What is the arc of loudness in syllable formation and syllable division?
15. What is a phonetic syllable?
16. Why is it important to observe correct syllable formation and syllable division?
17. What is "juncture" (open, close)?
18. What is the difference between an orthographic and a morphological syllable?
19. What rules of syllable division in writing do you know?
20. What are the principal differences between syllable formation and syllable division in English and in Russian?

Exercises

*1. Give syllabic structural patterns of the following English and Russian words; characterize them from the viewpoint of their structure: *open, covered, etc.*

- (1) pit, pat, pot, bet, tip, ten, top, took;
пол, бак, ток, час, воз, сон, так, нос
- (2) fact, taken, rhythm, prism, region, bacon, listen;
воплъ, вепрь, жатв, битв, ритм, метр, гипс, ЗАГС
- (3) depths, lapsed, boxed, lisped, lifts, busts;
текст, жертв, горсть, шерсть, Минск, тембр
- (4) plan, price, shriek, fret, smoke, twice;
птах, прав, жнец, здесь, злак, сгиб
- (5) do, go, so, dew, he, pea, pie, boy;
да, бы, фа, си, те, ту, ли
- (6) spy, stay, blue, brew, pray, dry;
дно, пну, все, про, кто, два
- (7) ought, eat, orb, oak, eight, out, art, at;
он, ас, ад, ил, ух, ох, от, ах

- (8) splay, spray, straw;
мсти, мзда, льсти, мгла
- (9) ebbcd, act, ask, else, aunt, apt;
акт, акр, игл, игр, остъ, альф
- (10) asked, aunts, asks, eights, acts, elks;
искр, астр
- (11) spleens, springs, sprawls, sprains, strains, screams;
вскользь, всласть, вдрызг, взвизг
- (12) serpents, patents, students, servants, licensed;
монстр, ханств, царств, земств, чувств
- (13) spleen, split, street, struck, squeek, scroll;
взлом, вздеть, сдвиг, сгнить, взмах, взрыв
- (14) twiddle, trance, plosion, flask, flint, thrust;
цвель, фланг, внутрь, швабр, скетч
- (15) stamps, tramps, twelfth, cleansed, clenched, errands;
спектр, ксеркс, сфинкс

*2. (a) Divide these words into phonetic syllables. (b) Give their syllabic structural patterns.

people, bugle, satchel, trifle, rhythm, April, equal, happens, marbles, patterns, dragons, urgent, servant, listened, heralds, errands, parents, tangents, patients, servants, scaffolds

*3. Define the number of syllables in these words according to the sonority theory.

alone, female, unfortunate, insufficient, machine, unimportant, yesterday, aristocracy, appetite, remarkable, solecism, misunderstand, inferiority, window, tomato, satisfactory, electrification

4. Mark initially strong consonants with a single line and initially weak consonants with two lines.

kæt, 'ɑ:mi, 'i:tə, 'lar-nə, 'æk-tə, 'bɔ:tl, 'i:gl, 'mis-tə, 'lek-tʃə, 'rʌg-bi, 'mi-dl, 'win-tə, 'ʌn-noun, mæp, film

5. Supply each word of exercise 4 with the corresponding arc of loudness.

6. Read these examples to prove the semantic importance of the correct syllabic boundary. Mark close juncture by pluses.

a nation — an Asian

a nice house — an ice house

the tall boys — that all boys

до дела ли — доделали

see Mable — seem able

it swings — its wings

хлеб с ухой — хлеб сухой

по машинам — помаши нам

*7. Analyse these words from the viewpoint of phonetic and orthographic syllable division; transcribe and divide them into syllabographs.

work, working, worker, pined, pining, stirring, occurred, cured, cheerless, curing, cheering, firing, redder, nation, culture, thoroughly

Control Tasks

***1.** Arrange these words into three columns according to the type of syllabic structure: (a) closed uncovered, (b) closed covered, (c) covered open.

took, pray, lifts, at, straw, boy, aunt, texts, clenched, tip, pea, struck, strays, elks, thrust, bet, fact, fret, asks, ebbled, price
мгла, рад, ил, ЗАГС, кто, от, горсть, та, астр, скетч, взрыв, власть, сфинкс, чувств, сон, Минск, гипс, здесь, злак, что

***2.** Write out: (a) initially weak (finally strong) and (b) finally weak (initially strong) consonants.

sit, lame, back, miss, sack, gave, tip, tide, top, late, mad, made, nine, till, cake, thick, bat, pin, pine, hate, act, ice, plot, face, hid, fate, stamp, spot, pile, land, mist, mole, mark, gold, cap, nose, fix, harm, merry, horn, start, form

***3.** Divide these words into phonetic syllables.

comfortable, cottage, orchard, ground, kitchen, pantry, study, several, upstairs, bedroom, nursery, bathroom, furniture, modern, own, electricity, January, February, August, September, October, November, December, Wednesday, Thursday, Tuesday

***4.** Divide these words into syllabographs (where possible).

parents, fire, plural, rural, dinner, marry, disappear, speaking, writing, playing, walking, standing, passing, breakfast, potatoes, tomatoes, coffee, cabbage, bananas, berries, pudding, pears, beer, shopping, ironing, housework, mistake, fishing

VII. ACCENT

If a syllable is made specially prominent, it is said to be stressed, or accented.

Stress, or accent is defined differently by different authors. B. A. Bogoroditsky, for instance, defined stress as an increase and decrease of energy, accompanied by an increase and a decrease 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."¹ A. C. Gimson also admits that a more prominent syllable is accompanied by the changes in the pitch of the voice, quality and quantity of the accented sounds.

If we compare stressed and unstressed syllables in the words *contract* /'kɒntrækt/ *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 chambers;

(c) the quantity of the vowel /æ/ in /kən'trækt/ is greater, the vowel becomes longer;²

(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/.

Word accent 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.

¹ Jones D. Op. cit., p. 247.

² In the Russian word accentual structure quantity is the most important factor. Златоустова Л. В. Фонетическая природа русского ударения (автореферат канд. дис.). 1953.

In different languages one of the factors constituting word accent is usually more significant than the others, it is said to be *phonologically relevant*. According to the most important feature of word accent different types of word stress are distinguished in different languages.

(1) If special prominence in an accented syllable or syllables is achieved mainly through the intensity of articulation, such type of stress is called *dynamic*, or *force stress*. It is observed in the English and Russian languages (other features of accent are present but irrelevant).

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

(3) Languages with the quantitative type of accent are very rare.

(4) Qualitative changes alone do not form an independent phonemically distinctive feature.

From the point of view of the position of stress in words and their grammatical forms, accent can be characterized as *free* (or *shifting*) and *fixed*.

In the English and Russian languages word accent is free, that is stress may fall on the first syllable: *'mother*, *ма́ма*; it may fall on the second syllable: *ig'nore*, *э́жэмен*; it may fall on the final syllable: *con'side'ration*, *напохóд*.

Stress in the English and Russian languages is not only free, but at the same time it is also *shifting*, that is it may shift from one syllable to another in different parts of speech, or in different forms of one and the same word: *ig'nore* — *'ignorant*, *пы́ка* — *пы́ку*. Shifting of word stress may perform semantic function: (a) it distinguishes words semantically: *мука́* — *му́ка*; (b) it may also serve to differentiate grammatical forms of words *до́ма* — *дома́*.

Languages with fixed stress are, for example, the Lettish language where stress falls on the first syllable, e.g. *galva* — *го́лова*, *lstaiba* — *комната́*, *tāfele* — *классная́ доска́*; the Polish, where stress falls on the prefinal syllable, e.g. *domówy*, *narodówy*.

Strictly speaking, a polysyllabic word has as many degrees of stress as there are syllables in it. American and English phoneticians give

the following pattern of stress distribution in the word *examination*. They mark the strongest syllable, with primary accent with the numeral 1, then goes 2, 3, etc.

It is more convenient and vivid to represent this pattern of stress distribution in the following way (Fig. 72, 73).

The number of lines corresponds to the number of syllables in a word. The primary strongest stress mark is placed on the highest line, the second strongest one is placed on the second line, the other stress marks are distributed on the appropriate lines according to accentual sonority. The vertical lines, drawn perpendicularly to the lowest line vividly show the degree of accentual sonority of the syllabic phonemes and the height of the voice-pitch, which is bigger within the strongest syllable, smaller within the second strongest syllable, etc.

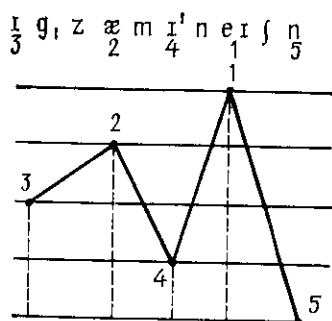


Fig. 73

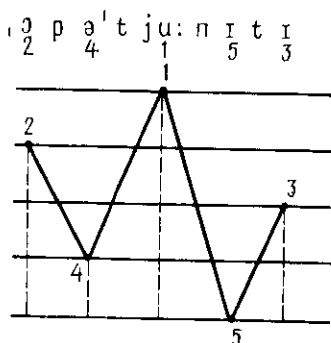


Fig. 73

The least strong syllable has the lowest sonority and the smallest pitch (5 in our examples). Such graphs help to visualize the greater intensity of syllables with primary and secondary stress compared to other, less prominent syllables.

There is some controversy about degrees of the word stress terminology and about placing the stress marks. Most British phoneticians term the strongest stress *primary*, the second strongest *secondary* and all the other degrees of stress — *weak*. The stress marks placed before the stressed syllables indicate simultaneously their places and the point of syllable division: *exami'nation*.

American descriptivists (B. Bloch, G. Trager) distinguish the following degrees of word stress: loud /'/, reduced loud /^/, medial /' /, weak which is not indicated. H.A. Gleason defines the degrees of stress as primary /' /, secondary /^ /, tertiary /' /, weak /~ / (H. Sweet distinguishes weak /~ /, medium, or half-strong /:/, strong /· / and extra-strong, or emphatic stress /; /).¹

Some American scientists suggest to place the stress marks above the vowels of the stressed syllable, e.g. *blackbird* /blæk b̂ɜ:d/. They place the stress marks even in monosyllabic words, e.g. *cát*, *pén*, *máp*. Most English scientists place the stress marks before the stressed syllables and don't mark monosyllabic words.

In the Russian word stress system there are two degrees of word accent: *primary* and *weak*. The stress marks in the Russian accented syllables are placed above the vowels which are the nuclei of the syllable, e.g. *у́сердней с ка́ждым днѐм гляжу́ в сло́варь*.²

¹ Sweet H. A Primer of Phonetics. Oxford, 1929, p. 49.

² Dictionary of accent for TV and Radio workers gives some words with two stresses /' / — primary, /' / — secondary (побочное), e.g. *автоко́рд, вѣдо́наливный, библиотѐковѣ́дение, а́грометеороло́гия*. (Словарь ударений для работников радио и телевидения. М., 1967.)

WORD ACCENTUAL PATTERNS

Some scientists use large and smaller dots to indicate stressed and unstressed syllables within the intonation group, e.g. J. D. O'Connor, G. F. Arnold, A. C. Gimson.

According to Gimson, the accentual elements of words can be marked in the following way:

- \ — syllable receiving potential primary (tonic, nuclear) accent;
- — syllable receiving potential secondary (pitch prominent, or rhythmic) accent;

in pre-nuclear syllables such secondary accent is frequently manifested by actual or potential pitch prominence;

in post-nuclear syllables, secondary accent may be manifested, when adjacent to tonic, merely by qualitative and quantitative prominence, marked as _o, or, when remote from tonic, together with a rhythmical beat, marked .;

.. — unaccented syllable (associated usually with the "weak" vowels /ə, u/ or with syllabic /m, n, l/.

Here are some accentual patterns for 2-, 3-, 4-, 5-, 6- and 7-, 9-syllable words according to Gimson's representation:

- .\ unknown; \. female, window
- .\.. quantity, yesterday; \. tobacco, tomato
- .\.. remarkable, impossible; \...\ counterattack
- ...\ affiliation, consideration; \...\ rehabilitate
- ...\... characteristically, variability, meteorological
- ...\... unilateralism; internationalization

In spite of the fact, that word accent in the English word stress system is free, there are certain factors, that determine the place and different degree of word stress. V. A. Vassilyev describes them as follows:

(1) recessive tendency, (2) rhythmic tendency, (3) retentive tendency and (4) semantic factor.

(1) *Recessive tendency* results in placing the word stress on the initial syllable. It can be of two sub-types: (a) unrestricted recessive accent, which falls on the first syllable: *father* /'fa:ðə/, *mother* /'mʌðə/ and (b) restricted recessive accent, which is characterized by placing the word accent on the root of the word if this word has a prefix, which has lost its meaning: *become* /bɪ'kʌm/, *begin* /bɪ'gɪn/.

(2) *Rhythmic tendency* results in alternating stressed and unstressed syllables. Rhythmical accent can be: (a) historically or diachronically rhythmical, with one stress, which was originally rhythmical. It falls on the third syllable from the end in three and four syllable words, e.g. *family* /'fæmɪli/, *occasion* /ə'keɪʒn/, *nation* /'neɪʃn/ and (b) synchronically rhythmical in words with a secondary stress on the second pretonic syllable, e.g. *pronunciation* /prəˌnʌnsɪ'eɪʃn/.

(3) *Retentive tendency* consists in the retention of the primary accent on the parent word, e.g. *person* — *personal* /'pɜ:sn — 'pɜ:sən/. More commonly it is retained in the parent word as a secondary accent, e.g. *similar* — *similarity* /'sɪmələ — ,sɪmə'lærəti/.

The interaction of the recessive and rhythmic tendencies resulted in the victory of (a) recessive tendency in a few four syllable words, e. g. *adversary* /'ædvə:səri/; (b) in the victory of historically rhythmic tendency in three or four syllable words, e. g. *family* /'fæmɪli/, *ability* /ə'bɪlɪti/, or in (c) a compromise which was, in its turn, of two types:

— when a three syllable word received its accent on the first syllable, e. g. *enemy* /'enəmi/, *cinema* /'sɪnɪmə/ (coincidence of historically rhythmical and recessive tendency);

— when one and the same word can be pronounced according to both tendencies: rhythmic and recessive, e. g.

territory /'terɪtəri/ — full style, R. P.

/'terɪtri/ — rapid colloquial style, R. P.

These are stylistically conditioned intraindialectal accentual variants. Such cases can be also observed in Russian, e. g. *п/л/шѐл*, which is pronounced in full style and *п/ъ/шѐл*, pronounced in rapid colloquial style;

— when one and the same word is pronounced differently by different speakers, e. g. *hospitable* /'hɒspɪəbl/, /hɒs'pɪəbl/ — these are interdialectal (individual) free accentual variants. Such cases can be observed in the Russian language, e. g. *теорѐз* /твѐрѣк/, /твѐрѣк/.

Free accentual interdialectal variants should not be confused with orthoepically incorrect accentuation, e. g. *портфель* /пѐртфѐл/ instead of /партфѐл/.

(4) The next factor which influences the place and the degree of stress in English words is, according to Vassilyev, a *semantic* one. It can be observed in compound words, and according to this factor the most important part of the compound is usually stressed. It is, as a rule, the first element of the compound, e. g. *'bluebottle*, *'booking office*, *'buttonhole*, *'musical box*, *'fire extinguisher*, etc.

Compound words can be represented by one word, two words, or two words written with a hyphen, but it is necessary that they should contain two separable roots.

There are compounds in English which have two strong stresses, because both of their elements are semantically important. They are:

(1) Words with prefixes which have their own meaning. Negative prefixes: *anti-*, *non-*, e. g. *'non-party*, *'anti-revolutionary*. Prefix *ex-* in the meaning of "former", e. g. *'ex-minister*. Prefix *re-* meaning "repetition", e. g. *'re-write*. Prefix *under-* meaning "subordination, assistance, insufficiency", e. g. *'under-do*. Prefix *vice-* meaning "in place of", e. g. *'vice-president*. Prefix *over-* meaning "too much", e. g. *'over-build*. Prefix *pre-* meaning "prior to", e. g. *'pre-dorsal*. Prefix *ultra-* when used with adjectives, e. g. *'ultra-fashionable*.

(2) Compound adjectives such as: *'well-known*, *'double-stressed*, *'evil-looking*, etc., have two equal stresses, because both elements of these adjectives are equally significant.

(3) Verbs consisting of a verb and a postpositional element of adverbial origin, which is semantically important, have two equal stresses, e. g. to 'get 'up, to 'put 'off.

Accent performs constitutive, distinctive and recognitive functions. (1) It organizes words when they are pronounced separately and joined into sentences. (2) It helps to recognize words. (3) It helps to distinguish words and their grammatical forms: 'conduct (noun) — to con'duct (verb), 'conflict (noun) — to con'flict (verb). It also helps to distinguish compound words from word combinations, e. g. 'blackboard (классная доска), 'black 'board (черная доска).

Vassilyev writes that "this function makes word accent a separate supra segmental, or prosodic, phonological unit which may be called accenteme."¹ He distinguishes three word accentemes in English:

primary — equal to the primary stress,
secondary — equal to the secondary stress,
weak — equal to unstressed syllables.

In the examples: 'insult — in'sult we have a form-distinctive accenteme. In the examples: billow /'bɪlou/ (морской вал) — below /bɪ'lou/ (вниз) we have a word-distinctive accenteme which differentiates the meaning of two words.

There are word and form distinctive accentemes in the Russian language as well. In мука́ — му́ка the meaning of the words is differentiated by the word-distinctive accenteme and in рука́ — ру́ку the singular and plural forms are differentiated by the form-distinctive accenteme.

Stress difficulties peculiar to the accentual structure of the English language are connected with two factors: inherent prominence of sounds and their special prominence.

Inherent prominence manifests itself in the fact, that the quantity of long vowels and diphthongs may be preserved in (a) pretonic and (b) post-tonic position.

(a) idea /aɪ'diə/
sarcastic /sɑ:'kæstɪk/
archaic /ɑ:'keɪɪk/

(b) placard /'plækɑ:d/
railway /'reɪlweɪ/
compound /'kɒmpaʊnd/

Special prominence is connected with the following difficulties of the English accentual structure:

(1) Presence of secondary stress in a great number of words, where it may fall on the first or on the second syllable, e. g. *modification* /,mɒdɪfɪ'keɪʃn/, *administration* /əd,mɪnɪ'streɪʃn/.

(2) Absence of secondary stress in a number of words with the initial /ɪ/, the single stress is placed on the third syllable: *electricity* /ɪlek-'trɪsɪtɪ/, *elasticity* /ɪləs'tɪsɪtɪ/. When such words are pronounced with the initial /i:/, e/ they have a secondary stress.

¹ Vassilyev V. A. Op. cit., p. 282.

(3) Single stress in compounds due to the manifestation of the semantic factor:

(a) when compound nouns denote a single idea, e. g. 'blacksmith (кузнец), 'walking stick (палка, трость);

(b) when the first element of the compound is most important, e. g. 'birth-day (день рождения), 'darning needle (штопальная игла; амер. стрекоза);

(c) when the first element of the compound is contrasted with some other word, e. g. 'flute player (флейтист), cf. banjo player.

(d) when a compound is very common and frequently used it may have a single stress, e. g. 'midsummer (середина лета), 'midnight (полночь); exceptions: 'down'hill (покатый), 'up'hill (в гору), 'down'stairs (вниз), 'up'stairs (вверх), 'passer'by (случайный прохожий), 'point'blank (перен. решительный);

(e) compounds of three elements have a single stress on the second element due to the rhythmic tendency, e. g. hot 'water bottle (грелка), waste 'paper basket (корзина для ненужных бумаг);

(f) nouns compounded of a verb and an adverb have one single stress on the first element, e. g. a 'make up, a 'set up, a 'setback.

Since words are not pronounced separately but joined into phrases and sentences, word accent is determined by different factors, that are connected with sentence stress, semantic importance of the word in the sentence, rhythm, emotional colouring and even the mood of the speaker. For example, the word 'thir'teen has two equal stresses but under the influence of rhythm it may be pronounced with one single stress on the first syllable: Her number is 'thirteen hundred. The same is observed in adjectives ending in the suffix -ese and denoting nationality, e. g. Bur'mese, Chi'nese, Japa'nese, etc., but a 'Burmese book, etc.

In conclusion we may state, that the interpretation of the nature of word accent given by Soviet phoneticians is thorough and profound, because they do not reduce the problem of accent to different degrees of loudness and discriminate between word, phrase, and sentence stresses.

Questions

1. What is the difference between inherent and special prominence of sounds?
2. How is accent defined by different authors?
3. What features characterize word accent?
4. How are languages characterized according to the most important feature of their word accent?
5. What is the difference between free and fixed word accent?
6. What is a shifting word accent?
7. How is sonority connected with stress distribution in polysyllabic words?
8. Can the degrees of stress distribution be represented graphically?
9. What is the accent terminology suggested by different authors?
10. What are the ways of marking word stress?

11. What are the factors that determine the place and different degree of word stress in English?

12. What happens as a result of the interaction of recessive and rhythmic tendencies?

13. How is the semantic factor connected with the distribution of stress in compounds of different types?

14. How does accent perform constitutive distinctive and recognitive functions?

15. What is accenteme (word-distinctive and form-distinctive)?

16. What are the difficulties connected with the study of word accent in the English language?

17. What are the factors that determine the place of word accent in the English language?

Exercises

*1. Read these compound words with two equal stresses and translate them.

unaided /'ʌn'aɪdɪd/
unalienable /'ʌn'aɪljənəbl/
unaltered /'ʌn'ɔ:ltd/
unarmed /'ʌn'ɑ:md/
unaspirated /'ʌn'æspɪreɪtɪd/
unclean /'ʌn'kli:n/
anticyclonic /'æntɪsaɪ'klɒnɪk/
anti-national /'æntɪ'næʃənl/
non-payment /'nɒn'peɪmənt/
non-resident /'nɒn'rezɪdənt/
non-stop /'nɒn'stɒp/
ex-minister /'eks'mɪnɪstə/
reopen /'ri:'əʊpən/
reorganize /'ri:'ɔ:gənaɪz/

repack /'ri:'pæk/
prepaid /'pri:'peɪd/
misspell /'mɪs'spel/
misuse /'mɪs'ju:z/
misrule /'mɪs'ru:l/
misquote /'mɪs'kwɔ:t/
misplace /'mɪs'pleɪs/
under-dressed /'ʌndə'drest/
underofficer /'ʌndə'ɒfɪsə/
underpopulated /'ʌndə'pɒpjuleɪtɪd/
vice-admiral /'vaɪs'ædmɪrəl/
vice-consul /'vaɪs'kɒnsəl/
pre-history /'pri:'hɪstəri/
ultra-modern /'ʌltrə'mɒdən/

*2. Read these compound adjectives with two equal stresses and translate them.

'good 'looking, 'old 'fashioned, 'bad 'tempered, 'absent-'minded,
'bare-'headed, 'home-'made

Note. When a compound adjective has a synonym to its first element, the stress is on the first element:

'oval shaped = oval
'yellowish looking = yellowish
'square shaped = square
'greenish looking = greenish

3. Read these composite verbs with two equal stresses.

'carry 'out — выполнять
'come 'across — встречать
'get 'up — вставлять
'see 'off — провожать

'go 'on — продолжать
'point 'out — указывать
'put 'on — надевать
'sit 'down — садиться

'set 'up — устанавливать
 'fall 'out — ссориться; выпадать
 'make 'up — мириться
 'blow 'out — взрываться
 'pick 'out — выбирать

'take 'off — снимать (одежду)
 'fall 'back — отступать
 'get 'back — возвращаться
 'bring 'forth — производить
 'fix 'up — устраивать

*4. Read these compound words with one single stress on the first, most important part of the compound, and translate them.

apple-tree, bystander, daybreak, birthday, sheep dog, pillow-case, school-boy, suit-case, time-table, inkpot, hair-do, housewife, everything, fire-place, broadcast, fountain-pen, anyone

*5. Read these compound nouns with one stress denoting a single idea and translate them.

butterfly, newcomer, butter-fingers, blacksmith, greatcoat, airplane, bluebottle, butter-boat, butterdish, bookmark

*6. Read these pairs of words. Translate them into Russian, mind the semantic importance of word stress (distinctive and recognitive function).

'blackboard — 'black 'board
 'blackbird — 'black 'bird
 'strongbox — 'strong 'box

'overwork — 'over 'work
 'yellow-cup — 'yellow 'cup
 'tallboy — 'tall 'boy

7. Read these pairs of words. Translate them into Russian, mind the importance of the form-distinctive accenteme.

'abstract — to ab'stract
 'commune — to co'mmune
 'compound — to com'pound
 'conflict — to con'flict
 'contest — to con'test

'desert — to de'sert
 'forecast — to fore'cast
 'import — to im'port
 'outgo — to out'go
 'produce — to pro'duce

8. Translate these words. Mind the position of secondary stress on the first syllable in the (a) column and on the second syllable in the (b) column.

(a) ,modifi'cation
 ,ornamen'tation
 ,qualifi'cation
 ,represen'tation
 ,archaeo'logical
 ,tempera'mental
 ,aristo'cratic
 ,mathema'tician

(b) ad,minis'tration
 a,ffili'ation
 a,ssimi'lation
 con,side'ration
 e,xami'nation
 pro,nunci'ation
 an,tago'nistic
 a,cade'mician

*9. Mark the accentual elements of these words according to Gimson's accentual patterns. Read them.

2-syllable words: female, window, profile, over, under, cotton, table, husband

3-syllable words: important, excessive, relation, appetite, photograph, telephone

4-syllable words: unimportant, insufficient, melancholy, caterpillar, criticism, capitalize

5-syllable words: satisfactory, aristocracy, administrative, empiricism, consideration, circumlocution

6-syllable words: variability, meteorological, autobiographic, identification

7- and 8-syllable words: unreliability, industrialization, impenetrability, unilateralism, unintelligibility.

Control Tasks

1. Give examples to prove that: a) the semantic factor influences the position of word-stress in English; b) the word-stress in the English language has a distinctive function.

2. Give examples to show the most difficult cases in the English accentual structure.

*3. Provide these words with necessary stress marks.

air-raid, birdcage, coalmine, teapot, washstand, mail-bag, dance-music, grandfather, handwriting, shopkeeper, ladybird, office-boy, waiting-room, dinner-jacket, tape-recorder, labour exchange, ground floor, knee-deep, cross-question, flat-footed, shop-window, hot-water-bottle, waste-paper-basket, post-graduate, vice-chancellor, secondhand

*4. Transcribe the words and put down stress marks in these verbs and nouns, translate them.

absent *n* — absent *v*
compress *n* — compress *v*
consort *n* — consort *v*
produce *n* — produce *v*
infix *n* — infix *v*

combine *n* — combine *v*
concert *n* — concert *v*
desert *n* — desert *v*
outlay *n* — outlay *v*

VIII. UNSTRESSED VOCALISM

The system of the unstressed vocalism of the English language is characterized by the following features: vowels in unstressed position may change in quality and in quantity, or remain unchanged. For example, the indefinite article *a* may be pronounced as /ə/ which differs from /eɪ/ qualitatively. The personal pronoun *he* may be pronounced as /hɪ/ which differs from /hi:/ quantitatively. In the word *potato* the sound /ou/ remains unchanged though it occurs in an unaccented syllable: /pə'tetou/.

In the English language articles, conjunctions, prepositions, pronouns, auxiliary and semi-auxiliary verbs, which are as a rule unstressed, are used in speech in the reduced form. The only exceptions are: the interrogative pronouns *what*, *when*, *where* and the demonstrative pronoun *that*.

It should be borne in mind that the verbs *has*, *have*, *had* are used in their strong form as notional verbs. They may be used in the strong form when they begin a question. When the verbs *have*, *had*, *has* and the pronouns *he*, *him*, *his*, *her*, *who* are final or medial /h/ may be lost.

Not has the weak form *nt* when it follows the verbs *are*, *should*, *would*, *is*, *has*, *have*, *could*, *dare*, *might*.

The major role in the system of the unstressed vocalism of the English language belongs to the neutral vowel /ə/, which may alternate with any vowel of full formation. E. g.

| | |
|------------|----------------------|
| /ə/ — /i:/ | the /ði:/ — /ðə/ |
| /ə/ — /æ/ | as /æz/ — /əz/ |
| /ə/ — /ʌ/ | but /bʌt/ — /bət/ |
| /ə/ — /ɔ/ | from /frɒm/ — /frəm/ |
| /ə/ — /ʊ/ | could /kud/ — /kəd/ |
| /ə/ — /u:/ | do /du:/ — /də/ |
| /ə/ — /ə:/ | were /wə:/ — /wə/ |
| /ə/ — /e/ | them /ðem/ — /ðəm/ |

Qualitative changes of vowel phonemes should not be confused with their quantitative alternations, when they are shortened because of different linguistic and extra linguistic factors (see examples on p. 40).

Strong and Reduced Forms of Some Words

| | Strong form | Reduced form |
|---------------------------|--------------|----------------------|
| a ¹ | /ei/ | /ə/ |
| about | /ə'baut/ | /baʊt/ |
| am ² | /æm/ | /(ə)m/ |
| and ³ | /ænd/ | /(&)nd, ən, n, m, ŋ/ |
| anybody | /'eni,bɒdi/ | /'enib(ə)di/ |
| are ⁴ | /ɑ:(r)/ | /ɑ, ə(r)/ |
| as | /æz/ | /(&z/ |
| at | /æt/ | /(&t/ |
| been | /bi:n/ | /bin/ |
| before | /bi'fɔ:/ | /bə'fɔə/ |
| but | /bʌt/ | /b(ə)t/ |
| by | /baɪ/ | /bi,bə/ |
| can | /kæn/ | /k(ə)n,kɪ/ |
| could | /kud/ | /k(ə)d/ |
| do ⁵ | /du:/ | /du,də,d/ |
| does | /dʌz/ | /dz, z/ |
| for ⁶ | /fɔ:(r)/ | /f(ə)r/ |
| from | /frɒm/ | /frəm, frm/ |
| had ⁷ | /hæd/ | /h(ə)d,əd,d/ |
| has ⁸ | /hæz/ | /həz, əz, z, s/ |
| have ⁹ | /hæv/ | /həv, əv, v/ |
| he | /hi:/ | /i:, hi, i/ |
| her | /hə:(r)/ | /ə:, hə, ə(r)/ |
| herself | /(h)ə'self/ | /hə'self, ə's-/ |
| him | /(h)ɪm/ | /ɪm/ |
| himself | /(h)ɪm'self/ | /(i)m'self/ |
| his | /(h)ɪz/ | /(i)z/ |
| me | /mi:/ | /mi/ |
| must | /mʌst/ | /məst, məs, mst, ms/ |
| my | /maɪ/ | /mi/ |
| myself | /maɪ'self/ | /mɪ'self, mi's-/ |
| no | /nəʊ/ | /no, nə/ |
| nor | /nɔ:/ | /nə/ |
| not | /nɒt/ | /nt, n/ |
| of | /ɒv/ | /(&)v, v, f/ |
| shall | /ʃæl/ | /ʃəl, ʃl/ |
| she | /ʃi:/ | /ʃi/ |
| should | /ʃʊd/ | /ʃəd, ʃd, ʃt/ |
| so | /sou/ | /so, sə/ |
| some ¹⁰ | /sʌm/ | /səm, sm/ |
| somebody | /'sʌmbɒdi/ | /'sʌmbdi/ |
| such | /sʌʃ/ | /sətʃ/ |
| than | /ðæn/ | /ðən, ðn/ |
| that (cor.) ¹¹ | /ðæt/ | /ðət, ðt/ |
| the ¹² | /ði:/ | /ði, də, ð/ |
| them | /ðem/ | /ðəm, ðm, əm, m/ |
| their | /ðeə(r)/ | /ðə, ðər/ |
| there | /ðeə(r)/ | /ðə, ð(r)/ |
| till | /tɪl/ | /tl/ |
| to ¹³ | /tu:/ | /tu, tə, t/ |
| toward | /tə'wɔ:d/ | /tɔ:d, twɔ:d/ |

| | Strong form | Reduced form |
|----------|------------------------|----------------|
| unless | /ən'les/ | /n'les/(emph.) |
| until | /ən'til/ | /n'til/ |
| upon | /ə'pɒn/ | /əpən/ |
| us | /ʌs/ | /əs, s/ |
| was | /wɒz/ | /wəz, wɪz/ |
| were | /wə:(r)/ | /wə/ |
| who | /hu:/ | /(h)u, u:, u/ |
| whom | /hu:m/ | /hum/ |
| will | /wɪl/ | /l/ |
| would | /wʊd/ | /wəd, (ə)d/ |
| you | /ju:/ | /ju, jə/ |
| your | /jɔ:(r), jə, joə, juə/ | /ju, jə(r)/ |
| yourself | /jɔ:'self/ | /jə'self/ |

- ¹ *a* is pronounced /ə/ before consonants, /æn/ — before vowels.
² *am* is pronounced /m/ after *I*, /əm/ — elsewhere.
³ *and* is pronounced /m/ next to /p, b/; /ɒ/ — next to /k, g/.
⁴ *are* is pronounced /ɑ:, ə/ before consonants, /ər/ — before vowels.
⁵ *do* is pronounced /du:, u/ before consonants, /də/ — before vowels.
⁶ *for* is pronounced /fɔ:(r), fr/ before vowels, /fə, f/ — before consonants.
⁷ *had* is pronounced /d/ after *I, he, she, we, you, they*, /(h)əd/ — elsewhere.
⁸ *has* is pronounced /z/ after voiced other than /z, ʒ/; /s/ — after breathed other than /s, ʃ/.
⁹ *have* is pronounced /v/ after *I, we, you, they*, /(h)əv/ — elsewhere.
¹⁰ *some* is pronounced /səm/ when it means a certain quantity.
¹¹ *that* has a strong form as a demonstrative pronoun and in *that's good*.
¹² *the* is pronounced /ðə/ before consonants, /ði/ — before vowels.
¹³ *to* is pronounced /tu:/ before vowels, /tə/ — before consonants, /tu:/ may be used as weak in the final position.

the /ði:/
pence /pens/
land /lənd/
particle /'pɑ:tɪkl/
a combine /ə'kɒmbaɪn/
toward /tə'wɔ:d/
fully /'fʊli/
to him /'tu:hɪm/
some /səm/
up /ʌp/
herd /hɜ:d/
face /feɪs/
shire /'ʃaɪə/
mouth /mauθ/
folk /fəʊk/

the lesson /ðə'lesn/
threepence /'θrepəns/
England /'ɪŋɡlənd/
particular /pə'tɪkjʊlə/
to combine /tə kəm'baɪn/
forward /'fɔ:wəd/
playfully /'pleɪfəli/
to the table /tə ðə 'teɪbl/
tiresome /'taɪəsəm/
upon /ə'pɒn/
shepherd /'ʃepəd/
preface /'prefəs/
Yorkshire /'jɔ:kʃə/
Plymouth /'plɪməθ/
Norfolk /'nɔ:fəlk/

revere /rɪ'viə/
there's /ðeəz/

reverence /'revərəns/
there's /ðeəz/

On the phonological level the question arises about the phonemic status of the neutral vowel /ə/. Is it an independent phoneme, or a variant of the phoneme with which it alternates? This question can be answered in terms of the distinctive function of the phoneme. In pairs like, for example, *some* /sʌm/ — *some* /səm/ /ə/ performs distinctive function. In the sentence *I read some* /sʌm/ *book* "some" means *a certain*. In the sentence *I read some* /səm/ *books* "some" means *several*. Similar pairs in which the members differ in quality prove an independent phonemic status of the /ə/ phoneme.

From the positions of the Moscow and Leningrad phonological schools the relations between the vowel of full formation and /ə/ should be viewed in the pairs mentioned above differently.

The representatives of the Moscow phonological school consider such relations to be interallophonic, because /ə/ is considered by them in the pairs like /sʌm/ — /səm/ to be an allophone of the /ʌ/ phoneme.

The representatives of the Leningrad school (who advocate the independence of a phoneme) state that in the above examples /ə/ and /ʌ/ undergo interphonemic changes and that they are separate phonemes.

In the Russian language vowels in unstressed syllables may coincide in sounding speech. E. g. /o, a/ in the first pretonic syllable are both pronounced as /ʌ/: /ʌ/ *вѣнс*, /ʌ/ *лѣнь*.

The peculiarity of the unstressed vocalism of Russian is that an unstressed vowel never preserves its full form. The cases like *potato* /pə'tetəʊ/, *artistic* /ɑ:'tɪstɪk/ are very common in English and are never observed in Russian.

In terms of the graphic representation of the English unstressed vocalism (when the vowels of full formation occur in the unstressed position) it is characterized by the following features:

(1) a can be pronounced as:

/ɑ:/ paragraph /'pærəgrɑ:f/

/æ/ photograph /'fəʊtəgræf/, /'fəʊtəgrɑ:f/

/ɪ/ in the suffixes **-ade, -ace, -age, -ate**: graduate /'grædjʊt/, average /'ævərɪdʒ/, surface /'sɜ:fɪs/

e can be pronounced as:

/ɪ/ effect /ɪ'fekt/, ticket /'tɪktɪ/

in the suffixes **-ness, -less**: helpless /'helpɪs/, kindness /'kaɪndnɪs/

i, y can be pronounced as:

/ɪ/ or /aɪ/ valid /'vælɪd/, city /'sɪtɪ/, civil /'sɪvɪl/

in the suffixes **-ize, fy, -y**: modify /'mɒdɪfaɪ/, occupy /'ɒkjupaɪ/, analyse /'ænəlaɪz/

o can be pronounced as:

/ou/ also /'ɔ:lsou/, zero /'zɪərəʊ/

u can be pronounced as:

/ju:/, /ʌ/ or /u/ unite /ju:'naɪt/, value /'vælju:/, useful /'ju:sfʊl/, input /'ɪnpʊt/, tumult /'tju:mʌlt/.

(2) **a, e, i, y, o, u** can be reduced to /ə/ or disappear, e.g.

a is pronounced as /ə/ in:

about /ə'baʊt/, data /'dɛtə/, central /'sentrəl/

a is reduced in such words as metal /'mɛtl/

e is pronounced as /ə/ in:

absent /'æbsənt/, conference /'kɒnfərəns/

e can be reduced as in: recent /'ri:snt/, looked /'lukt/, opened /'oʊpnd/.

i, y in unstressed syllables can be pronounced as:

/ɪ/ Baltic /'bɔ:ltɪk/, balmy /'bɑ:mɪ/

/ɪ/ can be reduced completely as in: basin /'beɪsn/

o can be reduced to /ə/ as in: correct /kə'rekt/, pilot /'paɪlət/, lemon /'lemən/ or disappear as in lesson /'lesn/.

u can be pronounced as /ə/: difficult /'dɪfɪkəlt/; but such cases are rare.

Digraphs **ar, ai, ay; er, ei, ey; ir, ie; or, oi, ou; ue, ui, ur; yr** are pronounced in unstressed syllables either as /ə/ or /ɪ/. The only exceptions are combinations of **wa:/** and **ju:/**; **ur** can be pronounced as /ə:/ or /ə/: conservatoire /kən'sə:vətwa:/, issue /'ɪsju:/, survey /sə:'veɪ/, /sə'veɪ/.

Other examples:

ar /ə/ radar /'reɪdə/, /'reɪdɑ:/

ai /ɪ/ captain /'kæptɪn/, chieftaincy /'tʃi:ftənsɪ/

ay /eɪ, ɪ/ essay /'eseɪ/, Sunday /'sʌndeɪ/, /'sʌndɪ/

er /ə/ teacher /'ti:tʃə/

ei /ɪ/ foreign /'fɔ:rɪn/

ey /ɪ/ money /'mʌnɪ/

ir /ə/ elixir /ɪ'lɪksə/

ie /ɪ/ hobbies /'hɒbɪz/

or /ə/ doctor /'dɒktə/

ou /ə/ famous /'feɪməs/

ue /ju:/ issue /'ɪsju:/

yr /ə/ martyr /'mɑ:tə/

Questions

1. What are the characteristic features of the English unstressed vocalism?

2. What parts of speech are as a rule unstressed in the English language?

3. What is the role of the neutral vowel /ə/ in the system of unstressed vocalism? How is the problem of the /ə/ phoneme solved on the phonological level?

4. What is the main difference between the English and Russian unstressed vocalism?

5. What are the peculiarities of the unstressed vocalism of the English language in terms of its graphic representation?

Exercises

***1. Transcribe these words. Single out the pairs of phonemes in which /ə/ alternates with the vowel of full formation in the unstressed position.**

| | |
|--|---|
| armour (броня) | — army (армия) |
| allusion (намек) | — illusion (иллюзия) |
| tell'em (скажи им) | — tell him (скажи ему) |
| sitter (живая натура) | — city (город) |
| forward (передний) | — foreword (предисловие) |
| experiment (опыт) | — experiment (экспериментировать) |
| some (некоторое количество) | — some (некоторый, какой-то) |
| that (который <i>относительное местоимение</i>) | — that (тот <i>указательное местоимение</i>) |
| variety (разнообразие) | — various (различный) |
| estimable (достойный уважения) | — estimate (оценивать) |

***2. Transcribe these words. Underline the vowels of full formation in the unstressed position.**

protest (*n*), content (*n*), comment (*n*), abstract (*adj*), asphalt (*n*), cannot, epoch, blackguard, export (*n*), humbug, expert (*n*), institute

***3. Transcribe these words. Read them. Mind the dropping off of /ə/ in the unstressed position.**

often, session, special, difficult, some, can, conference, dictionary, April, have

***4. a) Transcribe these words and underline the sounds of full formation in the pretonic syllables. b) Give examples of Russian vowel reduction in a similar position.**

| | | |
|------------|--------|--------------|
| emission | usurp | aorta |
| eleven | Uganda | oil-painting |
| ensign | upturn | coyote |
| abstract | urbane | aerologist |
| objective | idea | hereunder |
| orchestral | outwit | Eurasian |

***5. Read the exercise. Pay attention to the strong and weak forms which are singled out.**

Red and white. /'red (ə)n ,waɪt/. That man said: "That's good." /'ðæt 'mæn ,sed: 'ðæts ,ɡʊd/. Let's do it tomorrow. /'lets 'du: ɪt təˈmɒrəʊ/. I'm a student. /aɪm ə ,stjuːdənt/. These boys are naughty. /'ði:z 'bɔɪz ə ,nɔ:ti/. These books are interesting. /'ði:z 'bʊks ə ,ɪntrɪstɪŋ/. These bags are black. /'ði:z 'bægz ə ,blæk/. Which is correct? /'wɪtʃ ɪz kə'rekt/. I have many books. /aɪ 'hæv 'meni ,bʊks/. He needs some books. /hi 'ni:dz səm ,bʊks/. I want some book. /aɪ 'wɒnt 'sʌm ,bʊk/. Come for the ticket. /'kʌm fə ðə ,tɪkɪt/. Come for a change. /'kʌm fər ə ,tʃeɪndʒ/. Would you like to stay? /'wʊd ju 'laɪk tə ,steɪ/. Do you want to argue? /'du ju 'wɒnt tu ,ɑ:ɡju:/. You shouldn't have done it. /ju 'ʃʊdn̩t əv ,dʌn ɪt/.

Control Tasks

***1. Transcribe these words. Use them to illustrate the peculiar feature of the English unstressed vocalism.**

latchkey, simplicity, protest (*n*), skylark, pantheon, bulldog, outdoor, dining-room, into, mildew, woodcut, heart-burn, humpback, highway, simplify, highbrow, convoy, rainbow, raincoat, underwear, armature

2. Give some examples from the English language to illustrate the qualitative and quantitative changes of vowels in the unstressed position.

3. Prove the functional independence of the /ə/ phoneme in the English language.

IX. INTONATION

In order to understand the rules and laws of speech segmentation into phrases, words and syllables one should refer to phonetic characteristics dealing with prosody. Prosody is distinctive alternations of pitch, intensity, duration, tempo, etc., the combination of which forms intonation. The study of this phenomenon is called *prosodics*.

Intonation is present in every sentence and sometimes *how* we say something is more important than *what* we say. "Intonation is the soul of a language, while the pronunciation of its sounds is its body, and the recording of it in writing and printing gives a very imperfect picture of the body and hardly hints at the existence of a soul."¹

Intonation is present in every sentence and in written sentences it manifests itself in the punctuation marks:

- | | |
|--------------------------|--|
| . the full stop | " " double quotation marks |
| , comma | ; the semi colon |
| ? the interrogation mark | ... a series of periods, a row of dots |
| ! the exclamation mark | — the dash |
| : the colon | () marks of parenthesis |

Intonation is present not only in written and oral speech, but in "inner" speech as well. This is proved by the thesis of Marx, Engels and Lenin about the sound nature of language, which developed with "the development of the brain and its attendant senses, of the increasing clarity of consciousness, power of abstraction and of judgement".²

Different authors define intonation differently. Soviet phoneticians (V. A. Vassilyev, G. P. Torsuyev, E. Y. Antipova and others) state, that intonation is a complex unity of (1) speech melody, or pitch of the voice, (2) word stress, (3) rhythm, (4) voice timbre, (5) pausation and tempo (rate).

Most foreign authors consider intonation as pitch variations only. However they underline the inseparable connection of intonation and stress, but ignore other important components of intonation.

V. A. Vassilyev suggests that the term "intonation" can be viewed (1) in the narrow sense (pitch variations, speech melody) and (2) in the broad sense (a complex unity of all its components). In the latter case

¹ Kingdon R. English intonation practice. England, 1960, p. XIII.

² Marx K. and Engels F. Selected Works, p. 357.

the term "intonation" should be replaced by the term "prosodation"; in this case it is to be analysed on the suprasegmental level.¹

Methods of indicating intonation are different, but the traditional way of representing intonation is by tonograms. Two horizontal lines show graphically the upper and lower limits of the voice pitch. Dashes (—) represent stressed syllables, dots (.) represent unstressed syllables. Downward and upward curves (∖ /) represent the fall and the rise in the voice pitch. Vertical bars represent pauses: a single vertical bar (|) — a short pause, a double vertical bar (||) — a long pause, a wavy vertical line (|~|) — a very short pause.

The system of tonetic stress marks suggested by R. Kingdon indicates intonation as well as stress. The tonetic stress marks are the following:

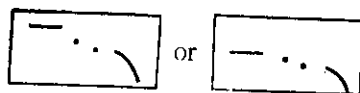
Tones

Wide voice-range

Narrow voice-range

| | | |
|--------------------------------------|-----------|-----------|
| 1. rising | ˈyes | ˌyes |
| 2. falling | ˋyes | ˋyes |
| 3. falling-rising (undivided) | ˋyes | ˋyes |
| 4. falling-rising (divided) | ˋyes ,sir | ˋyes ,sir |
| 5. rising-falling (undivided) | ˆyes | ˆyes |
| 6. rising-falling (divided) | ˆyes ,sir | ˆyes ,sir |
| 7. rising-falling-rising (undivided) | ˆˆyes | ˆˆyes |
| 8. rising-falling-rising (divided) | ˆyes ,sir | ˆyes ,sir |

Emphatic stress is represented graphically by double strokes: (ˆˆ) — falling tone, (ˆˆ) — rising tone. Level tones (unemphatic and emphatic) are marked with the help of a single stroke (ˆ) or a double vertical stroke (ˆˆ), which are placed above the line of the text if the utterance is performed within the high or medium pitch of the voice, or below the line of the text if the utterance is performed within the low pitch of the voice. Compare: *'Where did you ,go?*


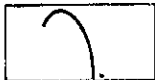


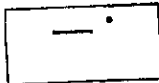
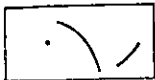

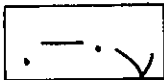
 — high and medium pitch of the voice.

ˆˆWhere did you ,go?  — low pitch of the voice.

There are other means of indicating intonation: wedge-like symbols, dots with an upward or downward glides to them, a numerical system, but the system of tonetic stress marks is gaining popularity because it is simple both to read and to print and, besides, stress-tone notations help to attract the attention of a learner to the text proper.

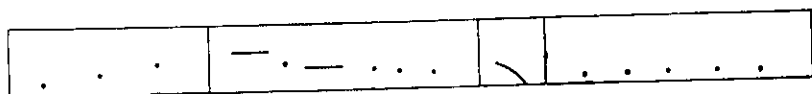
¹ Vassilyev V. A. English Phonetics. A Theoretical Course. p. 292.

Compare the system of tonetic stress marks and the system of tonograms and dots applied to one and the same context:




| | | | |
|-----------|---|------------------|---|
| He 'will. |  | ^Hardly. |  |
| He ,will. |  | ~Hardly. |  |
| 'Has he? |  | They 'may ,have. |  |
| ,Has he? |  | He 'sold a ~lot. |  |

The structure of intonation pattern is the following: unstressed and half stressed syllables preceding the first stressed syllable constitute the pre-head of the intonation pattern, stressed and unstressed syllables up to the last stressed syllable constitute the head, body or scale of the intonation group. The last stressed syllable, within which fall or rise in the intonation group is accomplished, is called the nucleus, the syllables that follow the nucleus constitute the tail, e. g.

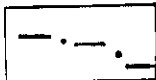
It's been a 'very 'fascinating ,evening for all of us.

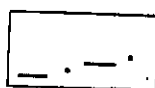


Pre-heads can be of different types:

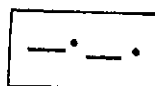
| | | | |
|---|--------|---|-----|
|  | rising |  | mid |
|  | low | | |

Scales can be of different types too:

| | |
|---|--------------------|
|  | regular descending |
|---|--------------------|



ascending



scandent¹

If a word is made specially prominent, a vertical arrow is used, which is placed before the one-syllable word made specially prominent, or the syllable of a polysyllabic word that breaks the descending scale, e. g. 'John is ↑ very busy.

SPEECH MELODY, OR PITCH

This component of intonation is characterized by changes in the voice pitch. It is present in every word (inherent prominence) and in the whole sentence, because it serves to delimit sentences into sense groups, or intonation groups.

The delimitative function of melody (V. A. Vassilyev terms it *constitutive*) is performed by pitch variations jointly with pausation, because each sentence is divided into sense groups, breath groups, or syntagmas, by means of pauses. The term *breath group* was suggested by D. Jones and it is not quite adequate, because a breath effort can be spread over two, or even more sense groups; it depends on their length and the abilities of a speaker. American descriptivists suggest the term *clause* which may and may not be equivalent to a grammatical clause. For teaching purposes it is convenient to view such groups as *intonation groups* (on the auditory and acoustic level) and as *sense groups* (on the semantic level).

A sense group can be formed by one word, or by a group of words. A change of pitch within the last stressed word of a sense group is called a *nuclear tone*. A change of pitch at the junction of two sense groups is called a *terminal tone* (*clause terminal* in the terminology of American descriptivists).

Nuclear tones are the following:

1. *low falling*



2. *low rising*



3. *high falling*



¹For more details see: Vassilyev V. A. English Phonetics. M., 1970, p. 299.

4. *high rising*



5. *falling-rising*



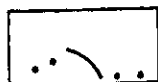
6. *rising-falling*



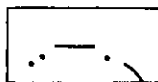
Terminal tones in English are the following: *falling*, *rising*, *rising-falling*, *falling-rising*.

Nuclear tones are more varied, but terminal tones are broader units because they may be realized not only within the nucleus but also in

the tail of the intonation pattern, e.g. He is here again



and He is 'here again



Nuclear tones may express the attitudes of a speaker to what he says. For example, the low falling tone is used to express finality and definiteness. The voice falls from a medium to a very low pitch, e.g.

/,jes/



The high falling tone is used to show interest. It can be compared with the Russian: *ооо!* (*прочти!*). The voice falls from a high to a [very low

pitch, e.g. /[^]jes/



The rising-falling tone is used to show that a speaker is greatly interested in something. The voice first rises and then falls from a high pitch, e. g.

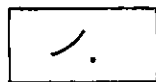
/[^]jes/



/[^]sə: tnl/



/[^]betə/



This tone can be compared with the Russian: *Ишь ты!*

The low rising tone is used to indicate the lack of interest, detachment from the subject matter. The voice rises from a very low to a medium pitch. It can be compared with the Russian: *Они ушли. А Света?*

¹ For detailed description of intonation and meaning see: I.D. O'Connor and G. F. Arnold. *Intonation of Colloquial English*. 1959.

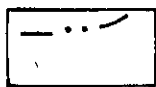
/jes/



/nou aɪ 'θɪŋk/



The high rising tone is used in questions which require the interrogative intonation:



/'nou dɪd ju 'seɪ/.

The falling-rising tone gives an impression that something is implied. The voice falls from a fairly high to a rather low pitch, then, still within the syllable rises to a medium pitch:

/ˈredɪ/



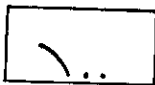
or



/ˈaɪv ,dʌn ɪt/



or



All the above mentioned general nuclear tones are kinetic. Static tones are used mostly in reciting poetry. A static tone is represented by a short horizontal arrow, e. g. $\overrightarrow{\text{Speak...}}$

Different types of sentences distinguished by intonation alone are called *communicative types*. The following communicative types of sentences are pronounced with the *falling tone*:

1. Categorical statements.
2. Disjunctive questions: the speaker is not asking for information, he is sure that the listener agrees.
3. Commands.
4. Exclamations.
5. Special questions.
6. Alternative questions. (The final sense group)

The following communicative types of sentences are pronounced with the *rising tone*:

1. Statements containing an implication.
2. Requests.
3. General questions.
4. Disjunctive questions: the speaker means to provoke the listener's reaction.

There are exceptions when a speaker wants to show by intonation his attitude to the situation or to display his mood. For example:

(1) In categorical statements the most typical melody is the low falling tone, which conveys a cool and reserved, indifferent attitude, e. g. 'Yes, I'm tired. If a statement is pronounced with the low rising tone it sounds reassuring, soothing with a hint of self-reliance, e.g. 'I'm sure. Such statements are closely connected with the next sense group. They may sound guarded, resentful.

If a statement is pronounced with a high rising tone it sounds lively, interested, e. g. I'm 'sure. Pronounced with the low head it conveys protest, e. g. 'Nobody's 'sure.

Statements pronounced with the falling-rising tone carry implication. If the fall-rise is divided they may sound apologetic, regretful, sympathetic, e. g. 'Mother isn't 'sure.

(2) In exclamations the low falling nuclear tone is the most typical melody. It makes the utterance weighty and emphatic, e. g. 'Good 'news! Pronounced with the low head it implies that the speaker is not surprised, reserved, e. g. „Good ,news! The low rising tone makes an exclamation encouraging, friendly, e. g. 'Well ,done! Pronounced with the low head it implies that the speaker is reserved, casually acknowledges the fact, e. g. „Well ,done! The high fall makes the exclamation sound more emotional than the low falling nuclear tone, but the exclamation becomes less weighty. 'Good 'news! The low head in this type of melody implies surprise, e. g. „Well ,done! The fall-rise intonation is used to express sympathy, e. g. 'Good ,news! The rise-fall shows that the speaker is greatly impressed, e. g. ^Well ,done!

Since intonation alone can serve to perform constitutive, distinctive and recognitive functions, we can speak about a separate suprasegmental, prosodic phonological unit on the intonation level, which may be called *intoneme*, or *toneme*. The use of the right toneme in the right place helps to recognize and understand the sense group of a sentence, therefore we may say that tonemes perform recognitive functions. If the sentence *He 'went there yesterday* is pronounced with the low falling intonation, it is recognized as a statement. The same sentence pronounced with the rising tone will be understood and recognized as a question. The same sentence pronounced with the high rising tone will be understood and recognized as an expression of joy.

The pitch of the voice may be changed through widening and narrowing the range of the voice. It is done for emphatic purposes. Widening of the range is used to express joy, happiness, indignation, etc., e. g.

"How did you 'manage it?
you come to having done it?)



(how on earth did

Narrowing of the range is used to express horror, disgust, aversion, etc., e. g.

„How did you ,manage it?
such a terrible thing?)



(what made you do

WORD STRESS

The word stress component of intonation is closely connected with the pitch or melody component because their constitutive function is performed jointly, which is expressed in *pitch levels*, *pitch ranges* and *rates (angles) of pitch change*.

The pitch level is determined by the pitch of the first stressed syllable:

1. *high pitch level*



2. *low pitch level*





3. *medium (mid) pitch level*



The pitch range of a sense group is the interval between the highest pitched syllable and the lowest pitched syllable, e. g.



ordinary

pitch range,  high pitch range,  low pitch range.

The rate, or angle, of pitch change is calculated by measuring (a) the pitch range in cps, and (b) the duration of the pitch change in msec, and then, by dividing the first sum by the second. E. g. if (a) is X cps and (b) is Y msec, then the rate, or angle, of pitch change will be equal to $\frac{X \text{ cps}}{Y \text{ msec}}$.

Pitch levels, ranges and rates are very important for the analysis of emphatic speech.

In sense groups and intonation groups word accent may undergo alternations because of the influence of rhythm, but there are some rules that can be formulated as follows:

inside a sense group only notional words are accented, though sometimes form words also receive primary stress, e. g.

(1) (a) auxiliary, semi-auxiliary and modal verbs are stressed when they begin a question, e. g. 'May I come ,in? 'Do you ,go?

(b) auxiliary and modal verbs are stressed when they are combined with the negative *not* (especially when used in the contracted form), e. g. I'm 'sorry I 'can't ,stay.

(c) auxiliary and modal verbs are stressed when they substitute notional verbs in answers, e. g. 'Can you ,do this? ,Yes, I ,can.

(d) in emphatic constructions, e. g. ,Do sit down!

(e) when the auxiliary verb is stressed the interest is greater, when it is unstressed the question sounds casual, e. g. 'Is 'Tom ,right?

(2) The following pronouns are stressed:

(a) the absolute form of possessive pronouns: mine, his, hers, ours, yours, theirs — when they are used as predicatives, e. g. 'This 'thing was ,his.

(b) indefinite pronouns: **all, each, every, either, neither, both, some** (meaning "a few", "certain"), **much, many, little, few, no, none, other, any, another**, e. g. 'Much a'do about ,nothing.

(c) demonstrative pronouns, when used as indicators, or to point to something, or somebody, e. g. I 'don't be'lieve ,that. 'Give me some ,tea, please; I 'think there's still ,some in the teapot.

(3) Prepositions **to, in, with, on, at, into, of, after, about, from** have a strong form though unstressed:

(a) when used terminally, e. g. 'What all the ,hurry for? I'll 'see what I can ,think of. ,Yes, I'd ,like to.

(b) when used in the preterminal position before a personal pronoun, e. g. It's 'very ,good for you.

(4) Conjunctions are stressed when used initially, e. g. 'Out of ,sight, 'out of ,mind.

They lose accent if used initially and followed by an accented word, e. g. When 'winter ,came...

The conjunction **as ... as** is pronounced without any accent, e. g. As 'snug as a 'bug in a ,rug.

(5) The combinations **'so on, 'so forth** are pronounced with the word **so** accented, e. g. He did 'not like ,music, ,dances, ,films and ,so on.

In the combinations **or so, or something, each other, one another** the components are either unstressed, or weakly stressed. The word-substitute **one** is usually unstressed, e. g. I 'don't re'member 'when we ,saw each other. You've 'got a ,textbook, and 'not a ,bad one. I 'haven't 'seen you for 'ten ,minutes or so. We'll 'buy the 'child a ,sweet or something.

RHYTHM

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

Sense groups in the sentence are divided into rhythmical groups. Most rhythmical groups consist of stressed and unstressed syllables. There are as many rhythmical groups in a sense group as there are stressed syllables in it. Unstressed syllables inside a sense group have a tendency to cling to the preceding stressed syllable (enclitics). Only initial unstressed syllables always cling to the following stressed syllable (proclitics). Correct reading habits require to attach the unstressed syllables to the preceding stressed word of a sense group.

↙
... usual rhythm pattern

↘
... exception with the initial unstressed syllables.

Unstressed syllables are pronounced rapidly, the greater the number of unstressed syllables the quicker they are pronounced. Rhythm is best taught through verse.

PAUSATION AND TAMBER

Pausation is closely connected with the other components of intonation. Speaking about the delimitative and distinctive functions of pausation reference should be made to the term *juncture*. There are the following types of juncture:

(1) The *plus-juncture* is marked by + and occurs within the phrase, e. g. that + stuff, that's + tuff. In this example the plus-juncture is opposed to the zero juncture

/ðæt+ 'stʌf/

↓ ↓
/ðæts + 'tʌf/

The pause during + is equal to half a mora (the average length of one short sound).

(2) The *level juncture*, or the *single bar juncture* is marked by /. It plays 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 hated each other).

The pause during the level juncture is equal to one mora.

(3) The *upturn juncture*, or *double bar juncture* is marked by //. It is used in counting, e. g. one // two // three... The pause during the upturn juncture is equal to one and a half mora.

(4) The *downturn juncture*, or the *double cross juncture* is used at the end of the sentence. Its symbol is #. It is equal to two moras.

The tamber of a speaker's voice may express the attitude of the speaker to what he says. It depends on the physiological properties and psychological peculiarities of a person. The auditory impression of the voice tamber is not sufficient for its investigation and instrumental analysis should be carried out for each person individually. This component of intonation is little studied.

TEMPO (RATE)

The temporal component of intonation is the rate of speech. Tempo suits the semantic importance of the sentence and is closely connected with rhythm.

Each of the components of intonation can be viewed separately for purposes of analysis, but in speech all of them constitute an indivisible unity.

QUESTIONS

1. What is prosody?
2. How does intonation manifest itself in written sentences?
3. How is intonation defined in the broad and in the narrow meaning of the word?
4. What are the methods of indicating intonation?
5. What is Kingdon's method of indicating intonation by tonetic stress-marks?

6. What other systems of indicating intonation do you know?
7. What is the structure of an intonation pattern?
8. What is the importance of melody or pitch component of intonation?
9. What is the difference between nuclear and terminal tones?
10. What do you know about communicative types of sentences?
11. What communicative types are pronounced with the rising and the falling tone?
12. What is an intoneme?
13. How is emphatic intonation connected with the range of the voice pitch?
14. How does the word stress component of intonation manifest itself in a sentence?
15. What rules of word stress do you know?
16. What is rhythm?
17. What do you know about the term juncture in connection with the pausation component of intonation?
18. What do you know about the tamber and tempo components of intonation?

Exercises

1. Read these words with the six main tones: (1) low fall, (2) low rise, (3) high fall, (4) high rise, (5) fall-rise, (6) rise-fall.

Model: ,deed, ,deed, 'deed 'deed, ~deed, ^deed

feed, cord, window, something, matter, quarter

2. Read these words and word combinations (a) with the undivided falling-rising tone, (b) with the divided falling-rising tone.

(a) cousin, husband, country, London, midday, blackboard, quinsy, bedroom, bathroom, modern, cottage

(b) sit down, good morning, good day, go on, come up, what's up

3. Read these words and word combinations (a) with the undivided rising-falling tone, (b) with the divided rising-falling tone.

(a) please, read, begin, listen, bad, thank, well, what, right, come, foreign, wrong, dear

(b) put down, write down, clean the board, not large, behind Tom, long ago, poor thing

4. Read these sentences. Observe (a) the high falling tone and (b) the low falling tone.

(a) She is ,cold.

She is at the ,hospital.

'Father is at ,home.

'Don't go a ,lone.

'Don't 'take the ,lamp.

(b) She is 'cold.

She is at the 'hospital.

'Father is at 'home.

'Don't go a 'lone.

'Don't 'take the 'lamp.

He is 'not ,well.
'Why are you ,late?
'Betty is in ,bed.
'Mother is ,busy.

He is 'not 'well.
'Why are you 'late?
'Betty is in 'bed.
'Mother is 'busy.

5. Read these sentences. Observe the tone marks.

1. 'When are you ,coming? 2. You can 'have it to,morrow.
3. 'When did you 'last 'see your ,parents? 4. She 'never 'really 'looks
very ~well. 5. 'My books are ,fairly ,new. 6. It's 'easier to 'speak
than to 'under~stand. 7. 'What did you ,say? 8. You might have ~warned
me. 9. ,How long do you 'want to 'keep it? 10. She 'won't 'do
it any 'better than ,you. 11. Would you 'like a'nother 'lump of 'sug-
ar? 12. You 'can't go to the 'party 'dressed like ~that. 13. 'Will you
'wait till I've 'had 'time to 'look for it? 14. It's 'always the ,same.

6. Read the following communicative types with the appropriate attitudes:

(a) categoric statements (cool, reserved, indifferent, grim attitude—

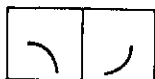
low fall



1. I 'want to ,talk to you. 2. 'What ,country are you from? 3. I
'can't speak ,Spanish. 4. I was ,busy that day. 5. You 'knew he ,was
there.

(b) disjunctive questions (statement of a fact provoking the listen-

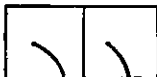
er's reaction,



sequence).

1. They 'know about it, ,don't they? 2. He 'read this book, ,didn't
he? 3. She 'worked 'hard at her English, ,didn't she? 4. They are in
the 'water, ,aren't they? 5. 'Tom is already 'ten, ,isn't he? 6. Your
sister 'wants to 'study 'German, ,doesn't she? 7. I can 'do something,
'can't I? 8. It's 'five o'clock, ,isn't it?

Read the same questions with the



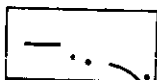
sequence to show that you are

sure that the listener agrees with what you say.

Model: They ,know about it, ,don't they?

(c) commands (firm and serious attitude).

Intonation pattern



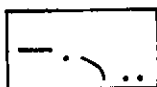
1. 'Show me your ,ticket. 2. 'Turn

'on the ,light. 3. 'Wash and 'iron your ,dress. 4. 'Leave the 'door
'open. 5. 'Don't 'go to the ,concert. 6. 'Hang up the ,time-table. 7. Re'pair

the ,tape-recorder. 8. 'Finish this ,work. 9. 'Sew the 'button on to your ,coat.

(d) exclamations (weighty and emphatic).

Intonation pattern

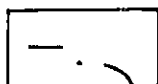


1. 'How ri,diculous! 2. I'm ↑ so

,happy! 3. The 'weather is ,lovely! 4. It's 'all ,over now! 5. 'Stop 'teasing your ,sister! 6. How 'quick the 'young 'people ,are! 7. 'What a 'tidy ,room! 8. 'Lovely ,weather! 9. 'Wonderful 'language ,laboratory! 10. 'Such 'selfish 'young ,men!

(e) special questions (serious, intense, responsible).

Intonation pattern

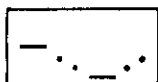


1. 'What's the ,time?

2. 'When did you 'come ,home? 3. 'What do you ,do? 4. 'What did you 'do in the ,evening? 5. 'How did you 'spend the 'time ,yester-day? 6. 'Who is 'going to 'do the ,shopping?

Pronounce the same questions with the low rising tone to show interest.

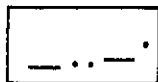
Intonation pattern



'What's all this ,fuss about?

Pronounce the same questions with the rising nuclear tone, following the in-terrogative word to show disapproval.

Intonation pattern



,When did you 'come there?

Pronounce the same questions with the high falling nuclear tone to show busi-ness-like interest.

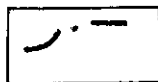
Intonation pattern



'What's the 'time?

Pronounce the same questions with the high rising nuclear tone to ask for a repetition.

Intonation pattern



'What's the 'time?

Pronounce the same questions with the falling-rising nuclear tone to plead for sympathy. Make the question warm, affectionate, weary.


Intonation pattern



'What's the ,time?

Pronounce the same questions with the rising-falling tone to make it challenging, antagonistic.

Intonation pattern  ^What's the time?

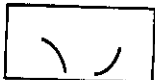
(f) alternative questions (the final fall) shows that the list is complete). Intonation pattern 

1. 'Would you like bread or meat? 2. 'Would you like fish or meat? 3. 'Would you like fish or eggs? 4. 'Would you like potatoes or tomatoes? 5. 'Would you like carrots or cabbage? 6. 'Would you like cucumbers or beets? 7. 'Would you like salt or mustard? 8. 'Would you like beer or wine? 9. 'Would you like fruit juice or water? 10. 'Would you like coffee or cocoa?

(g) statements containing an implication. What is implied is clear from the situation, it may be: suggestion, concern, polite correction, reluctance, careful dissent, grateful admittance.

Intonation pattern  -I am 'not late.

1. -I 'hope I am not late.¹ 2. -You are 'not right. 3. -I 'work systematically. 4. -I have no 'time for lunch today. 5. -I 'should have done it. 6. -I 'can't answer this question. 7. -You 'can sing perfectly.

(h) requests (pleadingly, reproachfully, reassuringly). Intonation pattern 

1. 'Cheer up. 2. 'Do for give me. 3. 'Don't do it. 4. 'Come in. 5. 'Don't do it alone! 6. 'Will you invite me? 7. 'Go on.

7. Read these sentences. Make the auxiliary and modal verbs that begin sentences stressed to show greater interest.

1. 'Does it matter? Does it matter? 2. 'Is he going to come? Is he 'going to come? 3. 'Do you like oranges? Do you 'like oranges? 4. 'Can you have an 'afternoon off? Can you have an 'afternoon off? 5. 'Could they help it? Could they help it?

¹ /-/- the high prehead

8. Read these sentences. Make the possessive pronouns that are used as predicates stressed.

1. 'This 'thing was ,mine. 2. 'This 'thing was ,his. 3. 'This 'thing was ,yours. 4. 'This 'thing was ,ours. 5. 'This 'thing was ,theirs.

9. Read these sentences. Make the final prepositions strong.

1. 'Nothing to be a ,fraid of. 2. 'Whom are you ,talking to? 3. 'What do you ,want it for? 4. It was 'Mary he was ,looking for. 5. It was 'Bess he was ,there with. 6. 'Where did she ,come from? 7. 'What is she ,here for? 8. It's a 'thing un ,heard of. 9. 'This 'boy should be ,sent for. 10. 'This 'letter was 'much ,talked about.

10. Read these sentences. Don't stress the correlative conjunction *as ... as*.

1. I'll 'come as 'soon as he ,pleases. 2. I'll 'read as 'long as the 'child ,likes. 3. It's 'not as 'simple as ,that. 4. 'Jane was as 'pale as a ,ghost. 5. 'Uria was as 'slippery as an ,eel. 6. 'Did you 'say: "As 'snug as a 'bug in a ,rug?"

11. Read these sentences. Don't stress (or make weakly stressed) combinations: *or so, or something, each other, one another*. Don't stress the substitute word *one*.

1. He will 'come in an ,hour or so. 2. This 'fruit will be 'red in a ,month or so. 3. We'll buy a ,coat or something to pro'tect you from the ,cold. 4. He 'said "Good ,morning" or something, and ,went on with his ,work. 5. He 'really 'wanted a 'couple of ,books or so. 6. He was a ,bootmaker and a ,good one. 7. We have 'never ,quarrelled with each other. 8. The 'passengers 'seemed to ,like one another.

12. Read these rhymes. Observe the regular alternation of stressed and unstressed syllables according to the given stress tone marks.

'Jack and 'Jill went ↑ up the ,hill
To 'fetch a 'pail of ,water.
'Jack fell ,down and 'broke his ,crown,
And 'Jill came 'tumbling ,after.

* * *

'Twinkle, 'twinkle, 'little ,star,
'How I 'wonder 'what you ,are.
'Up a'bove the 'world so ,high
'Like a 'diamond 'in the ,sky.

* * *

In 'winter 'I get 'up at ,night
And 'dress by 'yellow 'candle ,light.
In 'summer ↑ quite the 'other ,way
I ↗have to ↗go to ↗bed by ,day.¹

¹ the mark/↗/ indicates a stressed accented syllable in the scandent scale.

Control Tasks

1. Intone and read these statements. Define the attitude with which you read them.

1. He lives in Kiev. 2. He has two brothers. 3. I can't bear Mary. 4. The price is five dollars. 5. I shall come at five. 6. I haven't made up my mind yet. 7. I want to help you. 8. It's a pity you forgot about my letter.

2. Intone and read these questions. Define the attitude with which you read them.

1. Whom did you see? 2. Which book should I take? 3. Who rang you up on Sunday? 4. When were you in Leningrad? 5. Whom are you waiting for? 6. He turned you down flat, didn't he? 7. They can't afford it, can they? 8. Where shall I go? 9. What will you have for breakfast? 10. What excuse can you give? 11. What did you do at the week-end? 12. Do you prefer to see films over TV or at the cinema? 13. Will you go there on Sunday or on Saturday?

3. Read the following sentence with the six nuclear tones. State the attitudinal function of each tone.

Why did Mr. Smith intend to paint his house?

4. Read the extract according to the given stress tone marks. Define the distinctive function of intonation in each sentence. State the rules of word stress that can be applied to this passage.

'In the 'afternoon, the 'chairs came, | a 'whole big ,cart | 'full of little ,gold ones | with their 'legs in the ,air. And 'then the ,flowers came. 'When you 'stared 'down from the \balcony at the \people 'carrying them, | the 'flower 'pots looked like 'funny ↑awfully 'nice ,hats 'nodding 'up the ,path.

~Moon | 'thought they ^were ,hats. 'She 'said: "Look. There's a 'man ↑wearing a ,palm on his ,head." But she 'never 'knew the ,difference | be'tween 'real ,things and 'not ,real ,ones.

There was \nobody to 'look after ,Sun and ,Moon. ~Nurse | was helping \Annie 'after Mother's ,dress | which was 'much too 'long and 'tight under the ^arms and 'Mother was 'running ↑all over the ,house | and 'telephoning 'Father to be 'sure not to for,get ,things. 'She only had ,time to ,say: "\Out of my 'way, ,children!"

(From *Sun and Moon* by Catherine Mansfield)

X. RECEIVED PRONUNCIATION AND GENERAL AMERICAN PRONUNCIATION

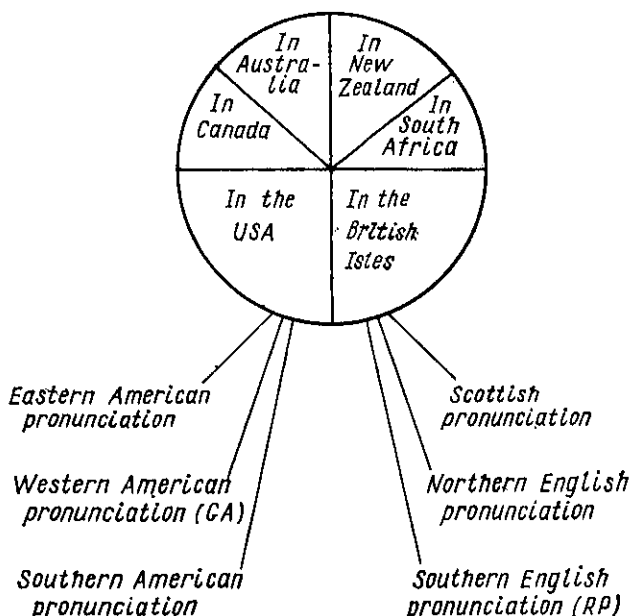
The English language is the mother tongue of several countries, such as Great Britain, the United States of America, Australia, New Zealand. The English language is also used by the greater part of the population of Canada and the Republic of South Africa.

The variants of the English language spoken in these countries have very much in common, but they differ from Standard English in pronunciation, vocabulary and grammar.

The variants of a national language should not be confused with its regional types. In the British Isles the regional types of the English language are the following: (1) the Southern English, (2) the Northern English and (3) the Standard Scottish.

In the United States of America the regional types of the American variant of the English language are the following: (1) the Eastern type, (2) the Southern type and (3) the General American type (Western, Midwestern, Central Western).

National English Language



The objective criteria for choosing this or that type of pronunciation as the teaching norm are different but it is accepted that in the British Isles and in the former British colonies the teaching norm is *Received pronunciation*, or *RP*. It is also called *Standard English pronunciation* and *Public School*

pronunciation. In the USA and the Latin American countries the teaching norm is *General American pronunciation*, or GA.

Received pronunciation is the teaching norm at schools and higher learning establishments of the Soviet Union because of (1) the degree of understandability of RP in English speaking countries, (2) the extent of RP investigation, (3) the number of textbooks and audio-visual aids, (4) the fact that RP is compared with the pronunciation of the Russian language and described in a number of textbooks.

Since RP and GA are the most widely used types of pronunciation, the learners of English should know the principal differences between them.

Within the vocalic system articulatory differences are the following:

/i:/

It does not differ greatly in RP and GA. Its transcription symbols are /ij/ and /iy/. In GA /ij/ may occur in place of the final RP /ɪ/.

| | GA | RP |
|------|----------|---------|
| very | /ve'rij/ | /'verɪ/ |
| bee | /bij/ | /bi:/ |

/ɪ/

It is a little more open in GA than in RP.

/e/

In GA it is a lower vowel. It is lower than the first element of the diphthong /eə/. In GA this vowel resembles /æ/.

| | GA | RP |
|-----|-------|-------|
| red | /rɛd/ | /red/ |
| pen | /pɛn/ | /pen/ |

/æ/

This vowel is more front and long in GA than in RP. Its distribution is different from RP /æ/.

| | GA | RP |
|-----|--------|--------|
| ask | /æ.sk/ | /ɑ:sk/ |

/ə:/

In GA it is pronounced as a retroflexed vowel /ə̃/. The transcription symbol of its retroflexion is /hr/.

| | GA | RP |
|-------|----------|--------|
| term | /tə̃hrm/ | /tə:m/ |
| third | /ə̃əhrd/ | /θə:d/ |
| turn | /tə̃hrn/ | /tə:n/ |

/ə/

It is almost the same in GA and RP.

/ʌ/

Most American descriptivists consider that in GA /ʌ/ is pronounced as /ə/. Others state that it is closer than the RP /ʌ/. They use the same symbol.

/u:/

In GA this vowel is considered to be not only a diphthongoid but also a combination of /u/ + /w/.

| | GA | RP |
|------|--------|--------|
| too | /túw/ | /tu:/ |
| boot | /búwt/ | /bu:t/ |

/u/

It is almost the same in GA and RP but in GA it has less lip rounding.

/ɔ:/

In the pronunciation of this vowel the lips are less rounded in GA than in RP. It is intermediate between RP /ɔ:/ and /ɒ/. /ɔ:/ is represented in GA by the symbols /oh/ or /ɔH/.

| | GA | RP |
|--------|---------------|--------|
| tall | /tóhl, tɔ'Hl/ | /tɔ:l/ |
| caught | /kóht, kɔ'Ht/ | /kɔ:t/ |

[ɔ/

This vowel is pronounced in GA without any lip rounding: /ɒ/. It is similar to the RP /ɑ:/ but is short and checked.

| | GA | RP |
|------|--------|--------|
| box | /báks/ | /bɒks/ |
| stop | /stáp/ | /stɒp/ |

However in the words *log*, *long*, *strong* /ɔ/ is labialized as in RP.

/ɑ:/

This vowel is more front and more long in GA than in RP. It is pronounced in words where the letter a is not followed by r. E. g.

| | GA | RP |
|-------|---------|---------|
| glass | /glæ's/ | /glɑ:s/ |
| dance | /dæ'ns/ | /dɑ:ns/ |
| ask | /æ'sk/ | /ɑ:sk/ |

The only exception is the word *father* which in GA is pronounced /'fɑ:ðə/ similarly to the RP pronunciation of this word.

/ɪ/

Some phoneticians consider this high central vowel to be similar to the Russian /ɨ/. They point out that it occurs in the unstressed syllables of such words like *believe*, *candid*. Other scientists do not include it in the inventory of the GA vowel phonemes (B. Bloch).

Long vowels and diphthongs in GA are stated to consist of two elements: a monophthong and a glide. The latter are represented as follows:

| GA | | RP |
|------|------|------|
| /eɪ/ | /ey/ | /eɪ/ |
| /aɪ/ | /ay/ | /aɪ/ |
| /ɔɪ/ | /ɔy/ | /ɔɪ/ |
| /aʊ/ | | /aʊ/ |
| /ɪh/ | /ɪʰ/ | /ɪə/ |
| /ɛh/ | /ɛʰ/ | /ɛə/ |
| /ɔh/ | /ɔʰ/ | /ɔə/ |
| /uh/ | /uʰ/ | /uə/ |

/eɪ/

In GA this diphthong is very often pronounced as /e/.

| GA | RP |
|-------------------|--------|
| make /méyk/ /mék/ | /merk/ |

/ou/

In GA this diphthong is very often pronounced as /o/.

| GA | RP |
|-------------------|--------|
| home /hówm/ /hóm/ | /houm/ |

Very often in GA the length of the vowels /ɑ:, ɔ:, ə:/ or the glide of centring diphthongs /ɪə, eə, ɔə, uə/ is compensated with the help of the retroflexed /r/ which is indicated by /h, hr/ or /ʰ/ placed above the vowel phoneme, e. g.

| GA | RP |
|----------------------|---------------|
| here [hrʰ] /híhr/ | /hɪə/ |
| poor [puʰ] /púhr/ | /puə/ |
| board [bɔʰd] /bóhrd/ | /bɔ:d/ /bɔəd/ |

Table of American Vowels

| | | |
|----|-------|----|
| i: | ɪ | u |
| ɪ | | ʊ |
| e | ə: | ə |
| ɛ | ə əˈʌ | ɔ: |
| æ | | |
| ɑ | ɑ | ɒ |

Within the system of consonants principal differences in the pronunciation of GA and RP are the following:

/t/

In GA this consonant is short and voiced in intervocalic position /t̚/, it is intermediate between /d/ and /r/.

| | GA | RP |
|------|---------|---------|
| city | ['sɪtɪ] | /'sɪtɪ/ |
| pity | ['pɪtɪ] | /'pɪtɪ/ |

/l/

In GA /l/ is dark in all positions.

| | GA | RP |
|------|-------|-------|
| look | [lʊk] | /lʊk/ |
| fill | [fɪl] | /fɪl/ |

/r/

In GA it is retroflexed but not after /t, d, ə, ʃ/. The symbol of a vowel retroflexion is /ʀ/. The retroflexed /r/ is pronounced with a considerable lip rounding.

/w/

In GA /w/ is pronounced as /ʍ/ when spelt *wh*.

| | GA | RP |
|-------|--------|--------|
| which | /ʍɪtʃ/ | /wɪtʃ/ |
| when | /ʍen/ | /wen/ |

However there is a strong tendency in modern English to pronounce /ʍ/ as in GA.

/j/

In GA this sound is weakened and in words like *news*, *Tuesday* is not pronounced, e. g. /nu:z/ 'tu:zdeɪ/.

Most of the principal differences between the GA and RP pronunciation are not absolute but combinatory, which proves the GA dependent

nature on the National English Language, the variant of which it represents.

The literary language (its structural unity is reflected in the orthoepic standard) may have variants which are manifested in the pronunciation of different large regional types and in the pronunciation typical of local dialects.

Dialectal variations of a national language are connected with idiolects used within the borders of a certain locality. They are limited by colloquial style.

Variants of a national language are connected with idiolects used on a large territory, but they occur within the limits of literary style.

Regional variations in the pronunciation of a language peculiar to different styles are called *stylistic variations*. Stylistic variations are manifested in full style which is characteristic of distinct speech and colloquial style characteristic of familiar talk (rapid colloquial style).

The knowledge of language variations is very important for mastering a foreign language. Thus, the knowledge of interdialectal and intraindialectal variations helps to trace tendencies in the development of the phonetic system, to predict future changes, to explain causes of the existing phonetic changes.

The knowledge of stylistic differences is also of great importance in mastering a foreign language. During the first stages of learning a foreign language the teacher of English (or any other foreign language) should draw the attention of the pupils to the peculiarities typical for careful or full style of speech. At the advanced stages of learning the other types of stylistic changes should be also introduced to enable the pupils to understand rapid colloquial style.

H. C. Gimson considers it possible to single out within the British English 2 pronunciation types which are the following: 1. Regional (educated, popular and modified), 2. Received (conservative, general and advanced).

Educated and popular Regional English are not influenced by RP. Modified Regional English may have some RP characteristics.

The conservative form of RP is used by the older generation. General Received English is adopted by the BBC. Advanced RP is used by young people of exclusive social groups and in certain professional circles for prestige value.

D. Jones points to the following modifications that have taken place within the English pronunciation system for the last 30 or 40 years:

1. Diphthongization of /i e æ/
2. Lengthening of /e/
3. London dialect of /ɔ:/
4. Southern English unrounded /u/
5. London dialect of /ə:/
6. Coalescence of Southern English /ɔ:/ with /ɔə/ /uə/
7. London monophthongization of /ei/

8. Southern English central first element in /ou/
9. Reduction of /ei ai au/ + /ə/ to [e̞ə, a̞ə, or aː, a̞ə or aː]
10. The instability of the final elements of the closing diphthongs /ei ou ai au ɔi/. This weakening doesn't take place when the diphthongs occur in syllables closed by a fortis voiceless consonant, e. g. late, coat, light, rate, moat, night, doubt, voice.

Questions

1. What variants of the English language do you know?
2. What are the regional types of the English language and of the American variant of the English language?
3. What are the reasons to choose one type of pronunciation as the teaching norm?
4. What are the principal differences between GA and RP within the vocalic system?
5. What are the principal differences between GA and RP within the consonantal system?
6. How are the variations of the literary language reflected in pronunciation?
7. Why is the knowledge of language variations important for mastering a foreign language?
8. What do you know about modifications within the English pronunciation system?

GLOSSARY OF PHONETIC TERMS

A

ACCENT /'æksənt/ a greater degree of prominence, given to one or more syllables in a word, which singles it out through changes in the pitch and intensity of the voice and results in qualitative and quantitative modifications of sounds in the accented syllable.

ACCENTEME /'æksenti:m/ The distinctive function makes word accent a separate suprasegmental, or prosodic phonological unit, e. g. primary and weak word accentemes perform word distinctive functions in English: bíllow, belów, in Russian: МЫКА́, МЫКА. It also performs form-distinctive functions in English: 'import—to im'port, and in Russian: ПЫКН (pl), ПЫКН' (genitive).

ACCIDENCE /'æksɪdəns/ grammatical rules about the changes in the form of words connected with different modifications of their sound nature. For example: foot—feet, have—has—had.

ACCOMMODATION /ə,kəmə'deɪʃ(ə)n/ adaptation to different adjacent sounds, e.g. in /tu:/ /t/ is labialized under the influence of /u:/ and /u:/ is a little bit advanced under the influence of /t/.

ACCURACY OF PRONUNCIATION /'ækjʊrəsi əv prə,nʌnsɪ'eɪʃn/ correct and distinct pronunciation.

ACOUSTIC PHONETICS /ə'ku:stɪk fəu'netɪks/ a branch of phonetics, which deals with physical properties of sounds.

ACOUSTIC SPECTRUM /ə'ku:stɪk 'spektrəm/ the complex range of frequencies of varying intensity which constitute the quality of a sound.

ADJACENT SOUNDS /ə'dʒeɪsənt 'saʊndz/ that follow each other.

AFFRICATES /'æfrɪkɪts/ the sounds formed during the separation of the articulating organs: in their articulation the complete closure gradually and uninterruptedly opens into a flat-slit narrowing: /tʃ, dʒ/.

ALLOCHRONES /'æləkrounz/ quantitative variants of a phoneme. The term is used by D. Jones and other foreign phoneticians.

ALLOPHONES /'æləfəʊnz/ qualitative variants or members of one and the same phoneme, which never occur in identical positions, but are said to be in complementary distribution.

ALLOPHONIC TRANSCRIPTION /'ælə'fəʊnɪk trəns'krɪpʃən/ this type of transcription is based on the principle "one symbol per allophone". This transcription provides a special sign for each variant of each pho-

neme. A phoneme is reflected in this transcription as a unity of all its allophones. The symbols of an allophonic transcription are usually placed between square brackets [].

ALTERNATION OF SOUNDS /ɔ:l'tə:'neɪʃn əv 'saundz/ changes of the sounds in different derivatives from the same root or in different grammatical forms of the same word or in different allomorphs of the same morpheme, e. g. alternation of /aɪ — ɪ/ in *child* — *children*.

ALVEOLAR CONSONANTS /'ælvɪələ 'kɒnsənənts/ articulated by the tip of the tongue, which makes a complete obstruction with the alveoles, for example: /t, d, s, z/.

ALVEOLAR POINT /'ælvɪələ 'pɔɪnt/ the central point of the upper jaw.

ALVEOLAR REGION /æ'l'vɪələ 'ri:dʒən/ bow-like prominence behind the upper teeth.

ALVEOLES /'ælvɪəulz/, or **ALVEOLI** [æ'l'vɪəlaɪ] depressions in the upper jaw, which socket the upper teeth.

APEX /'eɪpeks/ the tip of the tongue.

APICAL /'æpɪkəl/ articulated by the tip and the front edge of the tongue.

ARTICULATE /ɑ:'tɪkjʊ'ert/ to pronounce audibly and distinctly.

ARTICULATION /ɑ:'tɪkjʊ'leɪʃn/ coordinated movements of speech organs in the process of speech.

ARTICULATOR /ɑ:'tɪkjʊlertə/ this term is used by American linguists instead of the term *movable speech organs*.

ARTICULATORY PHONETICS /ɑ:'tɪkjʊlertərɪ fəu'netɪks/ the description and classification of speech sounds articulated by the speech apparatus.

ASPECTS OF A PHONEME /'æspɛkts əv ə 'fəʊni:m/ a phoneme is a dialectical unity of three aspects: 1. material, real and objective, 2. abstractional and generalized, 3. functional.

ASPIRATION /,æsprɪ'reɪʃn/ a slight puff of breath which is heard after the explosion of /p, t, k/ in the initial position.

ASSIMILATION /ə,sɪmɪ'leɪʃn/ the result of adaptation of one sound to another. It can be progressive, regressive or reciprocal. Most commonly the sounds, which undergo assimilation are immediately adjacent in the stream of speech. For example in *oɪaɪ* /c/ is voiced under the influence of /d/; in *horse-shoe* /s/ is pronounced as /ʃ/ under the influence of /ʃ/ which follows it.

ATTITUDINAL FUNCTION /,ætrɪ'tju:dɪnl 'fʌŋkʃən/ this function is performed by intonation when the speaker expresses his attitude to what he is saying by intonation alone.

B

BACK /bæk/ the term is used in phonetics to characterise the vowels, which are formed with the bulk of the tongue in the back part of the mouth cavity, when it is raised towards the junction between the hard and the soft parts of the palate; back vowels are: /u: ɔ ɔ:/ and the nuclei of the diphthongs /ɔɪ əɪ/.

BACK ADVANCED VOWELS /'bæk əd'vɑ:nst 'vauəlz/ the term characterises vowels, which are formed with the back-advanced position of the bulk of the tongue: /u, ɑ:, ʌ/ and the nuclei of the diphthongs /ou, uə/.

BACK SECONDARY FOCUS /'bæk 'sekəndəri 'foukəs/ it is formed by raising the back part of the tongue towards the soft palate (velarisation); e. g.: /w/ and dark /l/ are pronounced with the back secondary foci.

BICENTRAL /'baɪ'sentrəl/ formed with two places of articulation.

BICENTRAL CONSONANTS /baɪ'sentrəl 'kɒnsənənts/ consonants articulated with two centres of complete or incomplete obstruction: /w, l, ʃ, ʒ, tʃ, dʒ/. E. g. English "hard" /l/ is bicentral, because one place, or centre of articulation is formed by the sides (or one side) of the tongue, which are lowered. The other centre of articulation is formed by the back of the tongue raised to the soft palate, which produces the effect of "hardness".

BILABIAL /baɪ'leɪbiəl/ articulated by the upper and the lower lip. Bilabial consonants are: /p, w, b, m/.

BLOCK /blɒk/ to prevent the air from flowing out of the mouth cavity when the soft palate is lowered and the air passes out of the nasal cavity. The air passage through the mouth cavity is blocked in the articulation of /m, n/.

BLOW /blou/ to direct the air from the mouth or nasal cavity.

BODY /'bɒdi/ the whole.

BODY OF THE TONGUE /'bɒdi əv ðə 'tʌŋ/ the whole of it.

BREATH /breθ/ the process of blowing the air out of the mouth or nasal cavity through the bronchi and the wind-pipe, or blowing it into the lungs.

BRONCHI /'brɒŋkai/ two main divisions of the trachea, leading into the lungs.

BULK /bʌlk/ *see* **body**.

C

CACUMINAL /kə'kju:mɪnəl/ articulated by the tip and the blade of the tongue raised against the back slope of the teethridge. /r/ is a cacuminal sound.

CARDINALS /'kɑ:dɪnəlz/ an international standard set of artificial vowel sounds which, according to D. Jones, can be produced with the bulk of the tongue at the four cardinal points in the front part of the mouth cavity and—at the four cardinal points in the back part of the mouth cavity.

CARRYING POWER /'kæriɪŋ 'paʊə/ inherent properties of sounds connected with their sonority, which are due to their individual articulatory and acoustic characteristics.

CENTRAL VOWELS /'sentrəl 'vauəlz/ vowels formed by the central part of the tongue: a central high vowel is the Russian vowel /ы/ and a central low vowel is the Russian vowel /а/.

CENTRING DIPHTHONGS /'sentriŋ 'dɪfθɔŋz/ /ɪə, eə, ɔə, uə/ falling diphthongs, which glide to /ə/ which is considered to be "central". Russian phoneticians refer /ə/ to mixed vowels.

CHECKED VOWELS /tʃekt 'vauəlz/ they are short stressed vowels pronounced without any decrease in the force of articulation and immediately followed by consonants, e.g. /i/ in the word *city*.

CHEEKS /tʃi:ks/ sides of the mouth cavity.

CHRONEME /'krouni:m/ a unit, which shows that length is phonemically relevant (there are three chronemes in the Estonian language and only one in English and in Russian).

CLASSIFICATION /,klæsɪfɪkeɪʃn/ the method, which studies common properties of the investigated phenomena, and which is used to arrange them systematically.

CLASSIFY /,klæsɪfaɪ/ to arrange the common properties of (phonetic) phenomena according to their typical characteristics.

CLAUSE TERMINAL /'klɔ:z 'tə:mɪnəl/ this term is used by American descriptivists. According to H.A. Gleason there are three clause terminals in English: fading / \ /, rising / /, sustained / → /.

CLEAR SOUND /'kliə 'saund/ the sound which is made softer due to additional articulatory work. E.g. the raising of the middle part of the tongue to the hard palate (front-secondary focus) "softens", or clears /l/ in the initial position, compare: lily, light and bill, hill.

CLOSE NEXUS /'kləʊs 'neksəs/ close connection between a short checked vowel and a consonant which follows it. For example: /i + t/ in the word *city*.

CLOSE TRANSITION /'kləʊs træn'sɪʒən/ articulation of two neighbouring sounds when the first stage of the second sound takes place already during the medial stage of the first sound, e.g. palatalization in the Russian word ПИЛ, labialization in the word two /tu:/.

COALESCENT /,kəʊə'lesnt/ bilateral assimilation of two sounds when in the result they give a new sound. For example: /s/ + /j/ → /ʃ/ in mission /'mɪʃən/ → /'mɪʃn/

COMBINATORY ALLOPHONES /kəm'bɪnətəri 'æləʊfəʊnz/ variants of a phoneme which appear in speech as a result of assimilation and adaptation or of the specific ways of joining sounds together.

COMMUNICATIVE CENTRE /kəm'mju:nɪkətɪv 'sentə/ it is a word or a group of words which conveys the most important point of communication in the sense-group or sentence.

COMMUNICATIVE TYPES /kəm'mju:nɪkətɪv 'taɪps/ the types of sentences which are differentiated according to the type of intonation. V.A. Vassilyev gives the following communicative types: 1. Categorical and non-categorical statements. 2. Disjunctive questions. 3. Commands. 4. Exclamations. 5. Special questions. 6. Alternative questions. 7. General questions and 8. Requests.

COMMUTATION METHOD /,kəm'ju:'teɪʃən 'meθəd/ it is one of the basic methods of phonemic investigation, which consists in the discovery of minimal pairs.

COMPARATIVE PHONETICS /kəm'pærətɪv fəʊ'netɪks/ this branch of phonetics studies the correlation between the phonetic system of two or more languages.

COMPLEMENTARY DISTRIBUTION /,kɒmplɪ'mentəri ,dɪstrɪ'bju:-

ʃən/ arrangement of allophones of one and the same phoneme, which occurs in different contexts, but in a definite set of them.

COMPLETE ASSIMILATION /kəm'pli:t ə'sɪmɪ'leɪʃən/ assimilation when one of the two adjacent sounds fully coincides with the other. For example: *less sugar* /leʃ 'ʃugə/.

COMPONENT /kəm'pounənt/ a part of the whole.

CONSONANT /'kɒnsənənt/ a sound of noise, which is formed by a complete or incomplete obstruction. As a rule, consonants are non-syllabic.

CONSTITUTIVE FUNCTION OF SPEECH SOUNDS /'kɒnstɪtju:tɪv 'fʌŋkʃən əv 'spi:tʃ 'saundz/ the function to constitute the material forms of morphemes, words and sentences.

CONSTRUCTIVE FRICATIVE SOUNDS /kən'strɪktɪv 'frɪkətɪv 'saundz/ in the articulation of these sounds the air passage is narrowed or constricted to such an extent that the air passing through it produces noise or friction. No resonance is possible in the production of pure fricatives /f, θ, s, ʃ, h/. Voiced fricatives are produced with an admixture of musical tone, they are: /v, ð, z, ʒ/.

CONSTRUCTIVE SONANTS /kən'strɪktɪv 'səʊnənts/ (resonants) in the articulation of these sounds the narrowing for the air passage is not wide enough to eliminate the noise or friction completely; on the other hand it is wide enough to make the cavity function as a resonator. They are /w, l, r, j/.

CONTACT /'kɒntækt/ a closure made by the organs of speech.

CONTACTUOUS /kən'tɪgjuəs/ adjacent or neighbouring syllables or sounds (usually consonants).

CONTINUANTS /kən'tɪnjuənts/ consonants that can be prolonged during the stop-stage of their articulation. For example: /m, n, l, r, ʒ/.

CONTROID /kən'tɔɪd/ the term is used by the American linguist K. Pike to characterise noise consonants.

D

DARK SOUND /'dɑ:k 'saund/ the sound which is made harder due to additional articulatory work—the raising of the back part of the tongue to the soft palate (back secondary focus). /w/ and /l/ “dark” are pronounced with the back secondary focus.

DEFECTS OF SPEECH /dɪ'fɛkts əv 'spi:tʃ/ drawbacks in pronunciation.

DEFINITION OF A SOUND /,defɪ'nɪʃn əv ə 'saund/ the description of the complex of properties characteristic of a sound, which helps to attribute this sound to a certain type.

DENTAL CONSONANTS /'dentl 'kɒnsənənts/ consonants produced with the tip and the blade of the tongue placed against the upper front teeth. For example: /t, d, n/.

DEPRESSION OF THE TONGUE /dɪ'preʃn əv ðə 'tʌŋ/ low position of the tongue in the mouth cavity.

DESCENDING SCALE /dɪ'sendɪŋ 'skeɪl/ gradual lowering of the voice pitch.

DESCRIPTIVE PHONETICS /dɪs'krɪptɪv fəu'netɪks/ studies the contemporary phonetic system of a language, i.e. the system of its pronunciation, and gives a description of all the phonetic units of this language.

DEVOICE /dɪ'vɔɪs/ to pronounce with the vocal cords switched out. Voiced consonants are gradually devoiced in the terminal position and under the influence of the adjacent voiceless consonant (not so much as in the Russian language).

DIACHRONIC APPROACH /,daɪə'krɒnɪk ə'prəʊtʃ/ analysis of the phenomena which refer to different periods of development.

DIACRITIC MARKS /,daɪə'krɪtɪk 'mɑ:ks/ additional symbols used to characterise separate phonemes or their allophones. For example, the Russian Ъ, the German Ü. Diacritic marks help to use the inventory of the letters of the alphabet, without enlarging it.

DIALECTOLOGY /,daɪəlek'tɒlədʒɪ/ the branch of phonetics which studies the dialectal differences in pronunciation.

DIAPHONE /'daɪəfəʊn/ allophone of one and the same phoneme, pronounced by different people.

DIAPHRAGM /'daɪəfræm/ that part of the power mechanism which separates the cavity of the chest from the abdominal cavity.

DICTAPHONE /'dɪktəfəʊn/ the apparatus that records and reproduces oral speech.

DICTION /'dɪkʃən/ a way of speaking. The selection and control of words to express ideas (command of vocabulary, grammatical correctness, effective word order, etc.).

DIGRAPH /'daɪgrɑ:f/ combination of two letters equivalent to one phoneme. For example: ee /i:/, sh /ʃ/, th /θ, ð/.

DIMINUTION OF INTENSITY /,dɪmɪ'nju:ʃn əv ɪn'tensɪtɪ/ — lowering of the voice intensity, which results from the gradual weakening of the vocal cords vibration.

DIPHTHONG /'dɪfθɒŋ/ a vowel phoneme which consists of two elements: a nucleus and a glide. The first element of a diphthong is more loud and distinct, the formation of the second element of a diphthong is not accomplished. English diphthongs can be *normal* — this term is used because they are similar to the diphthongs normally occurring in other languages: /eɪ, aɪ, ɔɪ, au, ou/ and *centring*: /ɪə, eə, ʊə, uə/ — they are called so because their glide /ə/ is considered to be a central vowel.

DIPHTHONGIZATION /,dɪfθɒŋgaɪ'zeɪʃn/ slight shifting of the organs of speech position within the articulation of one and the same vowel (these organs are mostly — the tongue, the lips and the lower jaw). Diphthongization changes the quality of the sound during its articulation.

DIPHTHONGOIDS /'dɪfθɒŋɡɔɪds/ diphthongized sounds. In English they are /i:/ and /u:/. The /i:/ articulation begins with /ɪ/, which glides up to the /i/ position and ends up in the /j/ position. The /u:/ articulation begins with /ʊ/ which glides up to the /u/ position and ends in the /w/ position.

DISCREPANCY /dɪs'kreɪpənsɪ/ non-coincidence, divergence of properties.

DISJUNCTIVE QUESTION /dɪs'dʒʌŋktɪv 'kwɛstʃ(ə)n/ a question which consists of two parts, characterised by the succession of falling and rising tones (nuclear or terminal), used to express alternative ideas.

DISSIMILATION /,dɪsɪmɪ'leɪʃn/ substitution of one sound for another, similar in timbre but different articulatorily: *пролубь, лыцарь* instead of *пропубь, рыцарь*.

DISTINCTIVE FUNCTION OF SPEECH SOUNDS /dɪs'tɪŋktɪv 'fʌŋkʃən əv 'spi:tʃ 'saundz/ it is manifested most conspicuously in minimal pairs when the opposition of speech sounds is the only phonetic means of distinguishing one member of that pair from the other.

DISTRIBUTIONAL ANALYSIS /,dɪstrɪ'bju:ʃənəl ə'nælɪsɪs/ this method helps to establish the distribution of speech sounds, i. e. all the positions (or does not occur) in the words of the language.

DISYLLABIC /'dɪsɪ'læbɪk/ consisting of two syllables.

DORSAL CONSONANTS /'dɔ:sl 'kɒnsənənts/ pronounced with the tip of the tongue against the upper or lower teeth. For example: Russian /т/.

DORSUM /'dɔ:səm/ back.

DORSUM OF THE TONGUE /'dɔ:səm əv ðə 'tʌŋ/ the middle and back parts of the tongue.

DOUBLE STRESS /'dʌbl 'stres/ two stresses within one and the same word, e. g. *disagree* /'dɪsə'ɡri:/.

DRAWL /dɹɔ:l/ pronounce slowly.

DURATION /dʒuə'reɪʃn/ length.

DYNAMIC ACCENT /dar'næmɪk 'æksənt/ force accent based mainly on the expiratory effort.

E

EAR TRAINING /'iə 'treɪnɪŋ/ training of the ear in differentiating and distinguishing phonetic phenomena.

EDGES OF THE TONGUE /'edʒɪz əv ðə 'tʌŋ/ the rims of the tongue.

ELISION /ɪ'lɪzən/ dropping off of a vowel in the initial or terminal position. For example: *'tis* instead of *it is*, *th' eternal* instead of *the eternal*.

EMOTION /ɪ'mouʃn/ display of excitation, irritation, joy and other feelings. In speech they are expressed by different phonetic and lexicostylistic means, such as emphatic stress, emphatic intonation, etc.

EMPHASIS /'emfəsɪs/ combination of the expressive means of the language to single out emphatic words, groups of words or whole sentences.

EMPHATIC /ɪm'fætɪk/ that, which refers to emphasis.

ENCLITIC /ɪn'klɪtɪk/ unstressed word or syllable, which refers to the preceding stressed word or syllable. For example: *be*, *not* in *'may be*, *'cannot*. Together with the stressed word enclitics form one phonetic unit.

EPENTHESIS /e'penθəsɪs/ the occurrence of a sound in a word, in which it is not pronounced. For example: *length* may be pronounced as /lɛŋ(k)θ/, *glimpse* — as /ɡlɪm(p)s/ with the epenthetic /k/ and /p/.

EXHALATION /ˌɛkʃəˈleɪʃn/ breathing the air out of the lungs and the mouth cavity.

EXHALE /eksˈheɪl/ to breathe the air out of the lungs and the mouth cavity.

EXPERIMENTAL PHONETICS /eksˌperɪˈmentl fəʊˈnetɪks/ the branch of phonetics which studies phonetic phenomena through observation and calculations with the help of different apparatus and devices.

EXPIRATION /ˌɛkspaɪˈreɪʃn/ breathing the air out. See *exhalation*.

EXPLOSION /ɪksˈpləʊʒn/, or **PLOSION** /ˈpləʊʒn/ noise made by the air, when it is suddenly released through a complete obstruction. The sounds /p, t, k/ are pronounced with a plosion, or explosion.

EXPRESSION /ɪksˈpreʃn/ thoughts and emotions expressed by words and intonation.

F

FACULTATIVE PHONEMES /ˈfækʌltətɪv ˈfəʊni:mz/ such phonemes in English are /ɹ/ and /ɔ/. They are not used in all idiolects, where they are replaced by /w, ɔ:/. But in those idiolects in which they are used they may distinguish words in minimal pairs, e. g. which — который, witch — ведьма, more — больше, maw — пасть.

FALL /fɔ:l/ lowering of the voice pitch within a stressed syllable.

FAMILY OF SOUNDS /ˈfæmɪli əv ˈsaʊndz/ D. Jones' term in his phoneme definition.

FAUCAL CONSONANTS /ˈfɔ:kəl ˈkɒnsənənts/ occlusive noise consonants which are articulated by the soft palate raised against the back wall of the pharynx, which is accompanied by a nasal plosion and results in opening the nasal cavity for the flow of air. Combinatory allophones articulated in that manner are [t] in the word *button* or the Russian [ɕ] in *обман*.

FIXED ORGANS OF SPEECH /ˈfɪkst ˈɔ:gənz əv ˈspi:tʃ/ they are: the upper teeth and the teethridge, the hard palate and the pharyngeal wall.

FIXED WORD ACCENT /ˈfɪkst ˈwɔ:d ˈæksənt/ this type of accent is characterized by the fixed position of stress.

FLAPPED CONSONANTS /ˈflæpt ˈkɒnsənənts/ articulated by a single tap of the tip of the tongue against the teethridge. For example: [ɹ] in *sorry, very*.

FLAT NARROWING /ˈflæt ˈnærəʊɪŋ/ passage for the flow of air, which is more or less flat. The sounds /f, v/ are pronounced with the flat narrowing.

FLOW OF AIR /ˈfləʊ əv ˈɛə/ the stream of air.

FOCUS /ˈfəʊkəs/ (*pl* FOCI /ˈfəʊsaɪ/) the place in the mouth cavity, in which the obstruction (complete or incomplete) is formed in the articulation of a consonant. *Front-secondary focus* is formed by the middle part of the tongue raised against the hard palate. *Back-secondary focus* is formed by the back part of the tongue raised against the soft palate.

FORELINGUAL /'fɔ:lɪŋgwəl/ articulated by the tip of the tongue raised against the upper teeth or the teethridge. For example: /t, d, n/ are forelingual consonants.

FORMANTS /'fɔ:mənts/ the regions of the spectrogram, which are correlated with the qualities of vowels or their tembral characteristics.

FORTIS /'fɔ:tɪs/ strong.

FORTIS CONSONANTS /'fɔ:tɪs 'kɒnsənənts/ voiceless plosives and constrictives, which are pronounced with strong muscular tension and strong expiratory effort (compare with *lenis* consonants). The consonants /f, p, t/ are fortis.

FREE ACCENTUAL VARIANTS /'fri: æk'sentʃuəl 'vɛəriənts/ they are variants of individual pronunciation — interidiolectal variants. E. g. hóspitable, hospitable, pánopt, panópt.

FREE VARIATIONS intraindialectal and interidiolectal variations which are spontaneous, unintentional, non-functional, non-distinctive.

FREE WORD ACCENT /'fri: 'wə:d 'æksənt/ the type of accent which is characterized by the free accidence of the word accent: in different words of the language different syllables can be stressed — the first, the second, the third. Free word accent has two subtypes: a) constant, which always remains on the same morpheme: wónder, wónderfully and b) shifting, which changes its place: cáđ, садовóđ.

FRICATIVE CONSONANTS /'frɪkətɪv 'kɒnsənənts/ produced by friction of the flow of air through the narrowing formed by articulatory organs. For example: /v, s, z/.

FRICTIONLESS /'frɪkʃənlɪs/ produced without any audible friction.

FRICTIONLESS CONTINUANTS /'frɪkʃənlɪs kən'tɪnjuənts/ the term may be used in reference to constrictive sonants /w, r, j/, which are pronounced with little noise and can be prolonged or continued. "A consonant having the articulation of a fricative but pronounced with weak force so that little or no friction is audible." (D. Jones)

FRONT OF THE TONGUE /'frʌnt əv ðə 'tʌŋ/ the blade and the tip of the tongue. The blade and the middle of the tongue in the terminology of English phoneticians.

FRONT-RETRACTED VOWELS /'frʌnt rɪ'træktɪd 'vauəlz/ produced with the front but a bit retracted position of the bulk of the tongue. The vowel /ɪ/ is a front-retracted sound. It is retracted in comparison with the vowel /i:/ which is fully front. The nucleus of the diphthong /au/ is also front-retracted.

FRONT VOWELS /'frʌnt 'vauəlz/ they are vowels articulated when the bulk of the tongue moves forward and its front part is raised highest towards the hard palate: /i:, ɪ, e, æ/ and the nuclei of the diphthongs /eɪ, ɛɪ, əɪ, aɪ, au/.

FULLY VOICED /'fʊli 'vɔɪst/ consonants pronounced with the vocal cords vibrating from the first to the last stage of their articulation.

FUNCTIONAL /'fʌŋkʃənl/ phonological, connected with differentiator function.

FUNCTIONAL PHONETICS /'fʌŋkʃənl fəu'netɪks/ the branch of phonetics which studies the purely linguistic aspect of speech sounds.

FUNCTIONS OF A PHONEME /'fʌŋkʃənz əf ə 'fəʊni:m/ in speech a phoneme performs three functions: 1. distinctive, 2. constitutive and 3. recognitive; they are inseparable.

FUNDAMENTAL FREQUENCY /'fʌndə'mentəl 'fri:kwənsi/ the frequency of the vibrations of the vocal cords over their whole length.

FUNDAMENTAL TONE /'fʌndə'mentl 'təʊn/ the sound wave which results from the vibrations of the whole physical body and which has the lowest frequency.

G

GENERAL AMERICAN, G. A. /'dʒenərəl ə'merikən/ it is the most widespread type of educated American speech.

GENERAL PHONETICS /'dʒenərəl fou'netiks/ analysis, description, and comparison of phonetic phenomena in different languages.

GENERAL PHONOLOGICAL RULES /'dʒenərəl 'fəʊnə'lɒdʒikəl 'ru:lz/ these rules make it possible to establish the phonemic status of sounds without direct reference to their distribution; they are 1. the law of great phonemic dissimilarity, 2. the law of conditioned allophonic similarity.

GENERAL QUESTION /'dʒenərəl 'kwɛstʃən/ the type of a question which demands a *yes* or *no* answer, it is pronounced with the rising tone.

GLIDE /glɑ:d/ that part of a diphthong which constitutes its additional element, the full articulation of which is not accomplished. For example: /ɪ/ and /ə/ in /aɪ, eɪ, ɪə, ə/ are glides.

GLOTTAL SOUND /'glɒtl 'saʊnd/ when the glottis is narrowed during exhalation, the air, passing out of the mouth cavity, produces an /h/ like sound; that is why /h/ is considered by Prof. A. L. Trakhterov and British and American phoneticians to be a glottal or laryngeal consonant (not a pharyngeal one).

GLOTTAL STOP /'glɒtl 'stɒp/ a sound which reminds a slight cough and is articulated by the vocal cords, before a vowel sound is heard, in cases of emphatic speech.

GLOTTIS /'glɒtɪs/ the space between the vocal cords, which is the entrance to the trachea, or the windpipe.

GRAPHEME /'græfi:m/ it is an orthographic unit with which a phoneme can be correlated, e. g. t, e, n are graphemes in *ten*.

GROOVE-SHAPED DEPRESSION /'gru:v 'tʃeɪpt dɪ'preʃən/ is formed in the middle part of the blade of the tongue in the articulation of /s, z/.

H

HARD PALATE /'hɑ:d 'pælɪt/ the roof of the mouth.

HEAD /hed/ stressed syllables preceding the nucleus together with the intervening unstressed syllables.

HETEROGENEITY /,hetərə'dʒɪ'nɪ:ti/ mutually differentiating properties in the sounds which are compared.

HETEROGRAPHY /,hetə'rɒgrəfi/ the use of similar letters for dif-

ferent sounds, for example the letter *c* corresponds to the sound /k/ in the word *can* and to the sound /s/ in *city*.

HIATUS /haɪ'eɪtəs/ combination of two vowels which belong to different syllables. For example: *doing* /'du:ɪŋ/ — internal hiatus, *to order* /tu 'ɔ:də/ — external hiatus.

HIEROGLYPH /'haɪərəʒlɪf/ a written sign which may be equivalent to a sound, syllable, or a whole notion.

HIGH-PITCHED SOUND /'haɪ 'pɪtʃt 'saund/ a sound, which is high in tone.

HIGH POSITION OF THE TONGUE /'haɪ pə'zɪʃən əv ðə 'tʌŋ/ the position when the dorsum and the front part of the tongue are raised high to the roof of the mouth, but not so high as to produce an audible friction. High narrow vowels /'haɪ 'nærou 'vaʊəl/ /i:, u:, ɪ, y/ are pronounced with the bulk of the tongue raised more higher than for /ɪ, u/, which also belong to the group of high vowels but to their broad variety.

HIGH SPEED X-RAY PHOTOGRAPHY /'haɪ 'spi:d 'eks'reɪ fə'tɒgrəfi/ one of the methods used in experimental phonetics, which consists in the photography of X-rayed organs of speech in the process of articulation.

HEIGHT /haɪt/ the width of the resonating cavity in the articulation of vowels.

HEIGHT OF THE TONGUE /'haɪt əv ðə 'tʌŋ/ the height to which the bulk of the tongue is raised and which determines the level of the raised bulk of the tongue: high, mid, or low.

HISS /hɪs/ noise produced when the air passes through a round narrowing and produces hissing noise. The sounds /s, ʃ/ are hissing consonants.

HISTORICAL ASSIMILATION /hɪs'tɒrɪkəl əsɪmɪ'leɪʃən/ sound changes, which are the result of the historical development of the language.

HISTORICAL PHONETICS /hɪs'tɒrɪkəl fəʊ'netɪks/ that branch of phonetics, which studies phonetic components on the diachronic level, it is a part of the history of a language, which studies the history of the development of the phonetic laws.

HOLD /hould/ the second stage of a single sound articulation (retention, central, medial stage).

HOMOGENEITY /'hɒmədʒə'nɪ:ti/ articulatory similarity of two sounds, which is based on similar articulatory work of the speech organs. The sounds /p, b/ are homogeneous because they are both plosive and bilabial noise consonants.

HOMOGRAPHS /'hɒməgrɑ:fz/ words that are similar in orthography but different in pronunciation and meaning. For example: *tear* /tɛə/ *разрывать* and *tear* /tɪə/ *слеза*.

HOMOPHONES /'hɒməfəʊnz/ words that are similar in pronunciation but different in orthography and meaning. For example: *air* — *hair* *воздух* — *волосы*; *buy* — *bye* *покупать* — *что-либо* *маловажное*; *knight* — *night* *рыцарь* — *ночь*; *not* — *knot* *нет* — *узел*; *or* — *ore* *либо* — *руда*.

HYPHEN /'haɪfən/ a graphic sign which serves to show syllabic boundary.

IDEOGRAM /'ɪdjo(u)græm/ 1) a symbol or a picture which represents and conveys an idea of an object without using its name, for example: a numerical or a pictorial road sign; 2) a symbol representing a word, but not the sounds which constitute it.

IDIOLECT /'ɪdɪəʊlekt/ the individual speech of a member of a language community.

IDIOPHONE /'ɪdɪə'fəʊn/ one and the same speech sound which is pronounced differently in different idiolects.

IMPEDE /ɪm'pi:d/ hinder or bar (articulation, a stream of air, etc.).

IMPLOSION /ɪm'pləʊʒn/ the first stage of a single plosive sound articulation.

INALIENABLE (INDISPENSABLE, CONCOMITANT) FEATURES /ɪn'eriʃənbəl, ɪndɪs'pensəbəl, kən'kɒmɪtənt 'fi:tʃəz/ these features are always present in all the allophones of a phoneme, e.g. two foci in /ʃ, ʒ, w, l/ articulation, lip rounding in /u:/ articulation. They may be distinctively relevant and irrelevant, e.g. *seem* vs. *theme*, /s, θ/ are opposed due to the flat, round narrowing difference, in *same* vs. *fame* the shape of the narrowing is irrelevant, /s — f/ are opposed due to the place of articulation difference.

INHALATION /ɪnhə'leɪʃn/ breathing the air in.

INITIAL PHASE /ɪ'nɪʃl 'feɪz/ the first phase of a sound articulation.

INSTRUMENTAL PHONETICS /ɪn'stru'menti fəʊ'netiks/ different techniques and devices used in experimental phonetics.

INTERALLOPHONIC ALTERNATION /ɪntərələ'fəʊnɪk, ɔ:l'tə:'neiʃən/ alternation between different allophones of one and the same phoneme, e.g. /n/ alveolar alternates with /n/ dental in *nine* — *ninth*.

INTERCOMMUNICATION /ɪntəkə'mju:nɪ'keɪʃən/ giving or passing information by means of oral speech.

INTERDENTAL ARTICULATION /ɪntə'denti ɑ:tɪkju'leɪʃən/ articulation characterised by the interdental position of the tip of the tongue in articulating /θ, ð/. In speech these sounds are often pronounced as dental, with the tip of the tongue placed behind the upper teeth.

INTERIDIOLECTAL PHONETIC VARIATIONS /ɪntə(:),ɪdɪəʊ'lektəl fəʊ'netɪk vɛəri'eɪʃ(ə)nz/ variations in the pronunciation of one and the same phoneme, word or sentence in the same phonetic context and the same style of speech by different speakers of the language.

INTERMITTENT CLOSURE /ɪntə'mɪtənt 'kləʊʒə/ this type of closure is formed when the tip of the tongue is rapidly tapping against the teethridge as in the articulation of trilled, or rolled /r/.

INTERPHONEMIC ALTERNATION /ɪntə'fəʊ'nɪ:mɪk ɔ:l'tə:'neiʃən/ alternation between different phonemes, which are represented by their different allophones, e.g. /æ/ alternates with /e/ in *man* — *men*.

INTONATION /ɪntəʊ'neiʃən/ it is a component of the phonetic structure which is viewed in the narrow meaning as pitch variations, or speech melody. It manifests itself in the delimitative function within a sentence and at its end; see **prosodic features**.

INTONATION GROUP /ˌɪntəʊˈneɪʃən ˈɡruːp/ it is an actualized sense group.

INTONEME /ˈɪntəʊniːm/ it is a phonological unit created by two or more components of intonation, or by a combination of various types of tonemes or accentemes, e. g. What difficulty? What difficulty! These two sentences are pronounced with two different intonemes.

INTRAIDIOLECTAL PHONETIC VARIATIONS /ˈɪntɹəˌɪdiouˈlektəl ˌfəʊˈnetɪk vɛəˌriːʃənz/ they are variations in the pronunciation of one and the same speaker, i. e. within one and the same idiolect. They are of two types: free variations and those conditioned by different styles of pronunciation — stylistic variations.

INTRUSIVE SOUNDS /ɪnˈtruːsɪv ˈsaʊndz/ alien to the word. For example: /ˈhɪmpjudənt/ instead of /ˈɪmpjudənt/; /ˈpleɪjɪŋ/ instead of /ˌpleɪɪŋ/; /ˈdrɑːmə ɐnd ˈmjuːzɪk/ instead of /ˈdrɑːmə ɐnd ˈmjuːzɪk/.

INVENTORY OF PHONEMES /ˈɪnventrɪ əv ˈfəʊniːmz/ in the English language the inventory of segmental phonemes consists of 25 consonant and 21 vowel phonemes. In the Russian language there are 36 consonant and 6 vowel phonemes.

IRRELEVANT FEATURES /ɪˈrelɪvənt ˈfɪːtʃəz/ they are different articulatory and acoustic features of speech sounds, which do not make them allophones of different phonemes, e. g. partial devoicing of terminal voiced consonants, variation in the positional length of vowels.

J

JAWBREAKER /ˈdʒɔːbreɪkə/ a word, which is difficult to pronounce.

JAWS /dʒɔːz/ parts of the mouth, which bear teeth and by means of which the mouth can be opened and closed.

JONES' VOWEL TRAPEZIUM /ˈdʒəʊnzɪz ˈvaʊəl trəˈpiːzjəm/ Jones' system of vowels based on 8 cardinal points of articulation; see **cardinal vowels**.

JUNCTION /ˈdʒʌŋkʃən/ the joining of two sounds or words.

JUNCTURE /ˈdʒʌŋktʃə/ the place, where two sounds or words are joined together.

JUNCTURE PHONEME /ˈdʒʌŋktʃə ˈfəʊniːm/ this is the syllabic boundary at the junction of words or morphemes that can be characterised by distinctive difference, e. g. a name— an aim. Open or plus juncture is marked by /+/: a + name, an + aim.

K

KINETIC /kaiˈnetɪk/ relating to motion, producing motion.

KYMOGRAPH /ˈkaiməgrɑːf/ the apparatus used to record speech sounds graphically. Kymograms help to ascertain the quality of various sounds.

L

LABIAL /'leɪbiəl/ relating to the lips.

LABIALIZATION /,leɪbiəlaɪzə'tʃən/ lip rounding.

LABIALIZED VOWELS /'leɪbiəlaɪzd 'vauəlz/ vowels produced with a more or less lip rounding. For example: /o, y, u, ɔ:, ɒ, u/.

LABIAL SOUNDS /'leɪbiəl 'saundz/ articulated by the lips. For example: /p, b/.

LARYNGEAL /,lə'rɪŋ'dʒi:əl, lə'rɪndʒjəl/ of or pertaining to the larynx.

LARYNGOSCOPE /lə'rɪŋgəskəʊp/ laryngeal mirror, which helps to observe the vocal cords, epiglottis, and the glottis.

LARYNX /'lərɪŋks/ an organ of the respiratory tract above the wind-pipe. It consists of an elaborate arrangement of cartilage and muscles and contains a pair of vocal cords.

LATERAL /'lætərəl/ having to do with the sides of the tongue.

LATERAL SOUNDS /'lætərəl 'saundz/ sounds in the articulation of which the air passages (or passage) are formed at the lateral sides of the tongue. At the same time the contact is made by the tip of the tongue pressed against the teethridge as in /l/ articulation.

LAW OF CONDITIONED ALLOPHONIC SIMILARITY /'lɔ: əv kən'dɪʃənd ələ'fɒnɪk sɪmɪ'lærɪtɪ/ two more or less similar sounds, which are at the same time more or less different, are allophones of the same phoneme, if their difference is due to non-distinctive factors.

LAW OF GREAT PHONEMIC DISSIMILARITY /'lɔ: əv 'ɡreɪt fou'ni:mɪk dɪsɪmɪ'lærɪtɪ/ entirely different sounds such as a vowel and a consonant cannot be allophones of the same phoneme.

LAWS OF PHONEMIC AND ALLOPHONIC DISTRIBUTION /'lɔ:z əv fou'ni:mɪk ənd əlou'fɒnɪk dɪstrɪ'bju:ʃən/ 1. if different speech sounds occur in the same phonetic context, they are allophones of different phonemes, 2. if similar speech sounds occur in different positions and never occur in the same phonetic context, they are variants of one and the same phoneme.

LAX VOWELS /'læks 'vauəlz/ vowels in the articulation of which the muscular tension of the tongue, lips, and the walls of the resonating cavities is not so great as in the articulation of tense vowels. Compare: /ɪ, u, ɔ/ and /i:, u:, ɔ:/.

LENGTH OF THE SOUND /'leŋθ əv ðə 'saund/ length of the sound waves in the articulation of a sound.

LENIS /'li:nɪs/ (pl lenes /'li:ni:z/) pronounced with weak articulation: /b, d, z, g, v, ð, ʒ, dʒ/.

LENITION /lɪ'nɪʃən/ gradual weakening in the articulation.

LESSEN /'lesn/ to make less. For example, lessen the length, loudness or tension of sounds.

LETTERS /'letəz/ printed or written symbols of an alphabet used in representing speech sounds.

LEVEL TONE /'levl 'təʊn/ tone neutral in its communicative function, which is used mostly in poetry.

LIAISON /li:'eɪzən/ in the English language cases of liaison are the "intrusive" /r/ or the pronunciation of /n/ in an indefinite article when it is followed by a vowel: *an apple* /ən 'æpl/.

LIGHT /laɪt/ in phonetics this term is equivalent to *clear*.

LINGUAL /'lɪŋgwəl/ articulated with the help of the tongue. For example, /t/ is a lingual sound because it is articulated with the tip of the tongue pressed against the teethridge.

LINGUAPHONE /'lɪŋgwəfoun/ having to do with teaching languages with the help of phonetics.

LINGUAPHONE CLASS /'lɪŋgwəfoun 'klɑ:s/ class equipped with magnetic tape recorders, gramophones and earphones used for listening and reproducing foreign texts.

LINGUISTIC FUNCTIONS /lɪŋ'gwɪstɪk 'fʌŋkʃənz/ in phonetics they are connected with phonemic, significative properties of sound, syllable, stress, and intonation.!

LIP POSITIONS /'lɪp pə'zɪʃnz/ different positions of lips, which change the articulation of sounds and their timbre. The main positions of the lips are: rounded, as in /ɔ:/ articulation, unrounded, as in /ɪ/ articulation, protruded, as in /u/ articulation, non-protruded as in /e/ articulation, spread as in /i:/ articulation, neutral as in /ə/ articulation.

LIPS /lɪps/ two muscular folds bordering the mouth; in articulatory phonetics referred to as "upper" and "lower lip".

LIQUID CONSONANTS /'lɪkwɪd 'kɒnsənənts/ some phoneticians use this term to characterize the sounds /l, r/.

LISP /lɪsp/ to pronounce /θ/ instead of /s/ and /ð/ instead of /z/.

LITERARY PRONUNCIATION /'lɪtərəri prə'nʌnsɪ'eɪʃn/: *RP pronunciation (received pronunciation)* or *public school pronunciation*, the pronunciation of educated people in Southern England.

LOCAL DIFFERENCES /'ləukəl 'dɪfərənsɪz/ dialectal differences in the pronunciation of the same sounds or words.

LOGICAL STRESS /'lɒdʒɪkəl 'stres/ the singling out of the word, which seems to be most important in the sentence.

LOGOGRAM /'lɒɡəgræm/ an arbitrary symbol (in shorthand, for instance) representing a complete word.

LOGOPAEDIC /,lɒɡo(u)'pi:dɪk/ having to do with the correction of speech defects.

LOGOPAEDICS /,lɒɡo(u)'pi:dɪks/ a branch of phonetics, which studies speech defects and the ways of correcting them.

LONG VOWELS /'lɒŋ 'vauəlz/ in English they are /i:, ɑ:, ɔ:, ə:, u:/.

LOOSE NEXUS /'lu:s 'neksəs/ loose connection between a long monophthong or a diphthong and a consonant which follows it. For example: /i: + z/ in the word *bees*.

LOOSE TRANSITION /'lu:s træn'sɪʒən/ articulation of two neighbouring sounds when the final stage of the first sound is affected by the initial stage of the second sound, e. g. /aɪsbə:g/ compare with the Russian [эбѳр]—close transition.

LOSS /lɒs/ in phonetics it is absence of some articulatory work. Loss of plosion, sound, etc., e. g. *act*—loss of plosion in /k/.

LOUD /laʊd/ producing a powerful stimulus on the ear.

LOUDSPEAKER /'laʊdspɪ:kə/ a device that converts electrical impulses into sounds loud enough to be heard some distance away.

LOWER TEETH, LIP, JAW /'ləʊə 'ti:θ, 'lɪp, 'dʒɔ:/ all these organs are more active and important in the process of articulation than the upper jaw, lip, teeth.

LOW LEVEL TONE /'ləʊ 'levl 'təʊn/ characterises unstressed but prominent syllables of parenthetic groups or long tails.

LOW NARROW VOWELS /'ləʊ 'nærou 'vaʊəlz/ these vowels are /ʌ, ɔ:/.

LOW PITCH /'ləʊ 'pɪtʃ/ low tone. It is usually used in the narrow range of tone-pitch.

LOW VOWELS /'ləʊ 'vaʊəlz/ vowels pronounced with the low position of the bulk of the tongue. For example: /ɑ:, ɔ, æ, ʌ, ɔ:/.

/ʌ, ɔ:/ belong to low vowels of narrow variety.

/æ, a (ɪ, u), ɑ:, ɔ/ belong to low vowels of broad variety.

/æ a (ɪ u)/ are low front vowels.

/ʌ, ɔ:, ɑ: ɔ/ are low back vowels.

LUNGS /lʌŋgz/ the source of the air stream that makes it possible to produce sounds. The latter also regulate the force of the air pressure and produce vibrations in the intensity of speech sounds.

M

MAGNETIC TAPE RECORDER /mæɡ'netɪc 'teɪp rɪ'kɔ:də/ the apparatus that converts sounds into electrical signals and then into variations in the magnetization of a wire or tape of magnetic material. A similar system has been devised for operation with a television camera, recording television pictures as magnetic information which may be used later to reproduce the images (videotape).

MEDIA /'mi:djə/ (*pl* **MEDIAE** /'medʒi:/) *see* *lenis*.

MEDIAL /'mi:djəl/ passing through the middle of the air-passage.

MEDIAL SONANTS /'mi:djəl 'səʊnənts/ sounds articulated with the air-passage through the middle part of the tongue. For example: /w, r, j/.

MEDIOLINGUAL CONSONANTS /'mi:dʒo(u)lɪŋɡwəl 'kɒnsənənts/ consonants articulated with the help of the middle part of the tongue. To this group belong English /j/ and Russian /й/.

MELODY /'melədi/ changes in the voice pitch in the process of speech.

MEMBERS OF A PHONEME /'membəz əv ə 'fəʊni:m/ positional and combinatory allophones belonging to the "family of one and the same sound" (D. Jones).

MERGING OF STAGES /'mɜ:dʒɪŋ əv 'steɪdʒɪz/ coincidence of the last stage of the first sound in the articulation of a word with the first stage of the second sound. Merging of stages usually takes place when sounds of a different nature are joined, for example /l + i + t/ in the word *lit*.

METHODS OF PHONETIC ANALYSIS /'meθədz əv fou'netɪk ə'næ-lɪsɪs/ different methods used in the study and investigation of different phonetic phenomena.

METRONOME /'metrənəʊm/ a clockwork device with a moving audible indicator, which can be regulated to different speeds and used to mark equal periods. It is used in phonetics to teach rhythm.

MICROPHONE /'maɪkrəfəʊn/ an instrument, which amplifies and transmits sounds.

MID /mɪd/ neither high nor low position of the bulk of the tongue when it moves in the vertical direction. In Jones' classification *mid* corresponds to *half-close* and *half-open*. Mid vowels are: /e, ə, ɐ, o(u), ɛ(ə)/.

MID BACK VOWELS /'mɪd 'bæk 'vauəlz/ the nucleus of the diphthong /ou/ and the Russian /o/.

MID CENTRAL VOWELS /'mɪd 'sentrəl 'vauəlz/ /ə:/ and /ɐ/ in the terminology given by British phoneticians. Russian authorities define them as *mid*, *mixed*.

MIDDLE PART OF THE TONGUE /'mɪdl 'pɑ:t əv ðə 'tʌŋ/ the central part of the dorsum of the tongue which is opposite the hard palate. It lies between the blade and the back of the tongue. This term is widely used in our terminology. The middle of the tongue plays an important role in the process of palatalization. In the terminology given by some foreign phoneticians the term "middle" is used in reference to the border between the predorsal (that is front) and dorsal (that is middle and back) part of the tongue; according to their terminology the middle part of the tongue corresponds to the term "front part of the tongue".

MIDDLE PHASE /'mɪdl 'feɪz/ the second phase of articulation, or *the hold*.

MID FRONT VOWELS /'mɪd 'frʌnt 'vauəlz/ /e/, the first element of the diphthong /ɛə/ and the Russian /ɛ/.

MID NARROW VOWELS /'mɪd 'nærou 'vauəlz/ /e/, /ɛ:/ and the first element of the diphthongs /ou/ and /eɪ/.

MID WIDE VOWELS /'mɪd 'waɪd 'vauəlz/ /ə/ and the first element of the diphthong /ɛ(ə)/.

MINIMAL DISTINCTIONS /'mɪnɪməl dɪs'tɪŋkʃənz/ the smallest differences, that help to recognize and differentiate words.

MINIMAL PAIR /'mɪnɪməl 'peə/ it is a pair the distinctive differences between the members of which are based upon one distinctive difference. The pair *pill*—*bill* is minimal, because its members are differentiated due to /p—b/ phonemes, their fortis /p/—lenis /b/ distinctions.

MISPRONOUNCE /'mɪsprə'naʊns/ to pronounce sounds or words with mistakes.

MISTAKES IN PRONUNCIATION /mɪs'teɪks ɪn prə'nʌnsɪ'eɪʃən/ different deviations from the teaching norm in the pronunciation of a foreign language. Academician L. V. Shcherba suggested that mistakes should be divided into 1. phonological (altering the meaning of words) and 2. non-phonological (that do not affect the meaning of words).

MIXED VOWELS G. P. Torsujev defines them in the following way: тело языка приподнято, причем вся спинка языка лежит максимально плоско. They are /ə:, ə/.

MODIFICATIONS IN CONTEXT /ˌmɒdɪfɪˈkeɪʃnz ɪn ˈkɒntekst/ sound changes in context. Positional and combinatory modifications of phonemes in connected speech.

MONOPHTHONG /ˈmɒnəfθɒŋ/ a vowel sound in the articulation of which the articulating organs are more or less stable, which results in the stationary nature of the vowel. English monophthongs are /ɪ, e, æ, ɑ:, ɔ, ɔ:, u, ʌ, ə:, ə/.

MONOPHTHONGIZE /ˈmɒnəfθɒŋgaɪz/ acquire equal quality.

MONOSYLLABISM /ˈmɒnəˈsɪləbɪzəm/ linguistic phenomenon characterised by monosyllables. Monosyllabism is characteristic of the English language.

MONOSYLLABLE /ˈmɒnəˈsɪləbl/ a word consisting of one syllable.

MONOTONE /ˈmɒnətəʊn/ equal tone, lacking the necessary variations in the voice pitch.

MONOTONOUS /məˈnɒtənəs/ pronounced with equal tone.

MORA /ˈmɔ:rə/ (*pl* **MORAE** /ˈmɔ:ri:/) the length of one short syllable which was considered the unit of length in the antique versification; so the length of a long syllable was equal to two moras.

MORPHOGRAPH /ˈmɔ:fəgrɑ:f/ separate graphemic unit which is a graphemic reflex of a morpheme.

MORPHOPHONOLOGY /ˌmɔ:fəfəˈnɒlədʒɪ/ this branch of phonology studies the distribution of morphologically correlated sounds in order to establish their phonemic status.

MOUTH /maʊθ/ the cavity in the head containing the teeth, the tongue and the palate with the uvula.

MOUTH CAVITY /ˈmaʊθ ˈkævɪtɪ/ the cavity between the teeth and the pharynx.

MOUTHPIECE /ˈmaʊθpi:s/ the part of the kymograph which is applied to the mouth.

MOVABLE ORGANS OF SPEECH /ˈmu:vəbl ˈɔ:gənz əv ˈspi:tɪʃ/ the organs of speech that move during articulation: the lips, the lower jaw, the tongue, the soft palate with the uvula, the back wall of the pharynx.

MURMUR /ˈmɜ:mə/ soft speech, sometimes indistinct.

MURMURED VOWELS /ˈmɜ:məd ˈvaʊəlz/ obscure vowels.

MUTATION /ˈmju:ˈteɪʃən/ un laut.

MUTE LETTERS /ˈmju:t ˈletəz/ letters, or letter combinations which are not pronounced, but remain in words due to traditional spelling rules.

MUTUAL ASSIMILATION /ˈmju:tʃʊəl əˈsɪmɪˈleɪʃn/ bilateral assimilation, when two assimilating sounds equally influence each other. For example bilateral assimilation of /s/ + /j/ results in /ʃ/: *issue* /ˈɪʃju: — ˈɪʃʃju: — ˈɪʃju:/.

MUTUALLY DISTINCTIVE SOUNDS /ˈmju:tʃʊəlɪ dɪsˈtɪŋktɪv ˈsaʊndz/ the sounds that belong to different phonemes and are realizations, variants or allophones of different phonemes, e. g. /b, p/ in *park* — *bark*.

MYOKINETIC ANALYSIS /ˈmaɪo(u)kaɪˈnetɪk əˈnælɪsɪs/ a complex

of different analyses that are carried out to study muscular — kinetic work of speech organs.

N

NARROW /'nærou/ the variety of high, mid, and low positions of the bulk of the tongue when it moves in the vertical direction. *See high-narrow, mid-narrow, low-narrow.*

NARROWING /'nærouŋ/ a passage of small width or length. Narrowings can be formed by the lips, or the tongue and the palate (its front, mid or back part).

NARROWING THE RANGE /'nærouŋ ðə 'reɪndʒ/ characterises emphatic speech which is uttered within the limits of narrow range.

NARROW PASSAGE /'nærou 'pæsɪdʒ/ the term is conventional and characterises the state of the passage for the flow of air in the articulation of vowels or consonants. For example, the air passage is narrow in /i:/ articulation and it is also narrow in /s/ articulation.

NARROW RANGE /'nærou 'reɪndʒ/ (*see wide range, medium range*) if the range of the voice pitch is represented by two horizontal parallel lines 10 mm wide, then the head syllable of the wide range utterance will be arbitrary represented by a dash 2 mm from the top range line. The head syllable of the narrow range will be represented by a dash 2 mm from the bottom range line. The head syllable of medium range will be represented by a dash 6 mm from the bottom range line.

NARROW TRANSCRIPTION /'nærou 'træns'krɪpʃən/ the system of transcription signs into which additional symbols are included which correspond to allophones of some phonemes.

NASAL CAVITY /'neɪzl 'kævɪtɪ/ immovable cavity inside the nose and the nasopharynx; it is separated from the mouth cavity by the upper jaw with the teethridge and the palate.

NASALIZATION /'neɪzələɪ'zeɪʃn/ nasal twang.

NASAL SONANTS /'neɪzl 'sounənts/ they are articulated with the blocked passage for the flow of air through the mouth cavity. This is effected by lowering the soft palate. Nasal sonants are /m, n, ŋ/.

NASAL PHARYNX /'neɪzl 'færɪŋks/ (nasopharynx) the upper part of the pharynx 4 cm long. It is situated above the soft palate.

NASAL PLOSION /'neɪzl 'plouʒən/ plosion formed when the soft palate is separated from the back wall of the nasal pharynx and the air quickly escapes through the nasal cavity; it takes place in the combinations like /tn, dn/.

NASAL TWANG /'neɪzl 'twæŋ/ is characteristic of American pronunciation and results from the laxness of the soft palate which does not cover the nasal cavity completely and the air escapes partly through the narrowing formed.

NASAL VOWELS /'neɪzl 'vaʊəlz/ vowels articulated when the flow of air is directed from the lungs both through the mouth and the nasal cavity. Nasal vowels exist in the French language.

NEIGHBOURING SOUND /'neɪbəɪŋ 'saʊnd/ adjacent sound, that which follows.

NEUTRALIZATION /'nju:trəlaɪ'zeɪʃn/ the loss of qualitative and tembral characteristics of vowel sounds in unstressed positions.

NEUTRAL POSITION /'nju:trəl pə'zɪʃn/ the position when the tongue is equally removed from front, back, high, and low positions.

NEUTRAL VOWEL /'nju:trəl 'vauəl/ it is a mixed vowel of mid-open position, broad variety — /ə/.

NEXUS /'neksəs/ articulatory dependence between a vowel and consonant. *See close nexus, loose nexus.*

NOISE /nɔɪz/ characterises consonants, which are formed when the flow of air passes through a narrowing and produces audible friction. Voiceless consonants are “pure” noises, and voiced consonants are a combination of noise and voice, produced by the vocal cords, which are drawn together and vibrate.

NON-DISTINCTIVE SPEECH SOUNDS /'nɒndɪs'tɪŋktɪv 'spi:tʃ 'saundz/ similar sounds which occur in different positions and are incapable of being opposed to each other in minimal pairs, e. g. /k/ in cool, school, looked.

NON-FINAL /'nɒn'faɪnəl/ not terminal, followed by a sound, a word, a group of words.

NUCLEAR TONE /'nju:klɪə 'toun/ the tone associated with the nucleus of a sense-group is a nuclear tone. In RP they are the following: the high falling, the low falling, the high rising, the low rising, the rising-falling, the falling-rising, the rising-falling-rising, the level tone.

NUCLEUS OF A DIPHTHONG /'nju:klɪəs əv ə'dɪfθɒŋ/ (*pl* NUCLEI /'nju:klɪaɪ/) that part of the diphthong, which is more prominent. For example, the nuclei of /aɪ, eɪ/ are /a, e/.

NUCLEUS OF A SENSE-GROUP /'nju:klɪəs əv ə'sens 'gru:p/ it is the last stressed syllable of a sense-group.

O

OBSOLETE /'ɒbsəli:t/ not used nowadays.

OBSTRUCTION /əb'strʌkʃən/ in articulation it is either a narrowing (incomplete obstruction) or a complete closure of the speech organs (complete obstruction).

OCCCLUSION /ə'klu:ʒən/ a complete obstruction made by the speech organs, as in /p/, /t/, /k/.

OCCLOSIVE /ə'klu:sɪv/ the sounds pronounced when the air on its way out breaks up a complete obstruction. Occlusive consonants are 1) /p, b, t, d, k, g/ — stop or plosives and 2) sonorants /m, n, ŋ/ — nasals (*see plosive consonants*).

OCCURRENCE /ə'kʌrəns/ frequency with which sounds, phonemes, or words are used.

OFF-GLIDE /'ɔ:f,glɑɪd/ a short and not definite vowel, which is heard after terminal consonants (according to H. Sweet). Some authors consider that it is a neutral vowel, which is heard between sounds. For example: *-ism* /ɪz(ə)m/.

ONSET /'ɒnset/ the first stage of a sound articulation (initial phase, excursion, first stage).

OPEN /'əʊpən/ characterised by the low position of the bulk of the tongue.

OPEN SYLLABLE /'əʊpən 'sɪləbl/ the type of syllable which ends in a vowel — CV-type.

OPEN VOWELS /'əʊpən 'vauəlz/ the group of vowels which are pronounced with the open, or low position of the bulk of the tongue. Open or low vowels in English are: /æ, ʌ, ɔ, a(r, u), ɑ:, ɔ:/.

OPPOSITION /,ɒpə'zɪʃən/ comparison of sounds, words or morphemes along the lines of their qualitative and quantitative characteristics which results in singling out their minimal distinctive features, that are phonologically relevant or irrelevant. For example, the opposition between /kəb — kəp/ is based on voiced — lenis voiceless — fortis distinctions in /b — p/ which is their minimal distinctive relevant feature (other features, which characterise these sounds are irrelevant).

ORAL METHODS /'ɔ:rəl 'meθədz/ different methods of teaching a foreign language, which are carried out for retention of oral speech habits.

ORAL SOUNDS /'ɔ:rəl 'saundz/ they are the sounds which are produced with the raised soft palate, thus the air goes out of the mouth cavity.

ORATORICAL STYLE /,ɔ:rə'tɔ:rɪkəl 'stɑ:l/ the type of speech with which orators address large audiences. It is characterised by slow rate, eloquent and moving traits.

ORGANS OF SPEECH /'ɔ:gənz əv 'spi:tʃ/ the organs that together with biological functions, such as breathing, feeding, smelling and tasting, serve to carry out intercommunication through the elaborate work of the four mechanisms: the power, the vibrator, the resonator and the obstructor.

ORTHOEPHY /ɔ:'θoupi/ the correct pronunciation of the words of a language. The interpretation of the rules of reading cannot be done without a good command of phonetics. This fact makes grammar and lexicology dependent on phonetics.

ORTHOGRAPHIC SYLLABLE /,ɔ:'θə'græfɪk 'sɪləbl/ it is a unit into which words are divided in writing or print, e. g. rang — ing, al — ien. They do not always coincide with phonetic syllables.

ORTHOGRAPHY /ɔ:'θə'græfɪ/ the system of spelling rules.

OSCILLOGRAM /ə'sɪləgræm/ a record made by an oscillograph or by an oscilloscope.

OSCILLOGRAPH /ə'sɪləgrɑ:f/ an instrument which makes it possible to record speech in the form of graphs.

OVERLAP /,əʊvə'læp/ the term is connected with the phases of articulation which partly coincide in the neighbouring sounds. The result of such overlapping is partial or complete assimilation.

OVERTONE /'əʊvətoun/ one of the tones above the fundamental tone in a harmonic series. They are produced when only parts of the vibrator mechanism oscillate.

PALATALIZATION /ˌpælətəlaɪˈzeɪʃən/ softening of consonants, which results from the secondary place of articulation — front-secondary focus. It takes place when the middle part of the tongue is raised to the hard palate and the air passage is narrowed or constricted, which gives the consonant soft colouring. All consonants, with the exception of medio-lingual, can be affected by palatalization when they are followed by /i/, ɪ, e or j/. Palatalization is phonemic in the Russian language (compare: *нёл* — *нёлэ*). In the English language palatalization is non-phonemic, and when it takes place in the articulation of sounds other than /l, ʃ, ʒ, tʃ, dʒ/ under the influence of the Russian language it is a mistake.

PALATAL SOUND /ˈpælətl̩ ˈsaund/ the sound that is connected with the palate articulatorily.

PALATE /ˈpælət/ the roof of the mouth, separating the mouth cavity from the nasal cavity. In articulatory phonetics it is divided into the hard palate, the soft palate with the uvula and the teethridge.

PALATE ARTIFICIAL /ˈpælət ˌɑːtrɪfɪʃəl/ is made of metal or vulcanite for each experimentator individually and corresponds exactly to the shape of his palate. The underside of the artificial palate is sprinkled with some fine white powder and then carefully fitted into the mouth, after this a sound is articulated. During this process some of the powder is licked off at the points of the tongue — palate contacts. After this the artificial palate is removed and carefully examined.

PALATO-ALVEOLAR CONSONANTS /ˈpælətuːəlvɪələ ˈkɒnsənənts/ the consonants articulated by the tip of the tongue raised against the teethridge (there is a narrowing between them) and the middle part of the tongue which is simultaneously raised to the hard palate. Palato-alveolar consonants are /ʃ, ʒ/.

PALATOGRAMS /ˈpælətuːɡræmz/ the drawings of the tongue — palate contacts.

PARENTHESIS /pəˈrenθəsis/ a word, phrase or sentence usually having its own complete meaning, inserted into a sentence which is grammatically complete without this insertion, and marked off from it by punctuation. For example: “I shall not go there,” he replied. “I ask you,” she demanded, “to go there immediately.” In speech it is expressed by lowering the pitch of the voice.

PARENTHETIC /ˌpærənˈθetɪk/ constituting a parenthesis, containing a parenthesis.

PARTIAL TONES ˈpɑːʃəl ˈtəʊnz/ partial waves which result from the vibrations of the parts of the vibrating body are perceived as partial tones, or overtones, or harmonics.

PARTIAL WAVES /ˈpɑːʃəl ˈweɪvz/ waves produced by the vibrations of the parts of the physical body. Most sound waves are complex: they consist of the fundamental and partial waves. The sound waves produced by the vibration of the whole body are called fundamental.

PASSAGE FOR THE AIR STREAM /ˈpæsɪdʒ fɔː ðɪ ˈeə ˈstriːm/ the

way through which the flow of air goes out of the mouth or nasal cavity.

PASSIVE ORGANS OF SPEECH /'pæsɪv 'ɔ:gənz əv 'spi:tʃ/ the organs that are either constantly immovable, such as the hard palate and the upper teeth, or such that are fixed but can be movable, for example, the back part of the tongue in the articulation of /r/ is fixed and in /k, g/ it is active and moving to the soft palate, with which it forms a complete obstruction.

PAUSE /pɔ:z/ a short period of time when sound stops before starting again. Pauses are non-obligatory between sense-groups and obligatory between sentences.

PEAKS OF PROMINENCE /'pi:kz əv 'prɒmɪnəns/ the points of maximal acoustic activity of tone.

PECULIARITY /pɪ,kju:lɪ'æərɪti/ a feature which characterises some phonetic phenomenon.

PENULTIMATE /pɪ'nʌltɪmɪt/ the last but one syllable.

PERCEPTIBILITY /pə'septə'bɪlɪti/ in phonetics it is usually connected with hearing.

PERIODICITY /pɪəriədɪ'sɪti/ the quality or fact of recurring at constant intervals.

PHARYNGAL(-GEAL) /fə'rɪŋgəl, færin'dʒəl/ connected with the pharynx.

PHARYNGOSCOPE /fə'rɪŋgəskəʊp/ the apparatus which is used for the observation of the pharyngeal cavity.

PHARYNX /'færɪŋks/ the cavity between the mouth and the oesophagus communicating with the nasal passages and ears.

PHASES OF ARTICULATION /'feɪzɪz əv ɑ:tɪkju'leɪʃən/ three phases in the articulation of a single sound: initial, medial (or central), and final. They may be called differently: excursion, stop stage and recursion.

PHONATE /fo(u)'neɪt/ to pronounce outloud with the vocal cords vibrating and producing voice.

PHONEMATIC /'fəʊni:'mætɪk/ possessing functional properties.

PHONEME /'fəʊni:m/ the shortest functional unit of a language. Each phoneme exists in speech in the form of mutually non-distinctive speech sounds, its allophones. Each speech sound is an allophone of some phoneme.

PHONEMIC COMPONENT /fəʊ'ni:mɪk kəm'pəʊnənt/ this component of the phonetic structure manifests itself in the system of separate phonemes and their allophones.

PHONEMIC TRANSCRIPTION /fəʊ'ni:mɪk træns'krɪpʃən/ this type of transcription is based on the principle "one symbol per phoneme". A phoneme is reflected in this transcription as an abstraction and generalization. The symbols of a phonemic transcription are placed within two slanting lines / /.

PHONETIC PRINCIPLE OF ORTHOGRAPHY /fəʊ'netɪk 'prɪnsɪpl əv ɔ:'θɒgrəfi/ it is a one-to-one correspondence: one grapheme corresponds to one phoneme, or sequence of phonemes. This principle is realized in phonemic transcription.

PHONETICS /fou'netiks/ the science that studies the sound matter of the language, its semantic functions and the lines of development.

PHONETIC SUBSYSTEM /fou'netik səb'sistım/ the speech sounds which occur in interjections and borrowed words, e. g. nasalized vowels pronounced in some words borrowed from French.

PHONETIC SYSTEM /fou'netik 'sistım/ it is a systemic combination of five components of the language, i. e. the system of segmental phonemes, the phonemic component, the syllabic component, the accentual component, intonation.

PHONIC /'foun:k/ acoustic, connected with voice or sounds.

PHONOGRAPH /'founəgrɑ:f/ a machine invented by Edison for recording and reproducing sounds (1877).

PHONOLOGICAL MISTAKES /'founə'lɒdʒɪk(ə)l mɪs'teɪks/ mistakes connected with the alteration of the meaning of words, which prevent communication. For example, mispronunciation of /θ/ may lead to the confusion of *thought* — *fought*, *think* — *sink*, *mouth* — *mouse*, etc.

PHONOLOGICAL OPPOSITIONS /'founə'lɒdʒɪkəl ɔpə'zɪʃənz/ it is a pair of words in which any one phoneme is usually opposed to any other phoneme in at least one lexical or grammatical minimal or sub-minimal pair, e. g. /t — d/, /k — g/ in *ten* — *den*, *coat* — *goat*.

PHONOLOGY /fə'nɒlədʒi/ the science that deals with phonemes and their sequences. It is functional phonetics since it investigates the functional side of phonemes, accent, syllable, and intonation.

PITCH /pɪtʃ/ the degree of highness or lowness varying with the number of vibrations of a note. V. A. Vassilyev defines it as "perception of the frequency of repeated pressures on the ear-drum".

PLACE OF ARTICULATION /'pleɪs əv ɑ:tɪkju'leɪʃn/ the place, where a complete or incomplete obstruction is formed in the articulation of consonants.

PLOSION /'plouzən/ an abrupt separation of speech organs at the place of articulation.

PLOSIVE CONSONANTS /'plouɪv 'kɒnsənənts/ the consonants that are articulated by forming a complete obstruction which bars the flow of air sent from the lungs through the mouth or nasal cavities. The organs of speech that form the obstruction produce a kind of explosion on their abrupt separation. Plosive consonants are /p, b, t, d, k, g, m, n, ŋ/. See **pure plosives**.

POINT OF ARTICULATION /'pɔɪnt əv ɑ:tɪkju'leɪʃn/ this term is used by American linguists instead of the term fixed or passive speech organs.

POSITIONAL ALLOPHONES /pə'zɪʃənl 'æləfəʊnz/ variants of a phoneme which are used in definite positions due to the tradition of a language pronunciation, e. g. dark and light /l/.

POST-ALVEOLAR CONSONANTS /'pəʊst 'ælvjələ 'kɒnsənənts/ consonants that are articulated by the tip of the tongue which moves behind the back slope of the teethridge, as, for example /t/ — /d/ in the words *tree* — *dry*.

POST-CONSONANTAL SOUND /pəʊst ,kɒnsə'næntl 'saʊnd/ the sound which follows a consonant.

POST-POSITION /'poustə'zɪʃən/ the position of some phonetic element after a word; when unstressed, this element may be termed *enclitic* after a stressed word.

POST-TONIC STRESS /'poust'tɒnɪk 'stres/ tertiary stress is defined as post-tonic, e. g. /kən'grætʃuleɪt/.

PRACTICAL PHONETICS /'præktɪkəl fou'netɪks/ teaching to pronounce sounds correctly.

PRE-DORSAL CONSONANTS /'pri:'dɔ:sl 'kɒnsənənts/ this term is connected with the term *dorsum*. Predorsal consonants are articulated by the blade and the tip of the tongue, e. g. /s, z/.

PRE-TONIC STRESS /'pri:'tɒnɪk 'stres/ secondary stress is defined as pre-tonic: /æ'nɪ'meɪʃn/.

PRE-VOCAL /'pri:'vəʊkəl/ a consonant that stands before a vowel.

PRIMARY PHONEMES /'praɪməɪ 'fəʊni:mz/ the term is used by those scientists who consider phonemes proper "*primary*" *distinctive units* and open transition /+/, stresses /'˘˘˘/, pitches /1 2 3 4/, clause terminals /→↗↘/ are viewed by them as "*secondary*" *distinctive units*.

PRIMARY STRESS /'praɪməɪ 'stres/ the stress which is the strongest compared with the other stresses used in a word.

PRINCIPAL ALLOPHONE (typical) /'prɪnsɪpəl 'æləʊfəʊn/ that variant of a phoneme which is considered to be free from the influence of the neighbouring sounds.

PROCLITIC /pro(u)'klɪtɪk/ a monosyllabic word or particle with no accent of its own, which is pronounced with the following pre-tonic or accented syllable as one phonetic unit. For example, articles before nouns, the particle *to* before verbs in the infinitive, or cases like *for-give* /fə'gɪv/, *begin* /bɪ'gɪn/.

PROGRESSIVE ASSIMILATION /prə'gresɪv ə'sɪmɪ'leɪʃn/ the process when the first of the two neighbouring sounds influences the second and makes it similar to itself. For example, the pronunciation of the suffix *-ed* of regular verbs is based on progressive voicing and de-voicing: it is pronounced /t/ after voiceless consonants (except /t/), /d/ after vowels and voiced consonants (except /d/), /ɪd/ after /t/, /d/: *drop-ped* /drɒpt/, *remained* /rɪ'meɪnd/, *extended* /ɪks'tendɪd/.

PROMINENCE /'prɒmɪnəns/ singling out acoustically, which produces the effect of greater loudness.

PRONOUNCE /prə'naʊns/ articulate.

PROSODIC FEATURES OF THE SENTENCE /prə'sɒdɪk 'fi:tʃəz əv ðə 'sentəns/ they are: speech melody, the pitch (fundamental frequency), accent, tempo, rhythm and pausation, tamber; they constitute intonation in the broad sense—prosodization or prosodization.

PROTRUDE /prə'tru:d/ to move forward. In phonetics this term is connected with the protrusion of the lips.

PUFF /pʌf/ a short light gust of air blown out of the mouth cavity.

PULSATION /pʌl'seɪʃən/ regularly recurring beats. In speech they are connected with acoustic prominence.

PURE PLOSIVES /'pjʊə 'pləʊsɪvz/ voiced and voiceless occlusive consonants pronounced with distinct and quick separation of the obstruction, they are: /p, b, t, d, k, g/. Lax separation of the articulating

organs results in affricated plosion which characterises indistinct colloquial speech and dialects.

PURELY DISTRIBUTIONAL METHOD /'pjʊəlɪ dɪstrɪ'bjuːʃənəl 'meθəd/ it is based on the fact that it is possible to establish the phonemic status of any sound of a given language without knowing the meaning of words, on the knowledge of the distribution of the sounds.

Q

QUALITATIVE /'kwɒlɪtətɪv/ connected with the timbre of the sound, that is with its spectral characteristics.

QUANTITATIVE /'kwɒntɪtətɪv/ referring to the length of the sound, i. e., its positional and phonemic length.

QUASI-HOMONYMS /'kwɑːzɪ 'hɒməɪnɪz/ this is L. V. Shcherba's term when he speaks of the members of a minimal pair, which are almost homonyms, near-homonyms.

QUESTION /'kwɛstʃən/ the communicative type of a sentence in which doubt, supposition or want of some information is expressed in the form of a question: interrogative, alternative, general, or special.

R

RECEIVED PRONUNCIATION /rɪ'siːvd prəˈnɑːnsɪ'eɪʃən/ the type of pronunciation which is the most widely understood one in England and in English speaking countries. It is the teaching norm in England and in most countries where English is taught as a foreign language including the Soviet Union.

RECESSIVE STRESS /rɪ'sesɪv 'stres/ stress that falls on the first syllable or the root of the word if it is preceded by a prefix that has lost its meaning, e. g. 'import, be'fore.

RECESSIVE TENDENCY /rɪ'sesɪv 'tendənsɪ/ the tendency which consists in gradual shifting of word accent to the first syllable (which is usually the root of the word).

RECIPROCAL ASSIMILATION /rɪ'sɪprəkəl əˌsɪmɪ'leɪʃən/ bilateral assimilation, when the neighbouring sounds are equally affected by assimilation. For example, in the word *twice* /t/ is labialized under the influence of /w/, and /w/ in its turn is devoiced under the influence of /t/.

RECITE /rɪ'saɪt/ to repeat out loud something memorized, especially before an audience. In studying a foreign language recitation plays a very important role.

RECORD PLAYER /'rekɔːd ˌpleɪə/ an instrument for playing gramophone records by means of a pick-up and one or more amplifiers.

REDUCE /rɪ'djuːs/ to make smaller or less. For example, to reduce the intensity of a sound, to reduce the quantity of a sound.

REDUCED FORM /rɪ'djuːst 'fɔːm/ a word, which sounds weaker in the process of speech. Thus the verb *to do* can be reduced and pronounced

as /du, də/ or even /d/. The same can be said about the verb *to have* /hæv, əv, v/. Articles, conjunctions, prepositions and pronouns are mostly affected by reduction.

REGRESSIVE ASSIMILATION /rɪ'gresɪv ə'sɪmɪ'leɪʃən/ the process when the second of the neighbouring sounds influences the first one and makes it similar to itself. For example, in the combination *in the* /ɪn/ is regressively assimilated by /ð/ and becomes dental and is pronounced with the tip of the tongue against the upper teeth (its free variant is pronounced with the tip of the tongue against the teethridge).

RESONANT /'reznənt/ the term is used by H. Gleason for vowels and sonorous consonants.

RETENTION /rɪ'tenʃən/ the ability to preserve the most stable properties in spite of assimilation or reduction.

RETENTIVE TENDENCY /rɪ'tentɪv 'tendənsɪ/ this tendency is characterized by the retention of accent in the derivative on the same syllable on which it falls in the parent word, e. g. *similar*, *assimilate*.

RETRACTED POSITION /rɪ'træktɪd pə'zɪʃən/ the position of the bulk of the tongue when it is in the front or in the back part of the mouth cavity but a bit retracted in the horizontal direction, forward—back-advanced, or backward—front-retracted: /u, i/.

RETROFLEXED VOWELS /'retro(u)flekst 'vauəlz/ the vowels that are articulated by the tip of the tongue curled back behind the back slope of the teethridge irrespective of the articulation of the vowel itself: this results in a special timbral colouring of the retroflexed vowel, e. g. *American* /r/.

RHYME /raɪm/ the repetition of identical or similar terminal sounds, sound combinations or words.

RHYTHM /rɪðm/: "rhythm is a flow, movement, procedure, etc., characterised by basically regular recurrence of elements or features, as beat, or accent, in alternation with opposite or different elements or features" (Webster's New World Dictionary).

RHYTHMIC STRESS /'rɪðmɪk 'stres/ the term refers to the cases when there are equal number of unstressed syllables between two beats. For example, *'tell them to 'go, there at 'once*.

RHYTHMIC TENDENCY /'rɪðmɪk 'tendənsɪ/ the tendency to alternate stressed and unstressed syllables. This tendency gave rise to the origin of the secondary stress, especially in four-syllable words of foreign origin. For example, *explanation* /,eksplə'neɪʃn/, *conversation* /,kɒnvə'seɪʃən/.

ROLLED CONSONANTS /'rəʊld 'kɒnsənənts/ such consonants are pronounced when the tip of the tongue (or the uvula) vibrates in the flow of air and interrupts it repeatedly, so that the flow of air is momentarily obstructed by the vibrating organ (or organs). The Russian sonant /p/ is a rolled consonant.

ROMAN ALPHABET /'roumən 'ælfəbɪt/ Latin alphabet.

ROMIC /'roumɪk/ the term is used in connection with the use of Latin letters for symbols of phonetic transcription.

RÖNTGENOGRAM /rɒnt'genəgræm/ a photograph made with the

help of X-rays. Röntgenograms help to observe directly the work of speech organs in the process of speech.

ROOF OF THE MOUTH /'ru:f əv ðə 'mauθ/ for purposes of consonant analysis and description it is conventionally divided into 1. the gums, 2. the teethridge, 3. the back slope of the alveolar ridge, 4. the soft palate (velum), 5. the uvula.

RULES OF READING /'ru:lz əv 'ri:diŋ/ the system of rules dealing with the correspondencies between the reading matter of the language and its pronunciation.

S

SAGITTAL /'sædʒ:tl/ The sagittal division of the articulatory apparatus into right and left halves makes it possible to represent the position of speech organs in the production of sounds.

SANDHI /'sændhi:/ the term is connected with different modifications of the sound, caused by assimilation.

SCALE /skeɪl/ the arrangement of stressed and unstressed syllables of a syntactic whole.

SCALE OF SONORITY /'skeɪl əv sə'nɔ:rɪtɪ/ the arrangement of phonemes according to their degree of loudness. According to this scale the most sonorous are front low vowels, then go sonants and voiced consonants. Voiceless consonants are characterised by minimal sonority.

SCHWA VOWEL /'ʃwa: 'vauəl/ the neutral vowel /ə/.

SECONDARY ACCENT /'sekəndəri: 'æksənt/ this type of accent appears in words of five or more syllables. It falls on the second pre-tonic syllable, e. g. ,hospɪ'tality.

SEGMENT /'segment/ in phonetics it is the shortest part of speech continuum — a sound or a phoneme.

SEGMENTAL PHONEME /seg'mentl 'fəʊni:m/ the shortest part of speech continuum that is capable of differentiating words.

SEMANTIC FUNCTION /sɪ'mæntɪk 'fʌŋkʃən/ in phonetics the term is used in connection with the differentiatory function (semantic role) of phonetic means.

SEMANTIC TENDENCY /sɪ'mæntɪk 'tendənsɪ/ according to this type of tendency words with separable prefixes and compound words have two equally strong stresses, e. g. 'un'known, 'sit 'down, 'twenty 'one, 'eye-'witness.

SEMI-VOWELS /'semi'vauəlz/ the term is almost out of use nowadays. It refers to /j, w, r/.

SEMI-WEAK VOWELS /'semi'wi:k 'vauəlz/ the vowels weaker in timbre which is the result of qualitative reduction: intermediate between full and neutral phonation of the vowel.

SENSE-GROUP /'sensgru:p/ a word or a group of words that conveys some idea.

SENTENCE ACCENT /'sentəns 'æksənt/ it is a constituent part of the phonetic structure of the spoken sentence and one of the components of intonation in the broad sense of the term (see **prosodation**).

SENTENCE STRESS /'sentəns 'stres/ the greater degree of prominence given to certain words in a sentence. These words are usually nouns, adjectives, notional verbs and adverbs, interjections, numerals, demonstrative, possessive, emphasizing pronouns, interrogative words and two-syllable prepositions. Articles, particles *to* and *there*, auxiliary, modal, and connective verbs, personal, reflexive and reciprocal pronouns, one-syllable prepositions, conjunctions and conjunctive words—are, as a rule, unstressed. The distribution of sentence stress is determined by the semantic factor.

SHADE /ʃeɪd/ a slight variation.

SHAPE /ʃeɪp/ form, the shape of the mouth cavity, the shape, formed by the lips.

SHARP /ʃɑ:p/ strong and shrill.

SHORT VOWELS /'ʃɔ:t 'vauəlz/ the vowels having a relatively smaller length, or quantity in comparison with the long vowels (other conditions remaining the same). Short English /ɪ/ and /ʊ/ differ from the long /i:/ and /u:/ also in quality.

SIBILANTS /'sɪbələnts/ the sounds of a whistling or hissing nature. In English sibilants are /s, z, ʃ, ʒ/.

SILENT LETTERS /'saɪlənt 'letəz/ letters that are spelt but not pronounced.

SILENT STOP /'saɪlənt 'stɒp/ the medial stage in /p, t, k/ articulation that is characterised by the “loss of plosion” in cases like: *past perfect, blackboard, eight days*.

SIMILARITY /sɪmɪ'lærɪti/ likeness.

SINGLE STRESS /'sɪŋgl 'stres/ only one stress in a word.

SINGLE TAP /r/ /'sɪŋgl 'tæp 'r/ pronounced with the single beat of the tip of the tongue against the teethridge.

SLIP OF THE TONGUE /'slɪp əv ðə 'tʌŋ/ a small unintentional mistake.

SLIT /slɪt/ a flat narrowing.

SLOPE /sləʊp/ an incline. The back slope of the teethridge—an incline at the back part of the teethridge.

SLOW STYLE /'sləʊ 'stɑɪl/ corresponds to Acad. L. V. Shcherba's term *full style*.

SOFT CONSONANTS /'sɒft 'kɒnsənənts/ palatalized consonants.

SOFT PALATE /'sɒft 'pælɪt/ the back, soft part of the hard palate.

SONANTS /'səʊnənts/ the sounds in the production of which voice prevails over noise. Sonants in English are /m, n, ŋ, l, j, w, r/.

SONORITY /sə'nɒrɪti/ a degree of loudness.

SOUND /saʊnd/ a material unit, produced by speech organs. A sound can be viewed from the articulatory, acoustic, auditory and functional points of view.

SOUND SPECTROGRAPH /'saʊnd 'spektrəgrɑ:f/ an apparatus that is used in phonetics for purposes of spectrographic analysis of speech. Reading a spectrogram it is possible to see different configuration of the vowels spectra. Different vowels have different arrangement of formants on the spectrogram.

SOUTHERN ENGLISH PRONUNCIATION /'sʌðən 'ɪŋɡlɪʃ prəˌnɑnsɪ-'eɪʃən/ *see: received pronunciation, or RP.*

SPECIAL QUESTION /'speʃəl 'kwɛstʃən/ the type of a question which begins with the interrogative words *who, what, where, why*, etc., depending on information required. Special questions may refer to any part of the sentence. They are pronounced with the falling tone.

SPEECH MELODY /'spi:tʃ 'melədi/ variations in the pitch of the voice in connected speech.

SPIRANT /'spɪərənt/ *see fricative.*

SPREAD LIP POSITION /'spred 'lɪp pə'zɪʃən/ the position when the corners of the lips are widened in the horizontal direction, the teeth are slightly visible, and the lips come close to the gums. This position of the lips can be observed in the articulation of /i:/.

STABILITY OF ARTICULATION /stə'bɪlɪtɪ əv ɑːtɪkju'leɪʃən/ it is the state when the shape, volume and orifice-size of the mouth resonator are stable. According to the stability of articulation English vowels are divided into: monophthongs, diphthongs and diphthongoids.

STATISTICAL METHOD /stə'tɪstɪkəl 'meθəd/ the method which helps to establish frequency, probability and predictability of occurrence of phonemes and their allophones in different positions.

STAVES /steɪvz/ two parallel lines for intonation recording (by means of special symbols).

STRONG FORMS /'strɒŋ 'fɔːmz/ the forms that can be observed in accented words.

STRONG VOWELS IN WEAK POSITIONS /'strɒŋ 'vauəlz ɪn 'wɪk pə'zɪʃənz/ vowels the quantity of which is not reduced in unstressed positions. For example, /ɔː/ in *blackboard* /'blækbo:d/, /æ/ in *climax* /'klaɪmæks/.

STRUCTURALISTS /'strʌktʃərəlɪsts/ those scientists who analyse phonetic phenomena without recourse to meaning, which they consider to be external to linguistics (R. Jakobson, L. Bloomfield, L. Hjelmslev, E. Nida). Structuralists consider the sound structure as a system of relations between phonemes. They carry out the investigation of the phonetic structure without recourse to history and to the material aspect of phonemes, which are realized as distinctive units in words, phrases and sentences. All this makes their detailed analysis of phonemes abstract and schematic.

STYLES OF PRONUNCIATION /'stɑɪlz əv prəˌnɑnsɪ'eɪʃən/ L. V. Shcherba suggested two types of style in pronunciation: *full style* and *colloquial style*. According to D. Jones, there are the following varieties of style: *rapid familiar style, slower colloquial style, slow conversational style, natural style, acquired style, formal style.*

SUB-PHONEMIC VARIANTS /'sʌbfo(u)'niːmɪk 'vɛəriənts/ *see subsidiary members.*

SUBSIDIARY MEMBERS (allophones) /səb'sɪdjəri 'membəz/ variants of phonemes that appear under the influence of the neighbouring phonemes with which they are in complementary distribution. They are subdivided into 1. combinatory and 2. positional.

SUBSTITUTION METHOD /səbstɪ'tju:ʃən 'meθəd/ it is the method of replacing of one speech sound by another in the same position to see whether it results in a minimal pair, e. g. pen, ten, den.

SYLLABEME /'sɪləbi:m/ it is a unit which is responsible for a few minimal and sub-minimal pairs, e. g. *lightening* — *lightning* differ only due to /n/ syllabicity in the first word.

SYLLABIC /sɪ'læbɪk/ capable of forming a syllable.

SYLLABICATE /sɪ'læbɪkət/ to divide into syllables.

SYLLABIC SOUNDS /sɪ'læbɪk 'saundz/ sounds that can form the peaks of prominence, they are vowels and sonants other than /j, w/.

SYLLABLE /'sɪləbl/ shortest segment of speech continuum. Syllables are material carriers of words. They constitute words and their forms, phrases and sentences. According to J. Kenyon the syllable is one or more speech sounds, forming a single uninterrupted unit of utterance, which may be a word, or a commonly recognized and separable subdivision of a word.

SYLLABLE DIVISION /'sɪləbl dɪ'vɪʒən/ division of the word into "arcs of articulatory effort" (N. I. Zhinkin's theory). A strong-end consonant begins the arc of loudness and a weak-end consonant terminates it. Compare *day*, *aid*; in the first word /d/ constitutes the beginning of the arc of loudness, or the beginning of a syllable, it is progressively voiced. In the second word /d/ constitutes the end of the arc of loudness, or the end of the syllable, it is progressively devoiced.

SYLLABLE PATTERN /'sɪləbl 'pætən/ it is the type of syllable most common for the language. English and Russian are characterized by CV syllabic pattern.

T

TABLE OF CONSONANTS, TABLE OF VOWELS /'teɪbl əv 'kɒn-sənənts, 'teɪbl əv 'vaʊəlz/ an orderly arrangement of consonants or vowels in vertical and horizontal columns. It helps to visualize the system of vowels and consonants and to compare them with the similar systems of the mother tongue.

TABULATE /'tæbjuleɪt/ to arrange in tabular form.

TACTILE /'tæktai/ of, relating to, or perceived by the sense of touch.

TAIL /teɪl/ unstressed or partly stressed syllables (or syllable) that follow the nucleus of the intonation group.

TAMBER /'tæmbə/ the quality of a musical sound, depending on what overtones are present and their respective amplitudes.

TEETHRIDGE /'ti:θ.rɪdʒ/ see **alveoles**.

TEMPO OF SPEECH /'tempoʊ əv 'spi:tʃ/ the rate of utterance.

TEMPORAL COMPONENT OF INTONATION /'tempərəl kəm'pou-nent əv ɪntə'neɪʃən/ it consists of pauses, duration, rhythm.

TENSE VOWELS /'tens 'vaʊəlz/ these vowels are articulated with the muscles of the lips, tongue, cheeks and the back wall of the pharynx made harder by tensing. Traditionally they are long vowels: /i: a: ɔ: u: ə:/, all short vowels are considered to be lax.

TERMINAL TONE /'tə:mɪnəl 'toun/ it is a change of pitch at the junction of two sense-groups. The American descriptivists use the term: "clause terminal".

TIMBRE /'tɪmbə/ = tamber, tambré

tone /toun/ sounds may be periodical and non-periodical. If the vibrations of a physical body are rhythmical, the auditory impression of periodic waves is a musical tone, or in speech — a speech-tone.

TONEME /'touni:m/ the toneme of a sentence or of a sense-group is a separate phonological unit, because it performs distinctive function, e. g. 'not \once — never, not /once — many times.

TONETIC STRESS MARKS /tounetɪk 'stres ,mɑ:k/ the marks suggested by R. Kingdon. They are placed before the stressed syllables of an utterance in the same positions as the ordinary stress marks used in phonetic transcriptions. They indicate the intonation as well as the stress. The advantage of this system is that it indicates high and low falling and rising tones (as well as level and emphatic tones) in the text proper which enables the pupil to do without staves.

TONETIC TRANSCRIPTION /tounetɪk trəns'krɪpʃən/ tone and stress indicators shown by placing special signs on an inlined scale, or stave, between or beside the line of the text. These symbols are different: dashes and dots, small and big dots, wedge-like signs, etc.

TONGUE /tʌŋ/ the most important and movable articulatory organ.

TONGUE TWISTERS /'tʌŋ ,twɪstəz/ short rhymes into which difficult sounds and sound combinations are included. They are used as training exercises in teaching pronunciation.

TONOGRAM /'tounə,græm/ graphic representation of intonation.

TRACHEA /trə'ki:ə/ see **windpipe**.

TRANSCRIPTION /trəns'krɪpʃən/ the system of signs in which sounds are symbolized. Transcription represents sounding speech. A phonemic, or linguistically broad, transcription is based on the principle "one symbol per phoneme". The symbols of phonemic transcription are placed between slanting lines / /.

An allophonic, or linguistically narrow, transcription is based on the principle "one symbol per allophone". The symbols of an allophonic transcription are usually placed between square brackets []. In language teaching a phonemic transcription is more convenient. An allophonic transcription is indispensable to scientific phonetic work.

TRANSLITERATION /,trænzlɪtə'reɪʃən/ the representation of the sounds of one language as nearly as possible by the letters and letter combinations of another language. For example, the Russian *ж* is represented in English by the letter combination *zh*.

TRIPHTHONG /'trɪfθɔŋ/ a vowel sound that consists of three elements, the first element is a diphthong and the second — a neutral vowel /ə/. In slow style they are pronounced as a two-syllable unit: /auə/ — /au/ + /ə/.

TUNE ONE /'tju:n 'wʌn/ a falling tone.

TUNE TWO /'tju:n 'tu:/ a rising tone.

TWANG /twæŋ/ a sharp nasal quality of a vowel sound.

TYPICAL TONEMES /'tɪpɪkəl 'təʊni:mz/ they are hypothetically the following: terminal tonemes, prehead tonemes, head tonemes, scale tonemes, pitch-level and pitch-range tonemes, rate-of-pitch-change tonemes.

U

UNACCENTED /'ʌnək'sentɪd/ unstressed.

UNDERTONE /'ʌndətəʊn/ a low tone of voice.

UNICENTRAL CONSONANTS /'ju:nɪ'sentrəl 'kɒnsənənts/ they are consonants pronounced with a single articulatory obstruction (complete or incomplete): e. g., /t, d, k, g, p, b, s, z, f, v, ɲ, h/.

UNILATERAL /'ju:nɪ'lætərəl/ the lateral sonant /l/ pronounced with only one side of the tongue lowered (usually it is the left side of the tongue).

UNROUNDED VOWELS /'ʌn'raʊndɪd 'vəʊəlz/ vowels in the articulation of which the lips are not rounded /ɑ: e i: æ/.

UTTERANCE /'ʌtərəns/ vocal expression of some idea.

UVULA /'ju:vju:lə/ a fleshy conical body suspended from the soft palate over the back of the tongue.

V

VARIANTS CONDITIONED BY DURATION /'vɛəriənts kən'dɪʃənd bə: djuə'reɪʃən/ quantitative variants of phonemes (positional and combinatory allophones different in length).

VARIANTS CONDITIONED BY STRESS /'vɛəriənts kən'dɪʃənd bə: 'stres/ variants of phonemes which depend on positional (accentual) conditions, e. g. /'pɛərənt/ — /pə'rentl/.

VARIANTS FREE /'vɛəriənts 'fri:/ two different allophones of a phoneme pronounced in identical positions by one and the same or different speakers.

VARIATIONS STYLISTIC /,vɛəri'eɪʃnz ,stai'lɪstɪk/ variations in the pronunciation of speech sounds, words and sentences peculiar to different styles of speech.

VARIETY /və'rɪəti/ the term is used in connection with the vowels of low and broad variety.

VELAR /'vi:lə/ the term is used in the classification of consonants which are articulated with the help of the soft palate: velar nasal sonorant /ŋ/, velar stops /k, g/.

VELARIZATION /'vi:lərə'zeɪʃən/ formation of the back-secondary focus which makes the sounds "dark" in tamber /w, r, ɪ/ and the Russian /ж, ы/.

VELUM /'vi:ləm/ the soft palate. When the soft palate is raised the air passes out of the mouth cavity, when the soft palate is lowered the flow of air is directed through the nasal cavity.

VIBRATION OF THE VOCAL CORDS /vaɪ'breɪʃən əv ðə 'vəʊkl 'kɔ:dz/ "... when the glottis is narrowed so that the tensed vocal cords approach each other or touch lightly, these may be set in vibratory

motion by the outgoing breath pressure and brought together again by their own elasticity and by muscular tension" (Vassilyev).

VISUAL AIDS /'vɪzʃuəl 'eɪdz/ devices which serve to assist understanding or memory by displaying what is to be understood or memorized in a visible form: charts, diagrams, tables, pictures, films.

VOCAL BANDS /'vəʊkəl 'bændz/ elastic folds of membrane inside the larynx which vibrate to produce voice, *see* **vocal cords**.

VOCALISM /'vəʊkəlɪzəm/ the system of vowel phonemes.

VOCOID /'vɒkɔɪd/ the term is used by the American linguist K. Pike to express the articulatory closeness of sonorants to vowels.

VOICE /vɔɪs/ vocal tone produced by the regular vibrations of the vocal cords.

VOICED CONSONANTS /'vɔɪst 'kɒnsənənts/ the consonants which are produced with the vocal cords brought together and vibrating.

VOICELESS CONSONANTS /'vɔɪslɪs 'kɒnsənənts/ the consonants which are produced with the vocal cords taken apart and not vibrating.

VOLUME /'vɒljəm/ force or loudness of sounding speech.

VOWEL DIAGRAMS /'vaʊəl 'daɪəgræmz/ schematic representations of the system of vowels which are based on physiological principle (genetic principle) and which represent qualitative differences in the articulation of vowels.

VOWEL MUTATION /'vaʊəl mju:'teɪʃən/ umlaut, or modification of a vowel caused by assimilation to a vowel or semivowel (now generally lost) in the following syllable, a vowel resulting from such assimilation has a mark ˙ placed over it.

W

WEAK VOWELS /'wi:k 'vaʊəlz/ the vowels which are shorter and less distinct, sometimes they are reduced to the neutral vowel /ə/. Weakening or reduction of vowels is a characteristic feature of Russian and English. There are languages where vowel reduction does not take place (Japanese, Italian, Polish).

WIDENING THE RANGE /'waɪdnɪŋ ðə 'reɪndʒ/ one of the emphatic means which consists in deliberate widening the pitch-levels of sense-groups.

WINDPIPE /'wɪndpaɪp/ trachea or air passage.

WORD /wə:d/ in phonetics the term refers to the word as a phonetic unit.

WORD ACCENT /'wə:d 'æksənt/ it is a constituent feature of a word pronounced in isolation as a vocabulary item.

WORD-STRESS /'wə:d 'stres/ the term deals with the place of accentuation in words and its linguistic functions.

WORD TONEME /'wə:d 'təʊni:m/ it is a distinctive movement or change of pitch within the syllable. It exists in the so-called tone languages.

KEYS

Exercises p. 12

2. witches /wɪtʃ/, -ɪz/, glasses /ˈɡlɑːs/, -ɪz/, foxes /fɒks/, -ɪz/, gases /ɡæs/, -ɪz/, judges /dʒʌdʒ/, -ɪz/, crashes /kræʃ/, -ɪz/, calves /kɑːf/, -vz/, elves /elf/, -vz/, halves /haːf/, -vz/, knives /naɪf/, -vs/, leaves /liːf/, -vz/, lives /laɪf/, -vz/, loafs /ləʊf/, -vs/, selves /self/, -vz/, sheaves /ʃiːf/, -vz/, thieves /θiːf/, -vz/, wives /waɪf/, -vz/, wolves /wʊlf/, -vz/, actresses /ˈæktɪs/, -ɪz/, hostesses /ˈhəʊstɪs/, -ɪz/, mistresses /ˈmɪstrɪs/, -ɪz/, sculptresses /ˈskʌlptɪs/, -ɪz/, waitresses /ˈweɪtrɪs/, -ɪz/, lionesses /ˈlaɪənɪs/, -ɪz/

3. begged /beɡd/, lived /lɪvd/, opened /ˈəʊpənd/, travelled /ˈtrævld/, cancelled /ˈkænsəld/, compelled /kəmˈpeld/, recognized /ˈrekəɡnaɪzd/, arrived /əˈraɪvd/, rained /reɪnd/, informed /ɪnˈfɔːmd/, stopped /stɒpt/, wrapped /ræpt/, helped /helpt/, asked /ɑːskt/, discussed /dɪsˈkʌst/, worked /wɜːkt/, passed /pɑːst/, shipped /ʃɪpt/, packed /pækt/, looked /lʊkt/, nodded /ˈnɒdɪd/, permitted /pəˈmɪtɪd/, waited /ˈweɪtɪd/, expected /ɪksˈpektɪd/, invented /ɪnˈventɪd/, rested /ˈrestɪd/, loaded /ˈləʊdɪd/, depended /dɪˈpendɪd/

4. /ˈneɪʃən — ˈnæʃən/, /greɪv — ˈgrævɪt/, /prəˈvɒk — prəˈvɒkətɪv/, /ziːl — ˈze-læs/, /sju(:)ˈprɪːm — sjuˈpreməs/, /əˈkɑː — əˈkɑːrəns/, /ədˈvaɪs — ədˈvaɪz/, /juːs — juːz/, /haʊs — haʊz/, /ɪksˈkjuːs — ɪksˈkjuːz/, /dɪˈvaɪs — dɪˈvaɪz/, /luːs — luːz/, /klaʊs — klaʊz/

5. /ˈredbrɛst/ малиновка; /ˈbluːbel/ колокольчик; /ˈbluːstəʊn/ медный купорос; /ˈbluːlaɪnz/ авиационные линии, идущие с севера на юг Америки; /ˈbluːbɔɪl/ василек; /ˈblækʃæt/ чернорубашечник, фашист; /ˈblækfeɪs/ (полигр.) жирный шрифт; /ˈbɛːdzat/ первоцвет; /ˈbredən(d)ˈbʌt/ детский, юный, незрелый; /ˈbreɪkˌrɒmɪs/ не хозяин своему слову, ненадежный человек; /ˈheɪvɪweɪt/ боксер, борец тяжелого веса; /ˈredbʊk/ красная книга, справочник; /ˈbluːstɔːkɪŋ/ «синий чулок»; /ˈbluːpəʊz/ сорт картофеля; /ˈbluːkəʊt/ учащийся в школе для бедных; солдат, матрос; /ˈbluːbɔɪt/ крестьянин; шотландец; /ˈblækhaʊl/ темница, карцер, гауптвахта; /ˈblækməʊ/ реквем

6. /stɪl/ неподвижный, спокойный, /stiːl/ сталь; /puːl/ лужа, /puːl/ тянуть; /ʃɪp/ корабль, /ʃɪːp/ овца; /sɪt/ сидеть, /sɪːt/ место; /fɪl/ наполнять, /fiːl/ чувствовать; /lɪv/ жить, /liːv/ покидать; /ɪl/ больной, /iːl/ угорь; /slɪp/ ошибка, /sliːp/ сон; /sel/ клетка, /seɪl/ продажа; /ˈmɒdl/ модель, /ˈmɒdɪl/ модальный; /sɔː/ пила, /soʊ/ так, таким образом; /ˈpɒlɪʃ/ польский, /ˈpɒlɪʃ/ лоск, глянec; /ɡɑːd/ охрана, стража, /ɡaɪd/ проводник, гид; /wɜːθ/ ценность, значение, /wɜːs/ худший, еще хуже; /truːθ/ правда, /truːs/ перемирие; /bʌt/ за исключением, кроме, /bɑːθ/ ванна; /breθ/ дыхание, /bredθ/ ширина; /ˈdeɪəri/ дневник, /ˈdeəri/ маслoбойня; /sjuːt/ удовлетворять, /swɪt/ свита; /pəˈtrɒl/ патруль, /ˈpetr(ə)l/ бензин; /mɛə/ мэр, /ˈmeɪdʒə/ майор; /ˈraʊt/ бунт, волнение, /ruːt/ маршрут

7. Rhythm.

8. To give particular importance to the word *think*.

9. (a) The sounds /s, ʃ/ are repeated to express the idea of sea movement. This rhyme helps to practice their differentiation.

(b) The sounds /ɔ, æ, ɪ, ʌ/ are repeated in the rhyme to practice their pronunciation and differentiation.

10. /bau-wau, mjuː-mjuː, ɡrɑːnt-ɡrɑːnt, skwiːk, tuː-huː, kau-kau, kwæk-kwæk, muː/. Onomatopoeia.

Control Tasks p. 15

4. 1. very — vary /ˈveri — ˈvɛəri/; 2. personal — personnel /ˈpɜːsnəl — ˈpɜːsəˈnel/; 3. suit — suite /sjuːt — swɪt/; 4. patrol — petrol /pəˈtrɒl — ˈpetrəl/; 5. mayor — major /mɛə — ˈmɛrdʒə/; 6. riot — rout — route /ˈraɪət — raʊt — ruːt/; 7. bear — beer /bɛə — brɔː/; 8. year — ear /jɛː(jɪə) — ɪə/; 9. quay — queue /kiː — kjuː/; 10. admit — admittance /ədˈmɪt — ədˈmɪtəns/; 11. affect — effect /əˈfekt — ɪˈfekt/; 12. draught — drought /draːft — draʊt/; 13. hair — hare — heir /hɛə — heə — ɛə/; 14. pour — poor — paw /pɔː — puə — pɔː/; 15. courage — carriage /ˈkʌrɪdʒ — ˈkæridʒ/; 16. inquire — acquire /ɪnˈkwɪə — əˈkwɪə/

5. wolves /wʊlf, -vz/, wives /waɪv, -vz/, lives /laɪf, -vz/, leaves /li:f, -z/, knives /naɪf, -vz/, sheaves /ʃi:f, -vz/, halves /hɑ:f, -vz/, selves /self, -vz/, elves /elf, -vz/, loaf /ləʊf, -vz/, calves /kɑ:f, -vz/, echoes /ɛkəʊ, -z/, potatoes /pə'teɪtəʊ, -z/, hostesses /'həʊstɪs, -ɪz/, tigresses /'taɪgrɪs, -ɪz/, bases /'beɪsɪs, -ɪz/, theses /'θi:sɪs, -ɪz/, crises /'kraɪsɪs, -ɪz/, analyses /ə'neɪləsɪs, -ɪz/, men /mæn — men/, feet /fi:t — fi:t/, geese /ɡu:s — ɡɪ:s/, mice /maʊs — maɪs/, baths /bɑ:θ, -ðz/, houses /haʊs, -ɪz/, classes /kla:s, -ɪz/, boxes /bɒks, -ɪz/, dishes /dɪʃ, -ɪz/, inches /ɪntʃ, -ɪz/, phenomena /fɪ'nɒmɪnən, -ə/; foci /'fəʊkəs, -saɪ/

6. /ou — ɔ, ʊ — ʊ/; /ei — a:/, z — s/; /θ — 0/; /u: — ɔ, z — s/; /v — f/; /ɪ — aɪ, v — f/; /v — f/; /v — f/

7. /'ɪnsaɪt — tə ɪn'saɪt/ оскорбление — оскорблять; /'ɒbdʒɪkt — tə əb'dʒekt/ предмет — не любить, не одобрять; /'aʊtɡəʊ — tə 'aʊt'ɡəʊ/ уход, выход — превосходить; /'prɒdʒʊ:s — tə prə'dʒʊ:s/ продукция — предъявлять; /'sæbdʒɪkt — tə səb'dʒekt/ предмет — подчинять, покорять; /'aʊtɡrəʊ — tə 'aʊt'ɡrəʊ/ отросток — перерастать; /'aʊtli — tə aʊt'leɪ/ издержки, расходы — тратить, расходовать; /'aʊt(ə)θrəʊ — tə aʊt'θrəʊ/ извержение — бросать дальше; /'preznt — tə prɪ'zent/ настоящее время — преподносить, дарить; /'praʊtest — tə prə'test/ протест — протестовать; /'tə:ment — tə tə:'ment/ мучение — мучить

8. Alliteration, rhyme, rhythm.

9. Through the repetition of the sounds /ju:, eɪ, aɪ, ʌ/ syllabification and pausation.

Exercises p. 33

3. In the articulation of /p, t, k/ the vocal cords are taken apart and do not vibrate. In the production of /b, d, ɡ/ the vocal cords are drawn close together and vibrate. In the /p, t, k/ articulation the force of exhalation is much greater than that in the production of /b, d, ɡ/, therefore /p, t, k/ are *voiceless fortis* and /b, d, ɡ/ are *voiced lenis*.

4. In the articulation of /m, n, ŋ/ the soft palate is lowered. In the articulation of /ŋ/ it is not only lowered, but forms a complete obstruction with the back part of the tongue. The air escapes through the nasal cavity.

5. In the articulation of /b/ the noise is produced when the flow of air breaks the complete obstruction formed by both lips. /b/ is an occlusive plosive stop noise consonant. In the articulation of /v/ the noise is produced when the flow of air passes through the incomplete obstruction formed by the lower lip and the edge of the upper teeth. /v/ is a constrictive noise consonant. In the articulation of /tʃ/ the noise is produced by the flow of air first breaking a complete obstruction between the tip of the tongue and the teethridge and almost immediately passing through the narrowing formed between the tip of the tongue and the teethridge. /tʃ/ is occlusive-constrictive, or affricate.

6. In the articulation of /w/ the active organs of speech are the lips, which form a round narrowing. In the articulation of /j/ the active organ of speech is the middle part of the tongue which is raised to the hard palate and forms a narrowing with it, through which the air goes out rather freely. In the articulation of /h/ the walls of the glottis are slightly contracted when the air goes out through it almost without any friction. /w/ is bilabial, /j/ is medio-lingual, /h/ is glottal.

8. The place of articulation (focus) in the production of /s/ (lenis) is between the teethridge and the front part of the tongue. There is groove-shaped depression in the front part of the tongue, through which the air passes with friction: it passes through a round narrowing.

The place of articulation (focus) in the production of /f/ is between the lower lip and the edge of the upper teeth. The air passes through this narrowing with friction. The narrowing in /f/ articulation is more or less flat.

10. /'pi:pl/, /'peɪpə/, /'pə:pəs/, /'pɒsəbl/, /put/, /pens/, /'prɪt/, /puə/, /'pi:sɪz/, /pɔ:t/, /'penɪ/, /teɪk/, /taɪm/, /taʊn/, /taɪz/, /'tenɪs/, /tʊk/, /'tæksɪz/, /tɪl/, /'ti:tʃəz/, /tənd/, /'təʊtl/, /tɒs/, /tɪn/, /tʌnz/, /kɔ:ts/, /kəʊld/, /'kæfʊl/, /kɑ:/, /kʊk/, /'kʌvəd/, /kɒst/, /kɪst/, /'kæmpəs/, /'kæ:tɪl/, /kɒtɪdʒ/, /'kʌrənts/, /'kʌlə/

Exercises p. 45

4. Cardinal vowel No. 1 is pronounced with the position of the tongue higher than for the Russian accented /u/ in such words as *нѹлу, бѹлу, нѹлу*.

Cardinal vowel No. 2 is pronounced with the position of the tongue narrower than the Russian /e/ in the words *мечѣ, мечѣ*.

Cardinal vowel No. 3 is similar to the Russian /ə/ in the words *эхѡ, ѡмѡ*.

5. For instance: /t — d/ bit — bid, bat — bad, debt — dead
/k — g/ duck — dug, Dick — dig, tuck — tug
/r — d/ кот — код, вот — вод, док — дор
/c — 3/ коc — коз, poc — po3

11. The beginning of the articulation of /i: — u:/ coincides with that of /ɪ — u/ (See Figs. 39, 40, 46, 47).

12. (a) /si:m — sɪm/
/mi:l — mɪl/
/sli:p — slɪp/
/li:st — lɪst/
(c) /ti:m — tɪm/
/fi:l — fɪl/
/bi:n — bɪn/
/tʃi:f — tʃɪf/
/lʃi:p — lʃɪp/
(e) /di:d — dɪd/
/dʒi:n — dʒɪn/
/fi:liŋ — 'fɪlɪŋ/
/ɪ:t — ɪt/
/si:ts — sɪts/
(g) /li:v — lɪv/
/'fi:və — 'fɪftɪ/
/'bi:kən — bɪl/
/tʃi:k — tʃɪn/
/bi:t — bɪt/
(b) /ri:d — rɪd/
/sti:l — stɪl/
/kri:k — krɪk/
/sli:t — slɪt/
/si:k — sɪk/
(d) /si:n — sɪn/
/'di:lə — 'dɪnə/
/bi:t — bɪt/
/hi:t — hɪt/
(f) /fi:z — fɪz/
/mi: — mɪt/
/ði:z — ðɪs/
/sti:p — stɪk/
(h) /hi: — hɪm/
/θi:m — θɪŋ/
/si:ts — sɪts/
/sti:p — stɪf/
/'pi:pl — pɪt/
13. (a) /bed — bæd/
/ðen — ðæn/
/'plenti — plæn/
/els — 'æls/
/'letə — 'lædə/
(c) /frentʃ — ræn/
/pens — pænts/
/'berɪəl — 'bærəu/
/'twenti — twæp/
/'meni — 'mætə/
(e) /ded — dæd/
/'eni — 'æls/
/'selɪ — sæl/
/'merɪ — 'mæɪd/
/'henɪ — 'hæpɪ/
(g) /'hetɪ — hæp/
/'sentɪəl — 'sændɪ/
/'tʃevɪət — 'tʃænl/
/'meni — mæp/
/'vesl — 'væljɪ/
(i) /'eldəɪ — 'æpkʃəs/
(b) /hed — hæd/
/ten — tæn/
/left — læd/
/let — slæk/
/sɪ'lekt — rɪ'læks/
(d) /end — ænd/
/ðen — ðæn/
/'enɪweɪ — 'fæmɪlɪ/
/bed — bæp/
/'helpɪŋ — 'hæpɪ/
(f) /ten — tæp/
/men — mæn/
/sed — sæd/
/bed — bæd/
/tʃest — tʃæp/
(h) /'eni — 'æpkʃəs/
/bet — bæp/
/'plenti — 'plætʃɪsm/
/fɪlɪ — flæp/
14. (a) /kɑ:m — kɑm/
/'rɑ:ðə — 'rɑnɪŋ/
/bɑ:n — 'bɑtn/
/lɑ:k — læk/
(b) /ɑ:nt — 'ʌndə/
/hɑ:d — 'hændrəd/
/dɑ:k — dæl/
/'bɑ:skɪt — ə'bʌv/

- (c) /'kla:sɪz — 'basɪz/
/ma:vəl — 'manɪ/
/la:f — 'lavli/
/fa:st — 'pazlɪŋ/
/'ma:kɪt — 'maɪ/
/la:st — 'lændən/
(e) /'ɑ:nld — 'lɒðz/
/'ma:stə — 'mæpɪz/
/'sta:tɪd — 'stædɪ/
/ɪn'la:dʒ — ɪn'stræktə/
/la:st — 'mæst/
(g) /'fra:ns — frant/
/'ha:bəz — 'handrɪd/
/əd'vɑ:ntɪdʒ — ə'bav/
/ha:f — hat/
/pə:st — bat/
(i) /sta: — stæn/
/ka:nt — kam/
/ha:d — hat/
/'ta:ɡɪt — 'tæpəns/
/ma:sk — 'mæst/
15. /bɪd — bed — bæd/
/rɪd — red — ræt/
/mɪl — men — mæn/
/sɪd — sed — sæd/
/pɪt — pet — pæt/
/bɪ:t — bet — bæt/
16. /ɔ:l — ə:l — ʃæl/
/kɔ:t — kæt — kæt/
/wɔ:k — wæk — wæk/
/fɔ: — fə: — fæt/
/wɔ:m — wə:m — twæp/
/mɔ: — 'mɔ:si — mæn/
/lɔ:n — lə:n — læd/
/la:k — flæʃ/
(d) /dɑ:n — dæn/
/bɑ:t — bat/
/kɑ:t — kat/
/mɑ:tʃ — matʃ/
(f) /'ha:dlɪ — 'hanɪ/
/'ra:ðə — ræbd/
/la:st — læk/
(h) /ɑ:m — 'lɒð/
/'ha:dlɪ — 'handrədʒ/
/'sta:tɪd — 'stædɪd/
/mɑ:tʃ — matʃ/
/ha:f — stræk/
/ti:m — ten — tæn/
/hɪd — hed — hæd/
/lɪft — left — læd/
/lɪt — let — læk/
/mi:n — 'meni — 'mætə/
/tɔ:n — tən — tæn/
/kɔ:l — kəl — kæt/
/bɔ:d — bəd — bæd/
/tʃɔ:k — tʃə:tʃ — 'tʃæn/
/sɔ: — sə: — sæd/
/'kɔ:ʃən — 'kə:tn — kæt/

Control Tasks p. 57

- The allophones of the /r/ phoneme are for example:
labialized in: rock, roof, rook, raw
devoiced in: present, practice, problem, protract
affricated in: tree, trim, troop, try, drain, dry, drop, draw
single tap in: throw, throng, threepence, thrust
- As a result of palatalization in the Russian language consonants always occur as soft phonemes and the vowel phonemes turn to the /j/ + V positional allophone of the vowel phoneme.
- The examples may, for instance, be as follows:
complementary distribution of /u/: pool, food, shoe, youth, cool, who, stoop, tube, hoof, booth, boot, rouge, duke. (Each word is given as an example of different /u/ environment, which can not be observed in other words.)
contrastive distribution of /u/: book — beak, foot — fit, book — back, book — beck, book — bark, put — pot, put — port
free variation in the pronunciation of the words: decapitation /dɪkæpɪ'teɪʃən, dɪ:kæpɪ'teɪʃən/, deciduous /dɪ'sɪdjʊəs, dɪ'sɪdjʊəs/

Exercises p. 61

- Work of the vocal cords: voiceless fortis vs. voiced lenis: pin — bin, pack — back, pie — bye, tie — die.
Active organ of speech and the place of articulation:

labial, bilabial vs. lingual forelingual apical alveolar: pen — ten, been — dean
 labial bilabial vs. lingual backlingual: pole — coal, bait — gate
 labial, labio-dental vs. labial bilabial: fee — we, fell — well
 labial, labio-dental vs. pharyngeal: fee — he
 lingual forelingual apical vs. lingual forelingual cacuminal: sob — rob, seal — real, sole — role, sip — rip, sight — right

Manner of noise production:

occlusive vs. constrictive: pity — city, pay — say, pail — sail, pole — sole, peel — seal

Voice or noise prevalence

occlusive noise (plosives) vs. occlusive sonorants (nasal): pine — mine, debt — net, kick — nik

constrictive noise (fricatives) vs. constrictive sonorants: fell — well, those — rose, soul — role, sip — rip, sight — right

The number of noise producing foci

unicentral vs. bicentral: fell — well, fee — we

The shape of the narrowing

constrictive with a flat narrowing vs. constrictive with a round narrowing: fail — sail, fee — see, foot — soot, fat — sat, fell — sell

3. (a) The force of articulation rather than the presence and absence of voice: /p — b, t — d, k — g/.

(b) Manner of noise production: occlusive /p/ vs. constrictive /t/, /t — s/, /d — z/.

Active organ of speech: bilabial /p/ vs. backlingual /k/, backlingual /k/ vs. forelingual apical /t/.

(c) Manner of noise production: occlusive /t/ vs. occlusive-constrictive /tʃ/ or /d/ vs. /dʒ/; constrictive /ʃ/ vs. occlusive-constrictive /tʃ/.

(d) Place of articulation and the number of foci: interdental /θ/ vs. apical /ʃ/, alveolar /z/ vs. palato-alveolar /ʒ/, alveolar /s/ vs. palato-alveolar /ʃ/.

Manner of noise production: plosive /t/ vs. constrictive /ʒ/.

(e) Position of the soft palate: oral noise /b/ vs. nasal sonorant /m/, or /d/ vs. /n/, or /g/ vs. /ŋ/.

4. The sub-minimal pairs: merry — measure, genre — jar, leisure — ledger. All the other pairs are minimal.

Control Tasks p. 62

1. (a) man — nap, coming — cunning, seem — seen; (b) wield — yield, wail — yale; (c) pat — cat, supper — succour, leap — leak

2. (a) less — yes, drew — due, clue — cue, rung — young, sung — young; (b) tame — came, rudder — rugger, sinner — singer, bitter — bicker, bad — bag, bat — back, day — gay

3. (a) pine — fine, bee — thee, came — lame; (b) fare — chair, work — jerk; (c) boat — moat, seek — seen, kick — king, deed — need, vain — lane, sick — sing; (d) fare — chair, thine — wine, vain — lane; (e) thine — wine, fame — same

5. /l, r, j/ after /p/ are devoiced; after /t/ the position of the tongue for /r/ in *try* is not so cacuminal and /r/ is affricated; /j/ after /t/ in *tube* is devoiced; /w/ after /t/ in *twelve* is devoiced; /l, r, j, w/ after /k/ are devoiced in *clean, cream, cue, quite*

Exercises p. 67

1. (a) /ɔ — ɔ:/. Both are back open (or low) vowels, but /ɔ/ is the vowel of broad variation and /ɔ:/ is the vowel of narrow variation.

(b) /e — æ/. Both vowels are front, but /e/ is a mid-open vowel of narrow variation and /æ/ is a low (or open) vowel of broad variation.

(c) /ə — ɜ:/. /ə:/ belongs to the group of mixed mid-open vowels of narrow variation, /ɜ:/ belongs to the group of back, fully back open vowels of narrow variation.

(d) /u: — u/. Both vowels belong to the group of back high vowels, but /u:/ belongs to the subgroup of narrow variation and is fully back, whereas /u/ belongs to the subgroup of broad variation and is a back-advanced vowel.

(e) /æ — eɪ/. /æ/ is a front open vowel of broad variation. The nucleus of the diphthong /eɪ/ is /e/ which is front mid-open vowel of narrow variation.

(f) /ɔ: — ou/. /ɔ:/ is an open fully back vowel of narrow variation, the nucleus of the diphthong /ou/ is a back fully back mid-open vowel.

3. (a) /eɪ — aɪ/, /ou — au/; (b) /ɪə — eə/

4. The phonemes /i:, eɪ, ɔ:, ə:/ in the first row of each column are the longest, they are shorter in the second, and the shortest in the third row.

5. Stability of articulation.

Control Tasks p. 68

1. (a) /i: — e — æ/ bead — bed — bad, deed — dead — dad

(b) /æ — ə: — ʌ/ cab — curb — cub, bad — bird — bud, tan — turn — ton, hat — hurt — hut

2. cart — card Boz — bars don — down
wart — what caught — cot cord — cod

3. (a) known — noun, phoned — found, hay — high, bay — buy, no — now, hoe — how, tape — type

(b) hear — hair; beer — bear; ear — air; fear — fair; rear — rare; tear — tear

Exercises p. 74

5. (a) ki:p, 'pi:sɪz, 'ti:tʃəz, 'pi:pl, 'pə:pəs, 'kæ:tn, tə:nd, 'kæ:lɪ, kə:, kɔ:ts, pə:ts, pɔ:z, teɪk, taɪn, taɪz, tiəz, kould, 'tɒtl, kəə, 'piəriŋ

(b) tɪl, kɪst, tɪn, 'pɪtɪ, 'penɪ, tel, 'tenɪs, 'pendəntən, 'kæmpəs, 'kæmbriən, 'tæk-sɪ, put, tuk, kuk, 'kærənts, 'kælə, pæmpt, rɪ'pʌblɪk, 'kævəd, tænz, 'pɒsɪbl, kɒst, 'kɒlɪdʒ, tɒs

(c) spent, steɪ, stoun, 'stɑ:di, stɪk, 'stɑ:tɪd, 'splendɪd, ɪks'piəriəns, ɪks'tensɪvli, 'hɑ:skɪt, 'kli:nɪŋ, ɪks'pleɪn, pleɪs, plæn, 'klaɪsɪz, pleɪn, kɪrɪk, krept, krɒp, 'plætfɔ:m, ækt, kept, lukt

6. 'pi:pl, peɪ, 'pə:mənənt, 'i:tɪŋ, kæmp, 'kɪtʃən, 'bɪljədʒ, 'dɪfərənt, aɪ'diə, get, ə'geɪn, gə:lz

'pə:gətɪv, epɪ'demɪk, 'kæpsju:lz, bed, 'betə, 'dɪfrənt

'pi:sɪz, pens, 'peɪdʒɪz, 'twenti, 'sɪks'ti:n, 'tə:nɪŋ, 'keəflɪ, bæ:dʒ, bɪg, ʌnbrɪ'lɪ-vəbl, 'dɪfrənt, daʊnt, 'ɒnɪz, 'gɪvɪŋ, ɡəʊz

'pi:sɪz, rɪ'peəd, 'pə:pəs, tiəz, teɪk, tə:nd, bi:n, bɪg, bed, bæ:k, bouθ, aɪ'diə, dɪ'saɪdɪd, 'dɪdnt, der, ɡet, ɡest, ɡə:lz, 'ɡəʊɪŋ

'pɪktʃə, 'piəriəd, ɪks'pekt, pə, 'fɪfti:n, ɪn'sted, 'ɑ:tɪst, ki:p, 'hɑ:skɪt, vək'eɪʃn, 'kæmpəs, bi:, br'saɪd, ɪm'bærəsɪŋ, 'stɑ:di, depθ, derz, 'dædɪ, 'ɡɪɡl, ɡets, ɡə:lz, ɡəʊ

pɪŋk, ɪks'piəriəns, 'penɪ, peɪl, tɪn, 'wɒntɪd, teɪk, tə:nd, 'drɪŋkɪŋ, keɪm, 'kæn-dɪd, 'kæ:lɪ, bi:n, 'bi:kən, bɪt, bæd, 'bæ:tn, kən'dɪʃən, 'nɒdɪd, aɪ'diə, ɡɪv, ɡet, ɡə:lz

ɪs'peʃəli, 'pætən, stɪl, pə'teɪtəʊz, 'tʃu:lɪp, ki:p, ə'keɪʒənɪ, kæn, 'ɒkjupai, bi:, 'fʊɡəbi:t, 'bækbəʊn, di:, diə, 'mɑ:di, dæt, ɡɪvz, 'lɒŋɡest, 'regjələ

ə'plɪ:ŋ, peɪd, 'pju:pɪz, 'pə:fɪkt, ti:tʃ, stɪk, 'tʃu:zɪ, tiəz, ki:p, 'lʊkɪŋ, 'kæɪrɪdʒ, kould, bi:, ə'berd, bæ:k, bout, ɪn'dɪd, 'dɪnə, 'dʒu:lɪ, derɪ, 'ɡɪvn, ɡest, ə'ɡen, ə'ɡəʊ

'plænɪŋ, pɪt, rɪ'peɪd, 'pæsɪndʒə, stɪf, 'sɪti, ɡrəʊ'tesk, tænz, ki:p, 'breɪkɪŋ, 'kæɪrɪdʒ, kould, 'bi:nɪŋ, best, bæ:k, 'bæ:ləʊ, di:l, 'dɪtɪz, diə, ded, 'ɡetɪŋ, ɡeɪv, ɡəʊ

7. 'hæpi, 'hɪkəp, 'kəbəd, nju(:)'mʌnɪə, læm, 'pləmə, bɒm, 'tɒməs, 'krɪsməs, 'lɪsn, 'wɪsl, 'bʊkeɪ, 'hæŋkətʃɪf, 'wɪnzə, 'kemɪst, 'æŋkə, 'bæŋkwɪt, ɪk'sept, 'mɑ:sl, ɡəʊst, nɔ:, saɪn, tʌŋ, 'daɪəfræm, saɪ, plau, eɪt

Exercises p. 78

5. ja:n — jɒŋ пряжа — молодой
θɪn — θɪŋ тонкий — вещь

'gɪv 'ɪn — 'gɪvɪŋ уступить — пожертвование
 'draɪv 'ɪn — 'draɪvɪŋ загонять — катание
 'kʌm 'ɪn — 'kʌmɪŋ приходить — приход
 sʌn — sɔːn солнце — пропетый
 kliːn — kɹiːn чистый — прилпать
 'nɒt 'θɪŋ — 'nʌθɪŋ не вещь — ничто
 'ɡoʊ 'ɪn — 'ɡoʊɪŋ входить — отъезд
 oʊn — 'oʊɪŋ собственный — долг
 seɪn — 'seɪnɪŋ нормальный — пословица
 'breɪk 'ɪn — 'breɪkɪŋ врываться — торможение
 'lʊk 'ɪn — 'lʊkɪŋ быстрый взгляд — смотрящий

6. brɪʃ, lʌp, 'ɪŋɡlənd, 'ʃʌŋə, 'enɪʃn 'els, 'ɪŋɡlɪʃ, 'nʌθɪŋ əv ðə 'kaɪnd, 'wɪlɪŋ-
 ɪ, 'teɪkɪŋ ɪt, 'mɪŋɡld, 'slɪːpɪŋ, ʊɪŋ, 'hʌŋɡrɪ, 'fɪʃɪŋ, 'mɔːnɪŋ, 'draɪvɪŋ 'ɒn, 'lɔːŋɡə,
 ʃʌp, 'ɡetɪŋ 'ɒn, sprɪŋ, 'siːɪŋ ə 'frend 'ɒf, 'klaːspɪŋ ɪn 'bəʊθ hændz

7. 'raɪtɪŋ, 'rɪːdɪŋ, 'ɡoʊɪŋ, ɡɒn, wen, sʌp, 'hʌŋɡrɪ, sʌk, ʊɪŋ, ʊɪk 'hæŋə, 'hæŋkə,
 ræŋ, ræŋk, kəʊm, 'ɔːtəm, 'ɪŋɡlɪʃ, 'mɪŋɡld

Exercises p. 84

4. thin — sin тонкий — грех
 thick — sick толстый — больной
 thought — sought думал — искал
 forth — force вперед — сила
 mouth — mouse рот — мышь
 thumb — some большой палец — какой-нибудь
 worth — worse ценность — худший
 thick — tick толстый — тикать
 thought — taught думал — учил
 three — tree три — дерево
 seethe — seize кипение (уст.) — хватать
 lathe — laze токарный станок — безделье
 then — den тогда — логово
 though — dough хотя — тесто
 seethe — seed смятение — семя
 heath — heat пустошь — жара
 both — boat оба — лодка
 forth — fought вперед — боролся
 clothe — close одевать — закрывать
 breathe — breeze дышать — бриз
 there — dare там — вызов
 other — udder другой — вымя
 worthy — wordy достойный — многословный

5. faʊnd — 'θaʊzənd, fəːst — θəːst, fɔːt — θɔːt, friː — θriː, fɪnz — θɪŋz, def —
 depθ

11. ɔːl — hɔːl весь — зал
 ɪə — hiə ухо — слышать
 aʊt — haʊs внешний — дом
 aːt — haːt искусство — сердце
 ɔːt — hɒt следовало бы — горячий
 ɪz — hɪz есть — его
 aʊst — haʊs выгонять — дом

- ɪt — hɪt это — удар
 ɪl — hɪl больной — холм
 æz — hæz как — имеет
 æd — hæd добавить — имел
 ænd — hænd и — рука
 aːm — haːm рука — вред
 ædz — hændz добавляет — руки
 eə — heə воздух — наследник

14. sheep, sheet, sheen, ship, should, shook, shed, shell, shake, shave, shade,
 shame, shape, shy, shine
 election, condition, delegation, competition, organization, station, pleasure,
 leasure, decision, vision, occasion, measure

15. fiː, fiːp, 'ʃat, fɪʃ, brʌʃ, 'aɪrɪʃ, 'fɪʃɪŋ, 'speʃəl, 'steɪʃən, 'juːʒuəl, 'juːʒuəlɪ,
 'pleɪə, ʃɒp, 'ʃʊɡə, 'ʃʊd, flæʃ, 'brɪtɪʃ, 'ɪŋɡlɪʃ, 'æŋkʃəs, 'æŋkʃəsli, ɪs'peʃəli, 'ændʒɪlou,
 ə'keɪʒən, ə'keɪʒənɪ

16. pɑ:s, 'sə:tnɪ, 'sɪnɪk, saɪð, 'lestə, aɪl, 'hauzɪz, 'hʌzbənd, dɪ'zə:t, hu'zɑ:, 'fɪzɪks, 'sæfəɪə, ɪ'nɑ:f, drɑ:ft, lef'tenənt, 'nevju(:), 'mæθju:, 'gɔ:lzwə:ði, ɪg'zɔ:st, 'vi:ɪkl, 'ʃepəd, 'ʃugə, ə'ʃuə, 'və:ʃən, 'nɒʃən, 'sɒʃəl, 'kɒnʃəns, 'ʃɪvəlɪ, 'tʃeɪz, reɪ'ʒɪ:m, 'pleɪə, dɪ'sɪʒən, 'æʒə

Exercises p. 90

2. right, ride, ripe, cry, crisis, price, gray, bread, read, reap, reason, reach, ridge, risk, friend, France, ring, rod, ran, rang, rot, rong, great, try, rule, roof, room, red, rest, ready, press, present, rash, rag, treason, written, row, round, present

3. reɪts, red, ru:m, roust, raund, rouz, 'rekɔ:d, 'regjʊlə, 'reɪlweɪ, 'rɑ:nɪ, 'rɪəli, 'mæəri, 'mæɪrɪd, frendz, 'kru:sou, draɪv, 'praɪsɪz, tru:, draund, 'dresɪŋ, 'wɑ:ɪ, 'fɔ:ɪd, 'hændrɪd, 'temprɪtʃə, 'kæɪrɪd, 'pɪəriəd, 'bɔ:round, 'kærənts, 'dɪfrənt, 'fɪ:və, 'kɑmfət, 'hi:lðə, wɔ:ld, ə'merɪkə, 'sɪgə'ret, 'mɒdn, 'mætə, 'mæðə, wə:, 'wɪəri, 'sɪ:nəri, 'kə:lɪ, 'kæləd, 'nevə, fɔ:, 'stɔ:ɪ, 'fɪgə, wə:k, dɔ:z, pɑ:t, fɔ:, kɑ:

5. jʌŋ, ju:θ, jɔ:, jə:, jet, 'jestədi, 'ju:st tu, nju:z, 'hju:mən, mju(:)'ziəm, sju:t, fju:, ɪ'vju:z, ju:zd, 'kɑpsju:lz

9. The English /r/ is a cacuminal sound, the Russian /p/ is a trilled one. /j/ is pronounced with the middle of the tongue raised not so high as for the Russian /й/, which results in the more "noisy" character of the /й/ articulation.

[ɨ] is "dark" because it is pronounced with the back secondary focus. The Russian [ɨ] is very "soft" which is the result of the front secondary focus in its articulation.

[ɪ] is "soft", it is pronounced with the front secondary focus. The Russian [ɪ] is pronounced with the back secondary focus.

/w/ is bilabial and bicentral, it is pronounced with the back secondary focus. The Russian /в/ is labio-dental and unicentral.

10. for instance: ел — ель, пол — Польша, кол — колё

11. /w — v/, /e — æ/, /i — ɪ/, /ə — e/ are separate phonemes

12. jes, ə'pɪnʃən, 'ʌnʃən, ju:'nait, mju:t, 'nju:tə, 'juərəp, 'sju(:)ɪdʒ, wud, tɔ:k, fɒk, bɑ:m, 'lɪnkən, wɪtʃ, wʌns, 'kwɑɪə, hu:z, tə'wɔ:dʒ, sɔ:d

Exercises p. 93

2. /tʃ, dʒ/ are pronounced as indivisible clusters of two sounds and represent single phonemes /tʃ/ and /dʒ/. The combinations /tr, dr, ts, tz, tθ, dθ/ consist of two independent phonemes each: /t/ + /r/, /d/ + /r/, /t/ + /s/, /t/ + /z/, /t/ + /θ/, /d/ + /θ/.

3. chin, check, chess, chain, China, child, rich, much, chop, watch, chalk, coach, Jim, jinn, Jimmy, age, page, chainge, Jenny, Jack, Jane, George, Germany, June

4. tʃi:p, tʃi:k, tʃi:f, tʃɪn 'tʃænl, 'dʒentl, 'dʒentlɪ, dʒə:mz, 'streɪndʒə, 'mɪdl'eɪdʒd, rɪtʃ, wɪtʃ, sɑ:tʃ, mɑ:tʃ, lɑ:tʃ, wɒtʃ, eɪdʒ, peɪdʒ, lɑ:dʒ, 'kɒlɪdʒ, 'kɒtɪdʒ, 'sænwɪdʒɪz, 'mæntʃɪstə, 'mænju'fæktʃərəz, ɪn'dʒɔɪmənt, ə'reɪndʒmənt, ɪn'geɪdʒmənt, dɪ'tætʃt, 'temprɪtʃə, 'nætʃrəl

6. tʃaɪld, 'nertʃə, 'kwestʃən, 'rartʃəs, 'mɪstʃɪf, dʒɔɪ, dʒem, dʒɪps, ædvən'teɪdʒəs, 'li:dʒən, 'bɑdʒɪt, 'nɒlɪdʒ, 'grændʒə, 'souldʒə, 'grɪmɪdʒ

Control Task p. 104

a) sit down, read text 1, write down, next time, glad to see you, what can I do, like to have it, what country, good time, tea and cake, don't like, I'd like, mashed potatoes, mustard please, got to eat, that pub, work now, difficult to deal, silk dress, but good, hit nose

b) repeat the noun, in the noun, at the blackboard, clean the board, on the seventh, round the city, and the guest, on this, on the boy's plate, just thirsty, tell the girl
 c) will you read louder, will you please, people inside, will you tell me, tell the girl

Exercises p. 114

- (a) si:, wi:, tri:, bi:, mi:, hi:, fi:
 (b) si:m, ri:d, kli:n, si:n, di:l, 'pi:pl, 'i:zli
 (c) tʃi:p, swi:p, tʃi:f, tri:t, li:st, kri:k, wi:k
- ʃi:, i:v, 'konkrit, fi:t, mi:t, ni:s, ri'si:v, fə'ti:g, 'i:sθi:t, ki:, ki:
- in, il, bi:g, wi:p, pit, stik, klis, sprɪŋ, θɪŋ, sɪk, rist, 'sɪli, 'bɪldɪŋ, 'ɪŋɡlənd, 'bɑ:skɪŋ, 'buʃɪz, 'ɡɪnɪz, 'lʌvli, 'bɪzi, 'mɪnɪts, 'ɡoʊɪŋ, 'drɪʃɪz, br'ɡɪnz, 'kɒlɪdʒ, 'wɪmɪn, kə'mɪt, 'mɔ:si, 'brɪtən, 'wɪndəʊ, 'mɪsɪz, 'sɪmptəmz, 'hɒlədi, 'ɪntrɪstɪd, ɪk'saɪtɪd, 'enɪθɪŋ, 'hezɪteɪt, 'prɪvɪlɪdʒ, 'krɪtɪsɪzm, 'ɪmɪteɪt, 'medsɪn
- dɪd, lɪd, 'ɡlædli, 'fri:li, hɪŋks, 'kærɪdʒ, 'vɪlɪdʒ, 'wɒʃɪz, 'ru:ʒɪz, 'bɒksɪz, 'wærɪz, 'kɒpɪz, 'laʊdɪd, 'faʊntɪn, 'bɪskɪt, 'frɑ:di, si:v, 'letɪs, 'fɔ:ɪd, 'fɔ:fi:t, 'kɒfi
- bed, sed, help, tel, jet, hed, 'tenɪs, 'weðə, 'membə, 'letə, drest, 'setə, 'helpɪŋ, 'enɪweɪ, 'envɪd, 'pleʒə, 'frendli, 'dresɪŋ, 'desəli:t, 'seprɪt, 'hezɪteɪt, maɪ'self, rɪ'membə, ɪn'devə, haʊ'tel, ɪn'sted, fə'get, i'levn
- red, get, ten, 'sevn, hed, ded, et, ðə temz, 'beræl
- ɡlæd, bæd, plæn, kæn, swæm, blæŋk, dræŋk, ækt, sæt, 'fænsɪ, 'ɡlædli, 'ʃæləʊ, 'ædɪd, 'æŋkʃəs, 'bædli, 'træfɪk, 'hæpən, 'dædi, 'sædnɪs, br'ɡæən, ɪɡ'zæktli, i'mædʒɪn, vəkæbjuləri, 'prəʊgræm, 'sænwɪdʒɪz, mænju'fæktʃəz, 'bælkəni, 'sækri:fais
- 'kæri, 'æmpl, hæv, 'sæmən, plæd, ʃæm'peɪn, 'æbsəlu:tli, 'æbstɹækt, æm'brɪʃən
- a:, bɑ:, fɑ:, kɑ:, ɑ:m, ɑ:sk, kɑ:d, pɑ:st, fɑ:m, hɑ:f, pɑ:t, lɑ:dʒ, frɑ:ns, grɑ:s, dɑ:k, ɡɑ:d, pɑ:k, stɑ:t, smɑ:t, lɑ:st, hɑ:d, mɑ:sk, 'dɑ:nsɪŋ, 'bɑ:skɪŋ, 'lɑ:fɪŋ, 'rɑ:ðə, 'hɑ:dli, 'hɑ:bə, 'ɑ:nse, 'ɑ:tɪst, 'fɑ:ðə, 'bɑ:skɪt, 'klɑ:sɪz, 'ɑ:tɪklz, 'ɑ:k,eɪn(d)ʒ(ə)l, dɪ'pɑ:tʃə, ɪn'lɑ:dʒ, ət 'lɑ:st
- mɑ:st, 'ɑ:nse, lɑ:st, tɑ:, pɑ:t, lɑ:f, 'bækli, 'hɑ:fəd, hɑ:t
- ɔn, nɒd, wɒz, rɒd, wɒnt, ɡɒn, dʒɒb, hɒt, lɒŋ, sɒŋ, 'bɒðə, 'bɒnɪt, 'dɒktə, 'mɒdl, 'hɒstəl, 'ɒnɪst, 'nɒdɪd, 'bɒdi, 'ɔfə, 'hɒlənd, 'rɒki, 'sɒlɪd, 'kænət, 'ɒkju:pai, 'kɒtɪdʒɪz, 'prɒspərəs, dʒɪ'ɒmɪtri, 'fɒləʊɪŋ, 'hɒlədi, 'wɒznt, 'si:n 'ɔf
- hɒt, 'sɒri, 'fɔ:ɪn, 'kwɒlɪti, 'ɔ:lmənæk, 'sɔ:sɪdʒ, 'nɒlɪdʒ, jɒt
- mɔ:, drɔ:, ɔ:l, kɔ:l, bɔ:, θɔ:t, hɔ:s, tɔ:k, sɔ:t, bɔ:t, dʒɔ:dʒ, ʃɔ:, 'ɔ:lwəz, 'fɔ:wəd, 'wɔ:tə, 'wɔ:kɪŋ, 'mɔ:nɪŋ, br'fɔ:, 'ɔ:lsoʊ, 'eks'pɔ:ts, ɪm'pɔ:təns, 'ɔ:fuli, 'ɔ:dʒəns, 'ɔ:kɪstrə, 'ɔ:lɪtə'gedə, əf 'kɔ:s, 'fɔ:ti 'fɔ:
- pɔ:t, fɔ:t, flɔ:, dɔ:, kɔ:s, kɔ:t, fɔ:, pɔ:, rɔ:, wɔ:, brɔ:d, bɔ:t, rɔ:θ, kɔ:z, fɔ:l, jɔ:n, pɔ:, θɔ:
- ɡud, rum, wud, kuk, fut, tuk, put, sut, ʃuk, lukt, 'buʃɪz, mænju'fæktʃəz, 'wudn, 'kudnt, 'wudnt, 'wudlənd, 'restfʊl, 'wumən, 'put 'aut, 'put 'ɔn, 'ɡudbaɪ, 'næ-tʃʊli, 'ri:kə'pitʃuleɪt, 'keəfli
- put, puʃ, pul, 'wustɪd, wulf, luk, stud, tuk, kud, ʃud, 'kurɪə
- flu:, zu:, tu:, hu:, tu:, ju:s, ju:, fju:, tru:, fu:d, su:n, sku:l, ju:θ, mu:v, ru:l, hju:dʒ, nju:, 'ju:ʒuəli, 'æbsəlu:tli, nju:(t)'mounjə, 'mu:vɪŋ, 'ævɪnju:, 'hju:-mə, 'bfu:tɪfʊl, rɪ'vju:, ru:nd, 'sju:said, 'vælju:, 'regjʊlə, 'pju:plɪz, 'hju:mən, ə'sju:md, 'kɒnstɪ'tju:ʃən
- blu:, ru:d, ru:l, dʒu:n, ku:l, tu:m, grʊ:p, wu:nd, bru:z, bru:, mə'nʊ:və
- tju:n, 'hju:mə, ju:s, kju:, 'tju:zdi, sju:t, 'nju:tə, fju:, 'bjutɪ, hju:z

20. wən, rən, fən, ʃət, bəs, mətʃ, tən, jən, kəm, 'læðə, 'səmə, 'bræðə, 'mæðə, ə'naðə, 'kærənts, 'tʃækəl, 'wəri, 'hændrəd, 'nəʊɪŋ, 'mænɪ, 'fænɪ, 'lævl, 'kæntri, 'kæmpəs, mæst, dʒæst, 'træbl, 'wəndəfəl, 'wəndələnd, ɪn'stræktə, ɪn'tre'dækʃən, 'mi:nɪŋ

21. mæst, ən'dʒæst, dʒædʒ, 'hæmbæɡ, dæz, ɪrənt, ə'mæŋ, 'mænɪ, flæd, 'kæpl, ræɪ, tæl

22. wə:, hæ:d, wə:d, 'wəkəz, 'θe:ti, stə:, tænd, 'tə:nɪŋ, 'bæ:tn, hæ:, jə:z, 'bæ:lou, ɡe:lz, bæ:dz, wək, 'tækɪ, 'kæ:tn, fæ:st, wə:ld, wəs, 'ʃə:lək, 'sæ:tnli, wə:θ, də:t, 'pə:fɪkt

23. stə:, 'mæ:tl, 'kæ:nl, hæ:d, 'wəkə, 'tænə, nə:s, fə:

24. ə'ɡen, ə'ləŋ, ə'baut, ə'krəs, ə'beɪ, ə'pən, fə'ɡet, sə'praɪz, sɪɡə'ret, 'pɪkə'dɪli, kən'fes, pə'hæps, sə'pouz, kən'dɪʃən, pə'sent, hə'self, tə'pli:z, tə'stɒp, ðə'sɒŋ, tə'du:, tə'fɪʃ, ðə'ɡe:lz, 'pə:mənənt, 'prəbəbl, 'fæməli, 'wəndələnd, 'wudlənd, 'deke'reɪt, 'ɡlɪməɪŋ, 'mæntɪʃtə, 'desəɪlt, 'rekəɡnaɪz, 'trævlə, 'bælkənɪ

Exercises p. 133

1. (a) When preceded by /w, f, θ, s, d, tʃ, r, j, h, m, n/ the /i:/ phoneme is pronounced:

as labialized in /wi:/¹

with the labio-dental position for /v/ in /'fi:və/

with the interdental position of the tip of the tongue in /θi:m/

with the apical constriction (round narrowing) in /si:/

with the apical occlusion for /d/ in /di:l/

with the cacuminal position of the tip of the tongue for /r/ in /'ri:tʃɪz/

with the palato-alveolar position of the bulk of the tongue for /j/ in /'ji:ld/

with the glottal (pharyngeal) narrowing for /h/ in /hi:/

as nasalized after /m, n/ in /mi:lz, mi:, ni:dnt/

(b) When followed by /b, v, ð, t, l, ʃ, tʃ, k, ɡ, m, n/ the /i:/ phoneme is pronounced:

with the bilabial release in /ɡri:b/

with the labio-dental release in /li:v/

with the interdental release in /ʃi:ð, bri:ð/

with the apical occlusion in the final stage in /i:t, fi:l/

2. (a) the /ɪ/ phoneme is pronounced:

as nasalized in /mɪst/¹

with the bilabial occlusion for /b/ in /bɪɡ/

with the labio-dental position of the tip of the tongue in /fɪʃ/

with the interdental position of the tip of the tongue in /θɪŋks, θɪn/

with the apical position of the tip of the tongue in /dɪd, sɪt, lɪft/

as retracted in /ɡɪbə/

with the cacuminal position of the tip of the tongue in /rɪtʃ/

as retracted in /kɪl/

pronounced with the glottal (pharyngeal) narrowing for /h/ in /hɪd/

(b) the /ɪ/ phoneme is pronounced:

as nasalized in /hɪm/²

with the labio-dental release in /ɪf, lɪv/

with the interdental release in /mɪθ, wɪð/

with the apical release in /ɪz, bɪl/

as nasalized in /tɪn/

with the palato-alveolar position of the tip of the tongue in the final stage in /rɪdʒ/

as retracted in /pɪk, bɪɡ/

¹ that is — the initial stage and the beginning of the medial stage of the vowel are affected.

² that is — the final stage is affected

with the palato-alveolar position of the tongue in the final stage in /li:f, i:tʃ/
with the slightly retracted position of the bulk of the tongue in /bi:k, li:g/
nasalized in /si:m, spli:n/

Control Tasks p. 135

1. Vowel No. 1 /i:/, quantitative changes: vowel No. 1 is the longest in: *sea*, *we*, *tree*, *he*. It is shorter in: *easily*, *meals*, *fever*, *clean*, *unmeaning*, *heal*. It is the shortest in: *cheaper*, *sleet*, *speaker*, *teach*, *keep*, *sheep*.

The quality of the vowels depends on the articulatory characteristics of the consonants which precede or follow them. E. g. in *sea* /i:/ is modified under the influence of the forelingual, apical, alveolar, voiceless fortis, constrictive /s/

in *we* under the influence of the bilabial, constrictive sonant /w/

in *meals* — the nasal, bilabial occlusive sonant /m/

in *cheaper* — the lingual, forelingual, apical, palato-alveolar, voiceless fortis, constrictive /tʃ/

in *tree* — the lingual, forelingual, cacuminal, post-alveolar, constrictive sonant /r/

in *fever* — the labial, labio-dental, voiceless fortis, constrictive /f/

in *sleet* — the lingual, forelingual, apical, alveolar, constrictive "light" sonant /l/

in *speaker* — the labial, bilabial, voiceless fortis, occlusive /p/

in *he* — the pharyngeal (glottal) voiceless fortis, constrictive /h/

in *teach* — the lingual, forelingual, apical, alveolar, voiceless fortis, occlusive /t/

in *keep* — the lingual, backlingual, velar, voiceless fortis, occlusive /k/

in *sheep* — the lingual, forelingual, apical, palato-alveolar voiceless fortis constrictive /ʃ/

Vowel No. 2 /ɪ/. In *in* /ɪ/ is nasalized under the influence of the lingual, forelingual, nasal, occlusive sonant /n/, which follows it

in *ill* /ɪ/ is more open under the influence of the "dark" constrictive sonant /ɪ/, which follows it

In *big* /ɪ/ is modified under the influence of the preceding labial, bilabial, voiced lenis, occlusive /b/

in *pit* — under the influence of the labial, bilabial, voiceless fortis, plosive /p/

in *silly* — the lingual, forelingual, apical, alveolar voiceless fortis, constrictive /s/

in *middle* — the labial, bilabial, nasal occlusive sonant /m/

in *shilling* — the lingual, forelingual, apical, palato-alveolar, voiceless fortis, constrictive /ʃ/

in *thing* — the following lingual, backlingual, velar nasal, occlusive /ŋ/

in *rivers* — the preceding lingual, forelingual, cacuminal, post alveolar, constrictive sonant /r/

in *lived* — the lingual, forelingual, apical, alveolar "light" constrictive sonant /l/

in *hill* — the pharyngeal (glottal) voiceless fortis, constrictive /h/

Vowel No. 3 /e/. In *help* /e/ is modified under the influence of the pharyngeal (glottal) voiceless fortis, constrictive /h/

in *bed* — the labial, bilabial, voiced lenis occlusive /b/

in *ten* — the lingual, forelingual, apical, alveolar, voiceless fortis, occlusive /t/

in *said* — the lingual, forelingual, apical, alveolar, voiceless fortis, constrictive /s/

in *perce* — the labial, bilabial, voiceless fortis, occlusive /p/

in *weather* — the labial, bilabial, constrictive sonant /w/

in *eleven* — the lingual, forelingual, apical, alveolar, constrictive, "light" sonant /ɪ/

in *anyway* — the following post-vocal bilabial, occlusive, nasal sonant /n/

in *them* — the labial, bilabial, occlusive nasal sonant /m/

in *very* — the lingual, forelingual, cacuminal, constrictive sonant /r/

in *dead* — the lingual, forelingual, apical, alveolar, voiced lenis, plosive /d/

in *debt* — the lingual, forelingual, apical, alveolar, voiceless fortis, plosive /t/

Vowel No. 4 /æ/. In *bad* /æ/ is modified under the influence of the preceding bilabial, plosive, voiced lenis, occlusive /b/

in *plan* — the lingual, forelingual, apical, alveolar, constrictive "light" sonant /l/
 in *sad* — the lingual, forelingual, apical, alveolar, voiced lenis, constrictive /s/
 in *exam* — the lingual, forelingual, apical, alveolar, voiced lenis, constrictive /z/
 in *natural* — the lingual, forelingual, apical, alveolar, occlusive, nasal sonant /n/
 in *imagine* — the labial, bilabial, occlusive, nasal sonant /m/
 in *shallow* — the lingual, forelingual, apical, palato-alveolar, voiceless fortis, constrictive /ʃ/

in *strand* — the lingual, forelingual, apical, cacuminal, constrictive sonant /r/
 in *channel* — the lingual, forelingual, apical, palato-alveolar, voiceless fortis, affricate /tʃ/

in *Jack* — the lingual, forelingual, apical, palato-alveolar, voiced lenis, affricate /dʒ/

in *hat* — the pharyngeal (glottal) voiceless fortis, constrictive /h/

in *pal* — the following lingual, forelingual, apical, alveolar, constrictive "dark" sonant /l/

in *cab* — the labial, bilabial, voiced lenis, occlusive /b/ which follows it
 Vowel No. 5 /a:/. In the word *bar* the sound /a:/ is modified under the influence of the labial, bilabial, voiced lenis, occlusive /b/

in *jar* — the labio-dental, voiceless fortis, constrictive /f/

in *dancing* — the lingual, forelingual, apical, alveolar, voiced lenis, occlusive /d/

in *large* — the lingual, forelingual, apical, alveolar constrictive "light" sonant /l/

in *grass* — the lingual, forelingual, apical, cacuminal, constrictive sonant /r/

in *half* — the pharyngeal (glottal) voiceless fortis, constrictive /h/

in *mask* — the labial, bilabial, occlusive, nasal sonant /m/

in *card* — the lingual, backlingual, velar, voiceless fortis, occlusive /k/

in *yard* — the lingual, medio lingual, palatal, constrictive sonant /j/

Vowel No. 6 /ɔ:/. In the word *o'clock* /ɔ:/ is modified under the influence of the preceding lingual, forelingual, apical, alveolar, "light" constrictive sonant /l/

in *body* — the labial, bilabial, voiced lenis, occlusive /b/

in *watch* — the labial, bilabial, constrictive sonant /w/

in *solid* — the lingual, forelingual, apical, alveolar voiced lenis, constrictive /s/

in *nodded* — the lingual, forelingual, apical, alveolar occlusive nasal sonant /n/

in *crop* — the lingual, forelingual, apical, cacuminal, constrictive sonant /r/

in *coughing* — the lingual, backlingual, velar voiceless fortis, occlusive /k/

in *shocked* — the lingual, forelingual, apical, palato-alveolar, voiceless fortis, occlusive /ʃ/

in *long* — the lingual, forelingual, apical, alveolar, constrictive sonant /l/

in *dollar* — the lingual, forelingual, apical alveolar, voiced, lenis, occlusive /d/

in *bomb* — the following labial, bilabial, occlusive nasal sonant /m/

in *John* — the preceding lingual, forelingual, apical, palato-alveolar, voiced lenis, occlusive — constrictive /dʒ/

in *gone* — the lingual, backlingual, velar, voiced lenis, occlusive /g/

in *yonder* — the lingual, medio-lingual, constrictive palatal sonant /j/

in *hot* — the pharyngeal (glottal) voiceless fortis, constrictive /h/

in *pot* — the labial, bilabial, voiceless fortis, occlusive /p/

Vowel No. 7 /ɔ:/. In the word *bore* /ɔ:/ is modified under the influence of the labial, bilabial, voiced lenis, occlusive /b/

in *door* — the lingual, forelingual, apical, alveolar, voiced lenis, occlusive /d/

in *talk* — the lingual, forelingual, apical, alveolar, voiceless fortis, occlusive /t/

in *thought* — the lingual, forelingual, interdental, voiceless fortis, occlusive /θ/

in *sorts* — the lingual, forelingual, apical, alveolar, voiceless fortis, constrictive /s/

in *shore* — the lingual, forelingual, apical, palato-alveolar, voiceless fortis, constrictive /ʃ/

in *record* — the lingual, forelingual, apical, cacuminal, constrictive sonant /r/

in *water* — the labial, bilabial, constrictive sonant /w/

in *George* — the lingual, forelingual, palato-alveolar, voiced lenis affricate /dʒ/

in *altogether* /ɔ:/ is influenced by the following "dark" /l/, that is, it becomes more back.

- in *norm* — the lingual, forelingual, apical, alveolar, occlusive, nasal sonant /n/
 in *fall* — the labial, labio-dental, voiceless fortis, constrictive /f/
 in *more* — the labial, bilabial, occlusive nasal sonant /m/
 Vowel No. 8 /u/. In the word *put* /u/ is modified under the influence of the preceding labial, bilabial, occlusive, voiceless fortis, occlusive /p/
 in *books* — the labial, bilabial, occlusive, voiced lenis /b/
 in *would* — the labial, bilabial, constrictive sonant /w/
 in *took* — the lingual, forelingual, apical, alveolar, voiceless fortis, occlusive /t/
 in *looked* — the lingual, forelingual, apical, constrictive "light" sonant /l/
 in *soot* — the lingual, forelingual, apical, alveolar, voiceless fortis, constrictive /s/
 in *room* — the lingual, forelingual, apical, cacuminal constrictive sonant /r/
 in *should* — the lingual, forelingual, apical, palato-alveolar, voiceless fortis, constrictive /ʃ/
 in *awfully* — the labial, labio-dental, voiceless fortis, constrictive /f/
 in *good-bye* — the lingual, backlingual, velar, voiced lenis, occlusive /g/
 in *cook* — the lingual, backlingual, velar, voiceless fortis, occlusive /k/
 Vowel No. 9 /u:/. In the word *blue* /u:/ is modified under the influence of the preceding lingual, forelingual, apical, alveolar, constrictive, "light" sonant /l/
 in *beautiful* — more advanced under the influence of the preceding lingual, medio-lingual, palatal, constrictive sonant /j/
 in *move* — labial, bilabial, constrictive, nasal sonant /m/
 in *food* — the labial, labio-dental, voiceless fortis, constrictive /f/
 in *soon* — the lingual, forelingual, apical, alveolar, voiced lenis, constrictive /s/
 in *ruined* — the lingual, forelingual, apical, cacuminal constrictive sonant /r/
 in *cool* — the lingual, backlingual, velar, voiced lenis, occlusive /k/
 in *hoof* — the pharyngeal (glottal) voiceless fortis, constrictive /h/
 in *boot* — the labial, bilabial, voiced lenis, occlusive /b/
 in *chew* — the lingual, forelingual, palato-alveolar, voiceless fortis, constrictive, affricate /tʃ/
 in *shoe* — the lingual, forelingual, palato-alveolar, voiceless fortis, constrictive /ʃ/
 in *too* — the lingual, forelingual, apical, alveolar voiceless fortis, occlusive /t/
 Vowel No. 10 /ʌ/. In the word *bust* the vowel /ʌ/ is modified by the preceding labial, bilabial, voiced lenis, occlusive /b/
 in *must* — the labial, bilabial, occlusive, nasal sonant /m/
 in *nothing* — the lingual, forelingual, apical, alveolar, occlusive, nasal sonant /n/
 in *funny* — the labial, labio-dental, voiceless fortis, constrictive /f/
 in *summer* — the lingual, forelingual, apical, alveolar, voiceless fortis, constrictive /s/
 in *instructor* — the lingual, forelingual, cacuminal, constrictive sonant /r/
 in *luck* — the lingual, forelingual, apical, constrictive sonant /l/
 in *just* — the lingual, forelingual, palato-alveolar, voiced lenis, constrictive affricate /dʒ/
 in *come* — the lingual, backlingual, velar, voiceless fortis, occlusive /k/
 in *chuckle* — the lingual, forelingual, palato-alveolar, voiceless fortis, affricate /tʃ/
 in *wonderful* — the labial, bilabial, constrictive, voiced lenis constrictive /w/
 in *thunder* — the lingual, forelingual, dental, interdental, voiceless fortis, constrictive /θ/
 in *thus* — the lingual, forelingual, dental, interdental voiced lenis, constrictive /ð/
 in *shut* — the lingual, forelingual, palato-alveolar, voiceless fortis, constrictive /ʃ/
 Vowel No. 11 /ə:/. In the word *bird* /ə:/ is modified under the influence of the preceding labial, bilabial voiced lenis occlusive /b/
 in *turned* — the lingual, backlingual, velar, voiceless fortis, occlusive /t/
 in *girl* — the lingual, backlingual, velar, voiced lenis occlusive /g/
 in *sir* — the lingual, forelingual, apical, alveolar, voiceless fortis, constrictive /s/
 in *heard* — the pharyngeal (glottal) voiceless fortis constrictive /h/
 in *Sherlock* — the lingual, forelingual, apical, palato-alveolar, voiceless fortis, constrictive /ʃ/

in *workers* — the labial, bilabial, constrictive sonant /w/
 in *Germany* — the lingual, forelingual, apical, palato-alveolar, voiced lenis constrictive affricate /dʒ/
 in *churches* — the lingual, forelingual, apical, palato-alveolar, voiceless fortis, constrictive affricate /tʃ/
 in *curly* — the lingual, backlingual, voiceless fortis occlusive /k/
 in *nurse* — the lingual, forelingual, apical, alveolar, occlusive, nasal sonant /n/
 in *dirt* — the lingual, forelingual, apical, alveolar, voiced lenis, occlusive /d/
 in *year* — the lingual, medio-lingual, palatal, constrictive sonant /j/
 in *murky* — the labial, bilabial, constrictive nasal sonant /m/
 in *purr* — the labial, bilabial, voiceless fortis, occlusive /p/

2. 'həʊlɪdɪz, mə'ri(:)ə, 'fə:wəd, 'sɑ:t,si:ɪŋ, məʊθ, 'kɑ:mɪt, 'kæfer, 'bɪljədʒ, 'wə:k-əz, 'kru:sou, 'fə:lək, 'mæʊju:, 'ə:nɪst, 'fɔ:ɪd, nju(:)'mounjə, dɪ'tætʃt, 'bɒðəz, hed, 'vɑ:nɪst, 'prɪ:stli, 'pɑ:zɪŋ, 'pi:sɪz, ə'saɪləm, 're:kɔ:d, mə:m, 'fraɪdɪ, 'wʊdlənd, 'nju:s-peɪpə, 'tæksɪz, ʌn'bɪ'li:vəbl, 'pə:pəs, ʌn'fɔ:tʃnɪtl, 'ɔ:ful, jə:, hou'tel, 'ɔ:kwəd, 'kɒf-ɪŋ, ɪm'plɔɪ'i: (Consult the textbook for exceptions.)

Exercises p. 141

1. (a) When preceded by /w, m, v, ð, l, n, r, dʒ, j, ɟ, h/ /eɪ/ is pronounced:
 as labialized in /weɪ/
 as nasalized in /meɪ/
 with the labio-dental position for /v/ in /veɪ/ during the initial stage and the beginning of the medial stage of the /eɪ/ articulation
 with the interdental position for /ð/ in /ðeɪ/ during the initial stage and the beginning of the medial stage of /eɪ/
 with the apical position of the tip of the tongue for /l/ in /leɪ/ during the initial stage and the beginning of the medial stage of /eɪ/
 as nasalized in /neɪ/
 with the cacuminal position of the tip of the tongue for /r/ in /reɪ/
 with the apical position of the tip of the tongue for /dʒ/ in /dʒeɪ/
 with the middle of the tongue raised for /j/ in /jeɪ/
 as retracted influenced by the backlingual /ɟ/ in /ɟeɪ/
 with the glottal constriction for /h/ in /heɪ/
- (b) When followed by /b, v, ð, s, z, r, dʒ, ɟ/ /eɪ/ is pronounced:
 as bilabial for /b/ in /beɪb/
 labio-dental for /v/ in /veɪv/
 interdental for /ð/ in /beɪð/
 apical for /s/ in /peɪs/
 apical for /z/ in /meɪz/
 as nasalized /n/ in /peɪn/
 apical for /dʒ/ in /eɪdʒ/
 as backlingual /ɟ/ in /pleɪɟ/ in the end of its final stage.

Consult the textbook to give similar explanations in exercises 2 — 9:

— for 2. /aɪ/ (a) preceded by /w, m, v, ð, l, n, r, dʒ, k, h/ in: /waɪ, maɪ, vaɪ, ðaɪ, laɪ, naɪ, raɪ, dʒaɪ, kaɪn, haɪ/; (b) followed by /b, m, v, ð, s, z, n, dʒ, k/ in: /ɪm'baɪb, taɪm, faɪv, laɪð, maɪs, raɪz, naɪn, ə'blaɪdʒ, maɪk/

— for 3. /aʊ/ (a) preceded by /w, m, v, ð, l, n, r, tʃ, ɟ, h/ in: /wau, mau, vau, ðau, laud, nau, tʃau, gaun, hau/; (b) followed by /θ, d, s, l, n, dʒ/ in: /mauθ, kraud, mau, aul, daun, ɟaudʒ/

— for 4. /ɔɪ/ (a) preceded by /m, v, s, l, r, dʒ, j, ɟ, h/ in: /mɔɪst, 'vɔɪdʒ, sɔɪl, 'lɔɪtə, 'rɔɪstə, dʒɔɪ, ʝɔɪk, 'ɟɔɪtə, hɔɪst/; (b) followed by /f, s, l, n, dʒ, k/ in: /kɔɪf, tʃɔɪs, ɔɪl, dʒɔɪn, vɔɪdʒ, hɔɪk/

— for 5. /oʊ/ (a) preceded by /w, m, v, ð, s, z, l, n, r, dʒ, j, ɟ, h, n/ in: /wou, mou, vout, ðou, ʃou, zoun, lou, nou, roup, dʒouk, jouk, ɟou, hou, noun/; (b) followed by /m, v, ð, d, z, l, n, dʒ, ɟ/ in: /houm, rouv, louð, roud, clous, poul, oun, doudʒ, rouɟ/

— for 6. /iə/ (a) preceded by /w, m, v, θ, s, z, l, n, r, tʃ, dʒ, j, ɡ, h/ in: /wɪə, mɪə, vɪə, 'θɪətə, sɪə, 'zɪərəʊ, lɪə, mɪə, rɪə, tʃɪə, dʒɪə, jɪə, ɡɪə, hɪə/; (b) followed by /t, d, s, z, l, n/ in: /lɑr'senʃɪət, brɪəd, fɪəs, hɪəz, aɪ'dɪəlz, æn'tɪpə'di(:)ən/

— for 7. /eə/ (a) preceded by /w, m, v, θ, z, l, n, r, tʃ, j, ɡ, h/ in: /wɛə, mɛə, 'vɛəriəns, θɛə, 'zɛərə, lɛə, nɛəz, rɛə, tʃɛə, jɛə, 'ɡɛərɪʃ, hɛə/; (b) followed by /p, z, n/ in: /ʃeəp, ðeəz, pɪt'keən/

— for 8. /uə/ (a) preceded by /w, m, z, l, r, tʃ, dʒ, j, ɡ, h/ in: /wuə, muət, zouə'lɒdʒɪkə, ljuə, 'ruərəl, tʃuə, 'dʒuərɪst, juə, ɡuəd/; (b) followed by /d, z, s, l, n/ in: /ɡuəd, 'ɑ:dʒuəs, 'buəz, 'ænjuəl, buən/

— for 9. /ɔə/ (a) preceded by /b, w, f, l, n, r, tʃ, j, ɡ/ in: /bɔə, wɔə, fɔə, lɔə, nɔə, rɔə, tʃɔə, jɔə, ɡɔə/; (b) followed by /d, s, z, n/ in: /'bɔəd, 'kɔəs, ɔəz, mɔən/

Control Tasks p. 142

/eɪ/

- A. 1. a) pay, make, pain, weight, way, waste, pale, Wales, paint
b) face
2. b) taken, day, David, sane, late, lake, lay, lain, sane
c) shape d) ray, rain
4. game, case, gave
- B. 1. a) game, famous, able, shape. b) David, gave
2. b) again, pain, case, train, late, plain, waste, pale, sane, Wales, face. c) age
4. make, lake, ache, taken

/ou/

- A. 1. a) boating, motor, poet, motive, poker; b) foe
2. a) though; b) don't, so, total, social, nose, noticed; c) shoulder, jokes; d) road, bureau
3. yolk
4. go, gold, cosy
5. hope, hotel, hold
- B. 1. a) hope; b) over
2. a) both; b) boating, hotel, hold, only, follow, road, shoulder, gold, don't, old, cold, motor, poet, motive, total, nose, cosy, noticed; c) social
4. poker, yolk, jokes

/aɪ/

- A. 1. a) my, Michael, while, mild, why; b) profile
2. b) die, nine, silence, side, like, realize, climb, excite
d) right, rise, bright
4. kind, kindly, kite, excite
5. high
- B. 1. a) climb; b) wife.
2. b) kind, mild, wild, nine, while, silence, profile, right, side, kindly, isles, eyes, idea, realize, quite, bright, excite
4. like, Michael

/au/

- A. 1. a) pound, mouth; b) found
2. a) thousand; b) south, now, down, sound, loud; d) round, drown
4. couch
5. how
- B. 2. a) south, mouth, b) drown, out; thousand, down, round, pound, found, loud;
c) couch

/ɔɪ/

- A. 1. a) boy, point
2. b) soil, employ, noise; c) join, enjoy, joint; d) destroy
4. coin
B. 2. b) join, point, coin, soil, noise, joint

/ɪə/

- A. 1. a) Crimea; b) severe
2. b) dear, near, idea, museum
3. year
5. hear
B. 1. a) museum
2. b) accordion, ears, real, realize, period
d) weary

/eə/

- A. 1. a) parents, anywhere, bare, despair, pair, Mary
b) various, farewell
2. a) there; b) stare, stairs, dare
4. care, square, carefully
B. 1. b) carefully
2. b) stairs; d) parents, various, Mary

/uə/

- A. 1. a) poor, moor
2. b) tour, during; c) sure, usual
B. 2. b) usual; d) during, Europe
2. sauθ, 'bɪljədʒ, sɪn'srəl, 'streɪndʒlɪ, fə'sɪlɪteɪtɪd, 'nəʊtɪsəbl, 'waɪndɪŋ, puə,
'fəʊlɒwɪŋ, 'rɪəlaɪz, 'maʊtə, 'hɑ:tn, pə'tetəʊz, 'əʊvə'nəɪt, 'θɪətə, 'dʒʊərɪst, 'mɛərɪ,
tʃə, 'maɪkəl, 'ændʒɪləʊ, 'dʒeɪn 'eə, ɪn'dʒɔɪnmənt, 'taɪfɔɪd, 'juərəp, duə

Exercises p. 152

2. There is no aspiration in *spot*.
3. Voiceless fortis are pronounced with the vocal cords switched off and with the greater force of articulation, than voiced consonants, which are pronounced with the vocal cords drawn together and vibrating.
9. The vibrator mechanism which results in the partial devoicing of /r, m, j/.
10. The vocal cords are switched on only after the medial stage of /k/ articulation, /k/ is not devoiced. In /k/ to /θ/ transition the regressive voicing of /k/ should be avoided.
11. The place of articulation is affected by regressive assimilation: the alveolar sounds /d, l, t/ become dental in *breadth, wealth, at that*. The work of the vocal cords is affected by progressive assimilation: the sonant /r/ is partly devoiced in *afraid, apron, thrive*.

Control Tasks p. 153

1. (1) aspiration(initial sounds): port, cope, tarn, piece, car, cable, cake, top, pit, pepper, come.
no aspiration: топь, поле, тина, Коля, тесто, ток, пень, пел, кило, ком.
(2) palatalization: a) loose CV transition: bee, pit, built, meal, deer, beauty, music, peace, lean, lion, dean, onion.
b) close CV transition: тина, тесто, сила, день, пень, ряд, пел, рев, кило, мел, вилы.
(3) labialization: port, corn, coop, tool, all, call, gorge, goose, doom, dawn, room, thorn.
labialization: дуло, бук (with the lip protrusion); полк, роль, соль, лом, ком, ток.

2. (1) lateral plosion: curdled, muddle, needless, mottled, at last, red light, huddle, good looks.

(2) nasal plosion: Britain, oughtn't, admit, madness, witness, partner, cotton, great number, sudden, captain, at night.

(3) loss of plosion: actor, begged, what kind, back to back, big books, slept, top coat, black goat, ripe cheese.

3. /a:/ — more back in /kɑ:/
 /k/ — more back-lingual in /kɑ:/
 /k/ — more advanced in /ki:n/
 /j/ — more high in /'pju:tə/
 /i:/ — more back in /ki:p/

4. Care should be taken 1) to avoid regressive voicing or devoicing of the underlined sounds: 'æni:kdaʊt, 'bæ:θdeɪ, 'blækbə:d, 'medsɪn, 'ðɪs 'buk, 'lets 'gou, 'wɔts ðə 'taɪm/.

2) to pronounce alveolar /s, z, θ, l/ as dental, since they are followed by the interdental /θ, ð/: 'sɪksθ, 'hɪz 'θɪŋ, 'pa:s ðəm, ɪz 'ðæt, fɪfθs, 'smɪθs 'ðæ, 'su:ðz ðəm, 'tel ðəm, ɪn ðə/.

Exercises p. 159

1. c, c, c; eau, ou, ough

| 2. Graphemes | Phonemes | Letters |
|--------------|----------------|---------------|
| b-a-o-b-a-b | /b-eɪ-ə-b-ə-b/ | b-a-o-b-a-b |
| v-e-s-t | /v-e-s-t/ | v-e-s-t |
| d-u-l-y | /d-ju:l-i/ | d-u-l-y |
| sh-i-p | /ʃ-i-p/ | s-h-i-p |
| d-i-sh | /d-i-ʃ/ | d-i-s-h |
| aw-f-u-l | /w-ə-f-u-l/ | a-w-f-u-l |
| d-aw-n | /d-ɔ:-n/ | d-a-w-n |
| l-igh-t | /l-aɪ-t/ | l-i-g-h-t |
| h-igh | /h-aɪ/ | h-i-g-h |
| w-or-k | /w-ɔ:-k/ | w-o-r-k |
| ar-ch-a-i-c | /ɑ:-k-eɪ-i-k/ | a-r-c-h-a-i-c |
| ai-r-y | /eə-r-i/ | a-i-r-y |
| l-au-gh | /l-a:-f/ | l-a-u-g-h |
| w-a-tch-ed | /w-ɔ:-tʃ-t/ | w-a-t-c-h-e-d |

3. ⟨r⟩ → /r/ in /raɪt, ə'freɪd, preɪ, traɪ, 'veri, draɪ/. ⟨our⟩ → /ʊə/. ⟨ear⟩ → /ɛə/ in /tuə, teə/

4. ⟨ed⟩ indicates the past indefinite morpheme -ed.

5. pækt, bæ:d, pɛə, fræŋk, weə, 'weðə, si:n, bæ:θ, faɪnd, peɪnz, ti:z, pi:s, fi:t, wɪtʃ, diə, bau, bred, 'si:lɪŋ, soul, bæ, preɪ, reɪn, peɪl, ə, raɪt, prə, bi:tʃ, hɪə, fə:, teɪl, meɪl, sən, bi:t, breɪk, meɪz, wi:k, 'kʌrənt, 'stæriəl, veɪn, sel, seɪl, 'kɒmplɪment (v), hɛə, blu:, si:, mi:t, hi:l, feə, sent, rəʊd, ti:m, hɔ:s, 'beri, gɜ:t, pleɪn, ki: договор — упакованный — под запором — засов, пара — подрезать, стричь — груша, франк — искренний, носить — где, погода — ли, сцена — увиденный, койка — рождение, потолок — скрепленный печатью, подошва — душа, голый — медведь, просить, умолять — добыча, дождь — царствование — повод, ведро — бледный, воздух — наследник, оштрафованный — находить, старания, труды — оконные стекла, чай — дразнить, мир — кусок, подвиг — ноги, колдунья — который, дорогой — олень, гнуть — сук, хлеб — воспитанный, прямой — писать — обряд, церемония, ровня — дамба, пляж — бук, слышать — здесь, мех — пихта, ель, рассказ — хвост, мужской — почта, сын — солнце, бить — свекла, ломать — тормоз, кукуруза — лабиринт, слабый — неделя, смородина — течение, серийный — овсянка, кукурузные хлопья, тщетный — вена — флюгер, продавать — ячейка, комплимент — дополнение, волосы — заяц, голубой — дул, море — видеть, мясо — встречать, исцелять — пятка, плата за проезд — ярмарка, цент — посланный — запах, ехать верхом — дорога, команда — ки-

шеть, изобилловать, хриплый — лошадь, ягода — хоронить, ворота — походка, ясный — самолет, ключ — набережная

7. (a) me-ter, ca-ring, beau-ty, sour-ly, sure-ly, tea-cher, cry-ing, six-ty

(b) pray-s, praise, child-'s, read-able, mis-rule, penni-less, un-known, dis-like, im-mortal, ir-rational

8. Mute ⟨r⟩, ⟨e⟩ indicate historical length or the diphthongal nature of the preceding vowel phonemes (second columns, a), ⟨nn⟩, ⟨ss⟩, ⟨tt⟩, ⟨rr⟩ indicate the short character of the preceding vowel phonemes (second columns, b).

9. Эйбел, Эндрю, Энн, Болдуин, Бернард, Дороти, Эстер, Джеральд; Хьюго, Айра, Джин, Джереми, Кит, Лайонел, Мейбл, Марта, Пий

Control Tasks p. 161

1. fac-es, fac-ing, nic-er, choic-est, rac-y, princ-ess, ag-es, rag-ing, larg-er, urg-ent, bulg-y, burg-ess, rage-d, change-ling, outrage-ous, face-d, nice-ly, huge-ly, engage-ment, change-able

| | | |
|---------------|--------------|----------------|
| 2. a) cur-ing | b) cu-ring | c) /'kjuə-rɪŋ/ |
| fire-s | fires | /faɪəz/ |
| cheer-less | — | /ˈtʃɪə-lɪs/ |
| cure-d | cured | /kjuəd/ |
| oc-curr-ed | o-ccurred | /ə'kɜ:d/ |
| stirr-ing | stir-ring | /ˈstɜ:rɪŋ/ |
| stirr-ed | stirred | /stɜ:d/ |
| pin-ing | pi-ning | /ˈpaɪ-nɪŋ/ |
| pine-d | pined | /paɪnd/ |
| work-er | wor-ker | /ˈwɜ:-kə/ |
| work-ing | wor-king | /ˈwɜ:-kɪŋ/ |
| work-ed | worked | /wɜ:kt/ |
| thorough-ly | tho-rough-ly | /ˈθʌ-rə-lɪ/ |
| cult-ure | cul-ture | /ˈkʌl-tʃə/ |
| nat-ion | na-tion | /ˈneɪ-ʃn/ |
| cit-y | cit-y | /ˈsɪt-ɪ/ |
| redd-er | red-der | /ˈred-(d)ə/ |
| cheer-ing | chee-ring | /ˈtʃɪə-rɪŋ/ |

3. ai = /er, əə, e, ɪ, ə/
 /eɪd, 'fɛəri, sed, 'laʊntɪn, 'pɔ:trɪt, 'vɪlən/
 aigh = /eɪ/
 /streɪt/
 au = /ɔ:, ɑ:/
 /'ɔ:gəst, sɔ:s, lɑ:f, ɔ:'θɔrɪtɪ/
 augh = /ɔ:/
 /tɔ:t/
 ea = /i:/
 /i:st, ti:/
 ay, ei = /eɪ/
 /dɪ'leɪ, beɪʒ/ ee, eo = /i:/ e/ /'pi:pl, 'θrepəns, 'lepəd/
 eigh = /eɪ/ /freɪt, weɪ/

4. sealing, ceiling, ceiling; soles, soul, sole, soul, soul; bare, bear, bear, bear, bear; pair, pear, pair; write, right, right, right; vain, vane, vanes, vein, vein

Exercises p. 170

- (1) CVC, CFC
- (2) CVCC, CFC
- (3) CVC, CFC
- (4) CSVS, CSVC, CCFC
- (5) CV; CF
- (6) CCV (CSV); CCF
- (7) VC; FC
- (8) CCCV (CCSV); CCCC

- (9) VCC (VSC); FCC
 (11) CCSVSC; CCCFCC
 (13) CCCVC (CCSVS); CCCFC
 (15) CCVCCC (CSVSC); CCFCCC

- (10) VCCC (VSCC); FCCC
 (12) CVC (V) SCC; CFCFCC
 (14) CSVCC (CSVSC); CCFCC

2. (a) 'pi:-pl, 'bæ:gl, 'sæ:tʃəl, 'traɪ-fl, 'rɪ-ðm, 'ei-prɪl, 'i:-kwəl, 'hæ:pənz, 'ma:-blz, 'pæ:tənz, 'dræ:gnz, 'æ:-dʒənt, 'sæ:-vənt, 'li:-sɪd, 'he-rəldz, 'e-rəndz, 'pæ-rənts, 'tæn-dʒənts, 'peɪ-fənts, 'sæ:-vənts, 'skæ-fəldz

(b) CV-CS, CV-CS, CV-CVC, CCV-CS, CV-CS, V-CSVS, V-CSVS, CV-CVSC, SV-CSC, CV-CVSC, CSV-CSC, V-CVSC, CV-CVSC, SV-CSC, CV-SVSCC, V-SVSCC, CV-SVSCC, CVS-CVSCC, CV-CVSCC, CV-CVSCC, CCV-CVSCC

3. 2, 2, 4, 4, 2, 4, 3, 5, 3, 4, 3, 4, 6, 2, 3, 5, 6

7. Syllables Syllabographs

| | |
|-------------|--------------|
| wə:k | work |
| 'wə:-kɪŋ | wor-king |
| 'wə:-kə | wor-ker |
| paɪnd | pined |
| 'paɪ-nɪŋ | pi-ning |
| 'stə:-rɪŋ | stir-ring |
| ə-'kæ:d | o-ccurred |
| 'kjuəd | cured |
| 'tʃiə-lɪs | cheer-less |
| 'kjuə-rɪŋ | cu-ring |
| 'tʃiə-rɪŋ | chee-ring |
| 'faɪ(r)-rɪŋ | fi-ring |
| 'red-(d)ə | red-der |
| 'nei-ʃn | na-tion |
| 'kʌl-tʃə | cul-ture |
| 'θʌ-rə-ly | tho-rough-ly |

Control Tasks p. 171

1. (a) at, aunt, elks, asks, ebbed

(b) took, lifts, texts, clenched, tip, struck, strays, thrust, bet, fact, fret, price

(c) pray, straw, boy, pea

(a) ил, от, астр

(b) рад, ЗАГС, гореть, скетч, взрыв, всласть, сфинкс, чувств, сон, Минск, гипс, здесь, злак

(c) мгла, кто, что, та

2. a) b) | a) b) | a) b) | a) b) | a) b) | a) b) | a) b) |
 s t | l m | b k | m s | s k | g v | t p |

etc...

3. 'kʌm-fə-tə-bl, 'kɔ-tɪdʒ, 'ɔ:-tʃəd, graʊnd, 'ki-tʃən, 'pæn-trɪ, 'stʌ-dɪ, 'sev-rəl, 'ʌp-'steəz, 'bed-ru:m, 'næ:-sə-rɪ, 'bæ:θ-ru:m, 'fə:-ni-tʃə, 'mɔ:-dæn, oun, i-lek-'trɪ-sɪ-tɪ, 'dʒæ-njuə-rɪ, 'feb-ruə-rɪ, 'ɔ:-gəst, səp-'tem-bə, ək-'tɒu-bə, nou-'vem-bə, dɪ-'sem-bə, 'wen-zdɪ, 'tju:-zdɪ, 'θə:-zdɪ

4. pa-rents, fire, plu-ral, ru-ral, di-nner, ma-(r)ry, dis-appear, spea-king, wri-ting, play-ing, wal-king, stan-ding, pa-ssing, break-fast, po-ta-toes, to-ma-toes, co-ffee, ca-bbage, ba-na-nas, be-rries, pu-dding, pears, beer, sho-pping, iro-ning, house-work, mis-take, fish-ing

Exercises p. 179

1. лишенный помощи, неотчужденный, неизменный, невооруженный, неаспирированный, нечистый, противоциклонный, антинациональный, неуплата, иногородний, без остановок, бывший министр, вновь открывать, реорганизовать, перепаковать, оплаченный заранее, писать с орфографическими ошибками, неправильное применение, плохое правление, неправильно цитировать, положить не на то место, одетый слиш-

ком просто, младший офицер, малонаселенный, вице-адмирал, вице-консул, предыстория, ультрасовременный

2. красивый, старомодный, злой (раздражительный), рассеянный, с непокрытой головой, домашнего изготовления

4. яблоня, наволочка, чернильница, свидетель, школьник, прическа, зритель, рассвет, чемодан, домашняя хозяйка, день рождения, расписание, всё, камин, (радио)вещание, овчарка, авторучка, любой

5. бабочка, кузнец, василек, вновь прибывший, мужское пальто, шинель, соусник, растяпа, самолет, масленка, закладка для книг

6. классная доска — черная доска
дрозд — черная птица
сейф — прочная коробка
переутомиться — сверх работы (задания)
лютик — желтая чашка
высокий комод — высокий мальчик
(бокал на высокой ножке)

9. /° female, window, profile
/ . over, under, cotton, table, husband
/ . important, excessive, relation
/ . appetite, photograph, telephone
... / . unimportant, insufficient
/ . . . melancholy, caterpillar, criticism
/ . . . capital
... / . . . satisfactory, aristocracy
/ . . . administrative, empiricism
... / . . . consideration, circumlocution

Control Tasks p. 181

3. 'air-raid, 'birdcage, 'coalmine, 'teapot, 'washstand, 'mail-bag, 'dance-music, 'grandfather, 'handwriting, 'shop-keeper, 'ladybird, 'office-boy, 'waiting-room, 'dinner-jacket, 'tape-recorder, 'labour-exchange, 'ground-floor, 'knee-deep, 'cross-question, 'flat-footed, 'shop-window, 'hot-water-bottle, waste-paper-basket, 'post-graduate, 'vice-chancellor, 'secondhand

4. 'æbs(ə)nt — æb'sent отсутствующий — уклоняться
'kɒmpres — kəm'pres компресс — сжимать
'kɒnsə:t — kən'sə:t супруг (уст.) — общаться
'prɒdʒu:s — prədʒu:s продукция — предъявлять
'ɪnfɪks — ɪn'fɪks инфикс (грам.) — втыкать, вставлять
'kɒmbaɪn — kəm'baɪn комбайн — объединять
'kɒnsə:(t) — kən'sə:t концерт, согласие — договариваться
'dezət — dr'zə:t пустыня — бросать, покидать
'aʊtlei — aʊt'lei издержки — тратить

Exercises p. 187

1. /'a:mə — 'a:mɪ/ /ə — ɪ/ /ɪks'perɪmənt — ɪks'perɪment/ /ə — e/
/ə'lu:ʒən — ɪ'lu:ʒən/ /ə — ɪ/ /səm — sam/ /ə — ʌ/
'teləm — 'tel(h)ɪm/ /ə — ɪ/ /ðət — ðæt/ /ə — æ/
'sɪtə — 'sɪtɪ/ /ə — ɪ/ /və'reɪtɪ — 'veəriəs/ /ə — eə/
'fɔ:wəd — fɔ:'wɔ:d/ /ə — ə:/ /'estɪməbl — 'estɪment/ /ə — eɪ/

2. 'prəʊtest, 'kɒntent, 'kɒment, 'æbstɹækt, 'æsfælt, 'kænɒt, 'ɪ:pɒk, 'blæɡə:d, 'eksport, 'hambag, 'ekspə:t, 'ɪnstɪtju:t

3. 'ɔ:fn, 'seʃən, 'speʃəl, 'dɪfɪkəlt, səm, kən, 'kɒnfərəns, 'dɪkʃənəri, 'eɪprəl, həv

4. a) /i:'mɪʃn/ /ju:'zæ:p/ /eɪ'ɔ:tə/
 /ɪ'levn/ /u:'gændə/ /ɔɪl'peɪntɪŋ/
 /en'saɪn/ /ʌp'teɪn/ /'kɔɪrɔut/
 /æbs'trækt/ /ə:'beɪn/ /eə'rɒlədʒɪst/
 /ɔb'dʒektɪv/ /ə:'dɪə/ /hɪər'ʌndə/
 /ɔ:'kestrəl/ /aʊt'wɪt/ /juə'reɪʒjən/
- b) в/л/д́а х/л/жý пл/л/д́ов
 н/л/ѓа с/л/сн́а пр/л/в́ел
 гр/л/з́а др/л/в́а п/л/шý
 г/л/л́ов п/л/л́я ц/ы/н́а
 ст/л/р́он ст/л/л́ы /д'н^е/р́евня
 б/л/р́одка дв/л/р́ов /в'н^е/с́елье

Control Task p. 188

1. 'lætʃki:, sɪm'plɪsɪtɪ, 'prəʊtest, 'skɑ:lɑ:k, pæn'θi:ən, 'bʊldɔg, 'aʊtɔ:, 'daɪnɪŋ-
 rum, 'ɪntu, 'mɪldju:, 'wʊdkɑt, 'hɑ:tbə:n, 'hæmpbæk, 'haɪweɪ, 'sɪmplɪfaɪ, 'haɪbraʊ,
 'kɒnvɔɪ, 'reɪnbəʊ, 'reɪnkɔʊt, 'ʌndəweə, 'ɑ:mətjuə

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