

REPUBLIC OF AZERBAIJAN

On the rights of the manuscript

ABSTRACT

of the dissertation for the degree of Doctor of Philosophy

**PHONOTACTICS OF CONSONANTS IN ROMANCE
LANGUAGES**

Specialty: 5709.01 – Roman languages

Field of science: Philology

Applicant: **Sabina Khagani Aliyeva**

Baku – 2024

The work was performed at Department of Indian-European Languages at the Institute of Linguistics named after Nasimi of ANAS.

Scientific advisor: Doctor of Philological Sciences, Professor
Fakhraddin Yadigar Veysalli

Official opponents: Doctor of Philological Sciences, Professor
Ketevan Djashi

Doctor of Philological Sciences,
Associate Professor
Gunel Mahammad Bayramova

Doctor of Philosophy on Philology,
Associate Professor
Najaf Huseyn Nabiyev

One-time Dissertation Council BFD 2.12 created by the Supreme Attestation Commission under the President of the Republic of Azerbaijan within the base of Dissertation Council ED 2.12 operating at Azerbaijan University of Languages.

Chairman of the
Dissertation council: Doctor of Philological Sciences,
Professor
Azad Yahya Mammadov

Scientific secretary of the
Dissertation council: Doctor of Philosophy on
Philology, Associate Professor
Irada Nadir Sardarova

Chairman of the
scientific
seminar: Doctor of Philological Sciences,
Professor
Larisa Georgiyevna Vikulova



GENERAL CHARACTERISTICS OF THE WORK

Relevance and development of the topic. The study of phoneme variant discovery in different language systems is one of the topical issues of syntagmatic phonology. To characterize the phonological system of languages, studying vowel-consonant relations only in the paradigm is not enough. To do so, the realization of phonemes in syntagmatics must be considered. *"Whereas in paradigmatics the encounter of units is based on the same distinctive features, in syntagmatics the interaction expands the range of opposition in terms of variability, and this includes both integral and differential features"*.¹

According to N.S.Trubetskoy, *"phonemic combinations in each language are subject only to rules and laws that are specifically applicable to that language, and they must be studied separately for each language"*.² According to Y.S.Maslov, *"Every language has a wide set of recurring elements and a system of flexible rules that combine these elements into meaningful sentences"*.³ In other words, the combinatorics of language units is a common and important feature of any language, which is due to the fundamental system-wide characteristics of language units, such as discreteness and diversity. Phoneme combination rules are no less important in describing the systemic and structural features of language than phoneme composition. Without a distributive and statistical analysis of the phonemes of a particular language, the analysis of the phoneme structure and phoneme system of that language cannot be considered complete.

In syntagmatics, it is incorrect to explain the distribution of phonemes of one language by the facts of another language; in other

¹ Veysalli, F. *Phonetics and Phonology Problems.* / F.Veysalli. – London: Cambridge International Press, – 2016. – p.137.

² Trubetskoy, N.S. *Basics of phonology.* / N.S.Trubetskoy. Translation from German, notes and last word belongs to Sc.D., prof. F.Veysalli. – Baku: Science and education, – 2011. – p.310.

³ Maslov, Y.S. *Introduction to Linguistics. Textbook for filol. Special. Vuzov / Y.S.Maslov. 2nd ed., Processing. and the ball.* – M.: Higher School, – 1987 – p.272

words, each language must be described based on its own architecture. The identified distributive features of one language can be compared with those features of another language. In this way the similarities and differences of the compared languages can be identified. According to Akhundov, *"without a statistical analysis of the phonemes of a language, analyzing the structure of its phonemes, the phoneme system cannot be considered complete"*.⁴ The study examined the phonotactic features of Spanish as a whole and not of the Romance language as a whole. This can be explained for several objective reasons. Firstly, the scope of the study does not allow us to analyze other Romance languages and secondly, there is no specific study of Spanish phonetics in Azerbaijani linguistics, although Spanish is widely taught in Azerbaijani-speaking audiences today. Third, it is expedient to concentrate on a single linguistic material, since involving extensive linguistic material in experimental-phonetic analysis, which requires a lot of time and effort, does not allow us to pay proper attention to the actual linguistic phenomena in other languages, we thought in our dissertation. By examining the sequence of phonemes in syntagmatics, it is possible to identify certain regularities that constitute the essence of phonological research. The study of the patterns of phoneme combinations is particularly relevant to typological linguistics. As the correct interpretation of this problem affects the identification of similarities and differences in phonotactic patterns of languages of different systems, and the frequency of phonemes in a language.

The object and subject of the research. The object of the study is to investigate the phonotactics of consonants in words and word forms in Spanish, which belongs to the group of Romance languages.

The subject of the study is the discovery of different and similar features in phonemic combinations in the syntagmatics of Spanish, and the systematization and generalization of the features of phonotactic patterns in the phonetic organization of words.

⁴ Akhundov A.A. Phoneme system of the Azerbaijani language. / A.A.Akhundov. – Baku: Maarif, – 1973. – p. 203.

Aims and objectives of the study. The research consists in studying the acoustic parameters of the structure of words in Spanish – melodic, dynamic and temporal components. In order to achieve the aim of the thesis the following objectives have been defined:

- to give an overview of the scientific-theoretical literature related to the topic of the research work;
- to select language material for experimental-phonetic analysis in accordance with the purpose of the research work;
- to determine basic syllable patterns based on phoneme (K+V, V+K) combinations in comparable languages;
- to involve in phonetic analysis the coarticulation features arising from the immanent features of the consonant and vocal components involved in phoneme combinations;
- to analyze the issue of coarticulation in vowel+consonant (VK) and consonant+vowel (KV) combinations.

Research methods. The study used comparison methods, mathematical and statistical calculations and oscillography analysis. The acoustic qualities of the vowels within a word are also considered in the linguistic material chosen from Spanish. A total of 200 words and about 50 sentences were involved in the study.

The main points of the defense are:

- 1) The study of combinatorial properties of linguistic units allows to synthesize theoretical and applied linguistics;
- 2) The distributive analysis of the phonological system of language provides the basis for identifying and describing phonotactic regularities of the phonological structure of words, as well as determining the prospects for the development of phonemic combinations;
- 3) Scientific results in the field of syntagmatics form the basis for a depth study of the features of combining and the nature of language units (phonemes);
- 4) The study of phonemes in syntagmatic serves to reveal the universal properties of combinatorial linguistics;
- 5) The study of syntagmatic and paradigmatic features of linguistic units makes it possible to discover syllabic patterns in different languages;

6) Provides identification of different features in phoneme combinations in syntagmatics;

7) Lays the foundation for determining invariant syllabic models in phoneme combinations in syntagmatics;

Scientific novelty of the study. It consists of the first experimental-phonetic study of consonant phoneme combinations in Spanish and of phonotactic patterns in the phonetic organization of speech.

Theoretical and practical significance of the research. It consists in the development of theoretical knowledge in the study of the phonological form and prosodic organization of words in Spanish. The results of the experiment make it possible to identify relevant features of the phonotactic organization of words in Spanish. Furthermore, the results of the study can provide an impetus for further research on the presentation of phonemic combinations in the phonetic and phonological organization of words in Spanish in a new linguistic status. The results can be used in the teaching of Spanish to Azerbaijani audiences. The results of the study can be used in Romance linguistics, general linguistics, as well as in the comparative study of different systematic languages, in the combination of phonemes, in the study of prosodic events involved in the organization of words in different languages.

Approbation and application. The results of the study were presented at international and national conferences. Abstracts on the dissertation were published in publishers approved by the Higher Attestation Commission.

Name of the organization where the thesis work is being carried out. The dissertation work was carried out at the Department of Indian-European Languages at the Institute of Linguistics named after Nasimi of ANAS.

The total volume of the dissertation with characters indicating the volume of each structural section of the dissertation separately. The dissertation work consists of the introduction, three chapters, the conclusion, the list of used literature and appendix. The Introduction – 6 pages, 11780 characters; Chapter I – 29 pages, 56629 characters; Chapter II – 33 pages, 61617

characters; Chapter III – 65 pages, 66653 characters; Conclusion – 5 pages, 9415 characters. The total volume of the dissertation is 206094 characters, excluding the list of used literature.

MAIN CONTENT OF THE RESEARCH

The **introductory** part of the thesis describes the relevance of the topic, object and subject, scientific innovation, theoretical and practical relevance, aims and objectives, choice of language material and research methods.

The first paragraph named *“The study of phonotactics in general linguistics”* of the chapter I of the research paper entitled **“An overview of the history of the study of phonotactics”** is devoted to the analysis of the theoretical literature related to the study of the dynamics of development and setting the issues of phonotactics.

The essence of the phonological system of a language brings together two important issues: the description of the phoneme structure and the phonotactic structure resulting from its combination on the syntagmatic axis. For this reason, a research work sufficient to describe the phonological system by simply identifying an inventory of phonemes cannot be considered theoretically satisfactory. An accurate description of the phonological system depends on the study of the paradigmatic and syntagmatic features of the phonemes.

N.S.Trubetsky wrote that *“in syntagmatics the rules of phoneme combination are individual for each language and are no less important than the structure of phonemes in determining the nature of language”*.⁵ Referring to the paradigmatic and syntagmatic relations between language units, J.Greenberg noted that *“the paradigmatic and syntagmatic relations between language units at*

⁵ Trubetsky, N.S. Basics of phonology. / N.S.Trubetsky. Translation from German, notes and last word belongs to Sc.D., prof. F.Veysalli. – Baku: Science and education, – 2011. – p. 311.

systemic and speech levels are mutually conditioned and complement each other".⁶

Comparing the English word "chip" with the Spanish word 'mucho', A.Martine wrote that in English a simple / s /, such as "ship", could have been used first. However, in both languages / ʃ / are phonemes that are not divided into components.⁷

The patterns of phoneme combinations are fundamentally important to phonotactics as a whole, but they may vary with specific research methods. One important factor in describing phoneme combinations is to study the position of each phoneme and the volume in which the phoneme occurs, that is, its relationship to other phonemes.

R.K.Potapova considers as one of the most important factors *"the influence of language phonotactics on the syllable inventory"*.⁸ According to the author, *"knowledge of language phonotactics is not sufficient to determine syllable boundaries, especially with regard to speech dynamics"*.⁹ *"In syntagmatics, certain inconsistencies in phoneme structure appear in both consonant + vowel and vowel + consonant sequences. The most common feature of Germanic languages in this area is that phonemes can form a syllable and act as units of pronunciation. The syllable is the most appropriate phonetic field for the realization of phonemes. If we briefly define a syllable, we can approach it as a vowel + consonant or vice versa through prosodic means"*.¹⁰

In speech, the segmental units are implemented in a continuous sequence, the combination of phonemes being subject to the rules and laws important to that language, and determined individually for each language.

⁶ Greenberg, J. Some generalizations concerning possible initial and final consonant sequences // Questions of Linguistics, – 1964. № 4, – p.46.

⁷ Martine, A. Basics of general linguistics. // – M.: "New in Linguistics", – 1963. Vol.3, – p.432.

⁸ Potapova, R.K Syllabic phonetics of Germanic languages. / R.K.Potapova. – M.: Higher school, – 1986. – p.32.

⁹ Ibid, – p.39.

¹⁰ Veysalli, F.Y. Introduction to German linguistics. / F.Y.Veysalli. – Baku: Mutarjim, – 2011. – p.255.

In syntagmatics, the combinatorial capacity of phonemes allows us to say that each language is conditioned by fundamental system-wide features. The analysis of the phoneme structure and phoneme system of a language cannot be considered complete without involving the sequence of phonemes in the syntagmatic axis of the language in statistical research. It is theoretically impossible to interpret the distribution of phonemes of one language on the syntagmatic axis with the facts of another language, i.e. each language must be explained on the basis of its combinatorial models. Only then can the distributional features of different languages (regardless of the degree of relatedness) be involved in a confrontational analysis at the linguistic level.

The second paragraph of the chapter I of the research paper deals with the ***“History of the study of phonotactics in Romance linguistics”***.

In learning any foreign language, it is known that we start with the sounds in that language. Only after that, phonetic rules and phonological analyzes are carried out in that language. Voices for children, students, etc. inculcation is carried out orally, that is, in the communicative aspect, which allows for comprehensive learning of the language. Phonemes for communication are an organized system of human speech. This system of the language is the object of phonetics, that is, speech sounds are studied in the field of phonetics, and the functional aspect of language sounds and their regularities fall under phonology. Of course, this is not an ideal, final division, in any case, these terms are widely used in scientific research.

From the works devoted to the phonological study of consonants, it is clear that phonotactic processes include pairing, accent shift, tone, etc. belongs to. Each language has its own individual and free features. The name of this concept has been fixed by the term phonotactics and its own rules – phonotactic rules have been created, which can be applied to any language. Syllable structure, formation of diphthongs, consonant combinations, harmony, etc. such matters are the fields studied by phonotactics. Phonotactic rules allow to conduct phonological analysis of spoken

issues by applying them as a modern method in the system of syllables, diphthongs, triphthongs, vowels and consonants.

The investigation of the problems of approach and combination of phonemes is carried out by the phonotactic method in modern linguistics. However, despite the increased attention paid to phonotactics, there is a lack of consensus regarding phonotactic research in the linguistics literature. This is manifested not in the choice of materials and topics, but in the style of research methods. For example, combining phonotactics with phonesthetics, equality with phonological rules, etc. However, the methods underlying any research depend very much on the goals and objectives. Linguists use the phonotactic method when research studies the interrelationship of syllabic elements, monosyllabic words, more precisely, monomorphemes and polymorphemes.

According to the conducted phonotactic studies, the interaction of consonants in monomorpheme and polymorpheme elements in a syllable differs from the interaction of all elements and has its own rules. That's why most linguists focus on those regularities and consonant combinations are the object of their research. Consonant combinations are mainly taken in three positions in the word structure – initial, middle and final positions. But sometimes, depending on the subject, it can be learned in the middle position where consonant combinations are realized. It should be noted that the main attention in research studies is focused on the starting position where consonant phonemes are realized. Thus, the first syllable in the word structure is more stable, that is, discrete, its boundary is concrete, and it also has the function of differentiating words from each other. On the other hand, it is possible to associate it with the importance and informativeness of word onset in word recognition.

According to the famous novelist M.V.Gordina, *"the syllable is important in general phonetics, it is in the syllable that all phonetic features appear, and it is directly related to the perception of vocal speech"*¹¹ According to B.B.Ismailov, known as the author of many

¹¹ Gordina, M.V. History of phonetic research (from antiquity to the emergence of phonological theories). / M.V.Gordina. – S.–Petersburg, – 2006. – p.444-459.

studies in French phonetics, “*syllables are the free division of words into parts during speech*”¹² and “*in French in some languages, like English, Czech, etc., only vowel phonemes are used. Only vowel phonemes, not sonorous consonants, can form syllables.*”¹³

It is noted that in Romance languages, including French, there are combinations of two, three and four consonants. In this regard, the author notes that in French there is a tendency to simplify consonant groups. For example, discarding the sound: “here (re)”, “e (x) trangereau”. According to the author, “in French, / rtr /, / rdr / are characteristic constituent parts of the French language.”¹⁴ It should be added that in such words, probably due to the preservation of the power of the pronunciation organs when pronouncing consonants, this results in a total loss of the fine vowels that come after them, and as A. Martine points out, this is due to the principle of power.¹⁵

In the study of phonotactic regularities, some linguists consider important the discovery of linguistic universals. For example, B.Trnka, an active member of the Prague School of linguistics, wanted to create phonotactic laws that would be equally valuable for all the languages of the world.¹⁶

Phonotactic identification and classification must be based on the role which the phoneme plays in the language. This role also lies in the so-called distribution of consonant phonemes.

In traditional phonology, phonotactic studies are based on the distinctive features of phonemes, and linguists try to figure out which feature of a phoneme determines its association with another phoneme. Of course, there is no solidarity between linguists for the two types of classification. The two types of classification are simplified from a phonotactic point of view *"1) the traditional*

¹²İsmayilov, B.B. Introduction course to the phonetics of the French language. / B.B.İsmayilov. – Baku: Science and education, – 2011. – p.16.

¹³ Ibid, – p.16.

¹⁴ Ibid, – p.28.

¹⁵ Martine, A. The principle of economy in phonetic changes. / A.Martine. –M.: Izd -voinostrannoy lit-ry, – 1960. – p.263.

¹⁶ Trnka, V.A. Phonological Analysis of Present-Day Standard English. / V.A.Trnka. – “Prace vesteczych charter.” XXXVIII, – 1935. – p 45-175.

articulation (denominator); 2) the universal binary classification". The latter is by R.Jakobson.¹⁷ In phonotactics, the classification of consonants depends on the position in the composition.

This classification proposed by the binarists later became the target of serious criticism. For example, it is possible to accuse the supporters of the binary approach principle of apriorism. Because in order to verify the truth of the propositions put forward by binarists, it is necessary to inspect the materials of all world languages. However, the results of binarists are not based on the materials of all world languages. Therefore, it is possible to classify according to differential (distinguishing) signs after having certain information about the phoneme system and inventory that make up the phonological system of any language.

The Spanish consonant system refers to specific group phonemes and the relationship between them. The relationship between phonemes is due to the signs that bring them together or separate them. Each consonantal phoneme can be represented as a set of definite features. The combination of these features is studied through phonological and more topical phonotactic studies. In order to study and analyze Spanish consonant phonemes, it is necessary to define a list of these consonants, which means the phonological status of each phoneme.

The chapter II of the study is entitled **“From the History of the Study of Phonotactics in Spanish Linguistics”**. The first paragraph of the chapter named **“General Remarks”** is devoted to interpreting the criteria for distinguishing between vowels and consonants. The main criteria here are syllabic formation, vowel formation and “centrality”.¹⁸

Paragraph 2 of this chapter explores *“The vowel inventory of phonemes in Spanish and its contentious issues”*.

¹⁷Jakobson, R.O. Theories of phonological unions between languages. // – M.: Favorite works, – 1985. – p.92-104.

¹⁸ Baudouin de Courtenay, I.A. Selected works on general linguistics / I.A. Baudouin de Courtenay. – M.: Science, – Volume I. – 1963. – p.262

The phonemic system of a language is a complex system consisting of a subsystem of vowel and consonant sounds. Of course, the vowel and consonant subsystems do not exist in isolation; they represent a certain part of the phonological system of a language. However, it should be noted that unlike the consonantal system, which plays a key role in creation and differentiation of language units, the main function of vowel phonemes is related to organization of prosodic (accentual) structures. Apart from participating in the realization of super segmental units, the role of vowel phonemes is to provide a background for revealing semantically loaded consonant differences. In Spanish it is possible to analyze the phonemes of sounds.¹⁹ We can define, based on the concepts of L.V.Scherba and Z.R.Zinder.

G.V.Stepanov shows that there are five vowels in the Spanish phonological system – / a /, / o /, / e /, / u /, / i /.²⁰ In the Spanish literary language the openness and closedness is not a differential sign in the vowel subsystem. According to N.A.Katagoshchina, "The manifestation of the openness and closedness in this language, mainly the nature of the syllable (open syllable – closed vowel or vice versa) is also associated with the presence of certain combinatory conditions."²¹ Spanish has diphthongs and triphthongs (in some cases) formed from strong stressed vowels (/ a /, / e /, / o /), weak unstressed vowels (/ u /, / i /) or combinations of two weak vowels.²²

In Spanish the vowel phonemes attract attention because of their marked continuity in the speech process. E.Alarcos, drawing attention to this aspect, thinks that this peculiarity of vowel

¹⁹Scherba, L.V. Language system and speech activity. / L.V.Scherba. –L., – 1974 – p.428; Zinder, L.Z. General phonetics and selected works on phonetics. / L.Z.Zinder. – M.: – 2007. 2nd izd. – p.575.

²⁰Stepanov, G.V. On the problem of linguistic variation. (Spanish and Spanish). / G.V.Stepanov. – M.: Nauka, – 1979. – p. 325.

²¹ Katagoshchina, N.A. Comparative grammar of Romance languages. The problem of structural community. / N.A.Katagoshchina, E.M.Wolf, L.I.Luht [et al.] –M.: Nauka, – 1972. – p. 15.

²²Stepanov, G.V. Spanish in the countries of Latin America. / G.V.Stepanov. – M.: Publishing of literature in foreign languages, –1963. – p. 201.

phonemes can be explained by their small number. According to the author, variation is characteristic of unstressed vowels. According to him, the quality of vowels in terms of openness and closedness is not a phonemic but a phonetic phenomenon.²³ A similar idea is found in the study of N.A.Katagoshchina. *“The five-syllable vowel system in Spanish is characterized by minimal variations. In contrast to other Iberian-Romanic languages, the open and closed vowels in this language are combinatorial variants, depending on the position or phonetic context of the word. For example, the vowel / i / is open in closed syllables and before the vowel / r̂ / and / χ /, whether it is stressed or not in the open syllable. In Spanish, the long and short combinatorial variants of each vowel are determined by their conditions. However, there is a general tendency: closed combinatorial variants are used for open syllables and open combinatorial variants are used for closed syllables”*.²⁴

One of the most controversial issues in the Spanish phonological system is the status of diphthongs and triphthongs, or rather whether they are segmentary phonological units or a combination of two phonemes. Most Soviet and Spanish linguists argue that diphthongs in Spanish are biphonemes. T.Navarro Thomas accepts diphthongs and triphthongs as independent phonemes in Spanish. According to him, there are fourteen diphthongs in Spanish: For example, in modern Spanish “aire” – “air”, “causa” – “cause”, “seis” – “six”, “reuma” – “rheumatism”, “sois” – “are”, “hacia” – “towards”, “tierra” – “earth”, “adiós” – “bye”, “viuda” – “widow”, “cuatro” – “four”, “cuerda” – “chain”. In Spanish, triphthongs are formed by a combination of syllable nucleus and weak vowels in pre- and postlanguages: / jai / “estudiáis” – “you read”, / jei / “limpiéis” – “you clean”, / joi / “escorpioide” – “Scorpio”, / jay /

²³Alarcos, Llorach E. Some phonological questions in today's Spanish. / Llorach E. Alarcos. –AAF, – 1964. – p. 151

²⁴Katagoshchina, N.A. Comparable comparative grammar of Romance languages. The problem of structural community. / N.A.Katagoshchina, E.M.Wolf, L.I.Luht [et al.] –M.: Nauka, – 1972. – p. 19.

"Semiautomático" – "semiautomatic", / wai̯ / "averyguáis" – "you explore", / we̯ / "buey" – "bull", / wau̯ / "guaicho" – "wig".²⁵

According to T. Navarro Tomas, diphthongs in Spanish are divided into falling – [ai̯], [au̯], [ei̯], [eu̯], [oi̯], [ou̯] and raising diphthongs – [ja], [je], [jo], [ju], [wa], [we], [wi], [wo] due to the nature of the last element (133). In Spanish, diphthongs are considered a combination of a stressed vowel or syllable core and an unstressed vowel. The realizations of the phonemes / a /, / o /, / e /, [a], [o], [e] in these combinations are considered strong vowels. Half-syllables or semi syllables include / i /, / u /, [i̯], [u̯], [j], [w], which do not form the syllable nucleus.²⁶

According to E.A. Llorach, eleven of the fourteen diphthongs in Spanish meet this requirement, that is, all raisings and three falling ones – [au̯], [eu̯], [ou̯]. A syllable may cross the boundary between the remaining three falling diphthongs – [ai̯], [ei̯], [oi̯]. For example, "rey – rey – es, king – kings".²⁷

There is one point to note here. In Spanish there is a reverse event in the flow of speech – a combination of two or three consecutive vowels – synalepha. For example, "Ana u Oscar" [a-nau-os-kar] – Ana or Oscar, "come y vete" [ko-me̯j – be-te] – Eat and go away. However, based on the examples we can say that the syllable in Spanish has a purely phonetic and rhythmic function. Using phonetic criteria to assess the phonemicity of a sound combination is theoretically unacceptable. In this regard, the diphthongs [ai̯], [ei̯], [oi̯] proposed by E.A. Llorach are considered biphonemic compounds because they cross the morpheme boundary rather than the syllable boundary between their components. For example, in Spanish "baile – Ana y Pablo" dance, Ana and Pablo, "veinte – come y vete" "twenty – eat and go", "hoy – cielo y tierra" – today – sky and earth, etc. Diphthongs [au̯], [eu̯], [ou̯] may similarly be proved biphonemic.

²⁵ Navarro, Tomas T. Manual of Spanish pronunciation. / Tomas T. Navarro. – Madrid, – 1982. – 240 p.

²⁶ Ibid.

²⁷ Alarcos, Llorach E. Spanish Phonology. / Llorach E. Alarcos -4th ed. –Madrid. Gredos, – 1991. – p.151

For example, "causa – toma un té" – "reason – drink tea", "deuda – bebe un té" – "duty – drink tea". The diphthong [ou] usually does not occur in the morpheme.²⁸

Before determining the phonological status of raising diphthongs in Spanish, it is necessary to analyze the phonological status of their components – [i], [y], [j], [w]. E.A.Llorach considers these sounds to be realizations of the vowel phonemes / i / and / u /.²⁹

When analyzing the phonological status of diphthongs, the facts obtained from morphology contradict that the weak component of diphthongs in Spanish [y] is a consonant. On the other hand, the phoneme composition of the morpheme is stable and cannot change according to position or combinatorial conditions. However, in the following examples we find that this rule is violated, e.g. / subes y bajas / – you go up and down, / cielo y tierra / – sky and earth, / apagan y encienden / – turn on and turn off, and so on.³⁰ Turning to the linguistic material, we accept the consonantal nature of the "weak" components of diphthongs, whose status in Spanish is disputed. The quality of constituents such as variations of the consonants / y / and / w / once again proves the ambiguity of diphthongs in Spanish.

We believe that this evidence fully proves the absence of phonological diphthongs and triphthongs in Spanish. However, we would like to describe "diphthongs" in Spanish on the basis of linguistic material, referring to the criterion that diphthongs do not cross the morphological boundary. The falling diphthongs in Spanish represent biphonemic compounds according to the morphological boundary criterion. The same is true of rising and falling diphthongs and triphthongs. For example: in Spanish [ja] ¿Y Ana viene? Is Ana coming ?; [je] Viejo – el lápiz y el papel Old – pencil and paper; [jo] canción – gris y oscuro song – grey and dark; [ju] ciudad – y usted

²⁸Alarcos, Llorach E. Some phonological questions in today's Spanish. / Llorach E. Alarcos. –AAF, – 1964.

²⁹Alarcos, Llorach E. Spanish Phonology. / Llorach E. Alarcos -4th ed. –Madrid. Gredos, – 1991. – 290 p.

³⁰Ibid, – p. 154

también city – and you too; [wa] cuaderno – tu abanico notebook – your fan; [we] fuente – tu edificio source – your building; [wi] cuidado – tu Inés – care – your Inés; [wo] antiguo – su horario – ancient his schedule; [jai] estudiáis – Ramón y Andrés – Luisa y Raúl You read – Ramón y Andrés – Luisa y Raúl; [jei] estudiéis – el gato y el perro – la bolsa de Inés you read – cat and dog – Inés's bag; [wa i] averiguáis – averiguar – su ansia – you investigate – to investigate – his grief; [we i] averigüéis – averiguo – termine y déme you investigate – I investigate – finish and give it to me.

Thus, all diphthongs and triphthongs in Spanish have a morphological boundary, which is one of the main criteria for proving that they are biphonemic compounds.

In syntagmatics, it is important to note the effect of the intense vibration of / r / sonant on the change of vowel phonemes, regardless of the position before or after a vowel. For example: / r: ɛmar / – shovel, / ger: ɛar / – fight, / r: ico / – rich, / kr: ɛr / – believe, / ar: uga / – wrinkle, / r: umor / – hear and so on.

In closed syllables which do not end in a consonant, / n /, / m /, / s /, / d /, / θ /, [e] occurs after the resonant / r /. This is because the listed consonants neutralize the effect of the consonant [r]. For example, / reḏ / – net, / respeto / – respect, / reḅdir / give and so on.

Interesting developments are observed in the variants of the Spanish phoneme / a /. The phoneme / a / is pronounced in the articulatory position in those positions where it occurs before back vowels, and before soft vowels the tongue moves forward. For example, [causa] is cause, [rauda] is speed, [haça] is axe və s.³¹

The third paragraph of the chapter deals with ***“The inventory of consonant phonemes in Spanish and explores its contentious issues”***.

In the literature on Spanish phonetics, there are different approaches to the classification of consonants. The principles of phoneme classification of the consonant subsystem are the main subject of disagreement in the research of leading Spanish linguists.

³¹ Berdnikova, O. Vyach. Contrastive-phonological analysis of the system of vocalizations of Russian and Spanish languages: /Diss. Candidate of Philological Sciences/ – Voronezh, 2003. – 121 p.

As the acoustic representation of phonemes is conditioned by the configuration of pronunciation members involved in the formation of a particular sound, the articulation factor plays an important role in the classification of language sounds. But here, too, linguists disagree. They also unreasonably include inactive members in articulatory features.³²

One of the main difficulties in determining the inventory of the consonant subsystem in the Spanish phonological system is related to the diversity of Spanish dialects due to the width of the area. Consequently, in order to determine the phonological content of each consonant phoneme, it is necessary to distinguish between the standard Spanish norm (español estandar) and the many variants of national dialects.

The phonetic classification of consonant sounds is found in the studies of T.Navarro Tomás, J.Alcina Franch and J.M.Belcua.³³ However, in addition to the phonetic classification, there are Spanish linguistics who describe the basis of phonological discrepancies in the inventory of the consonant system. For example, E.A.Llorach uses criteria of articulatory characteristics and distinctive features of phonemes.³⁴ The plosives / b /, / d /, / g / (in strong position) have got position variants – aspirants / b /, / d /, / g / (in weak position). The Spanish affricate /č/ is similar to the corresponding consonant in English, Italian and other languages. In Spanish literary norm the phoneme / s / is apical, common in Andalusia and Latin America. The velar phoneme / x / is more fricative than other affricates. There are

³²Alcina Franch J. Spanish Grammar / Alcina Franch J., Blecua J.M. – Barcelona: Ariel, – 1975. – 1274 p.; Quilis, A. Spanish phonetic and phonology course for Anglo-American students. / A.Quilis, J.A.Fernández. – Madrid: Higher Council of Scientific Research (Collectanea Phonetica 2). 10th edition, – 1982; Royal Spanish Academy. Outline of a new grammar of the Spanish language. / – Madrid: Espasa Calpe, – 1973, Phonology, – p.7-119; Canellada, M.J. Spanish pronunciation. Spoken and literary language. / M.J.Canellada, Madsen J.Kuhıman. – Madrid, – 1987. – 202 p.

³³ Alcina, Franch J. Spanish Grammar / Franch J. Alcina, J.M.Blecua. – Barcelona: Ariel, – 1975. – p.202-482

³⁴ Alarcos, Llorach E. Spanish Phonology. / Llorach E. Alarkos -4th ed. –Madrid. Gredos, – 1991. – 290 p.

not sonorants equivalents for all types in Spanish. There is a transition from / l / to / j /. The vibrant consonant / r / has many vibrations at the beginning of the word and after the consonants / n /, / l /, / s /, and in the inter-syllable position it has one vibration. The phoneme / rr / is in the intermediate position and differs from the phoneme / r / in this position in terms of phonematicity.³⁵

The phonotactic description of Spanish consonantism reveals the difficulties caused by dialectological factors due to the vast geography of Spanish territory. Dialectal variations constantly introduce phonetic changes into the official Spanish language, creating new phonological events in the language. Nevertheless, the phonological content of each consonant phoneme serves to delimit the boundaries of the standard norm (español estándar) and national dialect variations. Our small observations on the apical groups are a confirmation of this.

Spanish consonants have two main features: sonority and intensity. Spanish consonants vibrate in the throat. In Spanish, sonority is always combined with sounds in the nasal, tongue, vibration series. Others have both voiced and voiceless elements: the tension of the consonants is a feature of muscular activity. Tension creates a large articulatory force that stimulates the expansion of the sound element.

In the paragraph 4, *“The Phoneme System in Spanish as a Network of Phonological Encounters”* of the chapter II are also discussed Spanish phonemes. In contrastive-phonological oriented studies, all the components of the phonological system of the compared languages - phoneme composition, phonological structure, functional load of individual phonemes, features of combination of phonemes are reconciled. Phonemic analysis of the language system requires, first of all, to determine its phoneme inventory and its variants manifested in syntagmatics.

The concept of neutralization in the Moscow phonological school is based on positional substitutions. Position substitutions are

³⁵ Stepanov, G.V. Spanish in the countries of Latin America. / G.V.Stepanov. – M.: Publishing house of literature in foreign languages, – 1963. – 201 p.

conditioned by phonetic and morphological positions. In morphological positions, the sounds forming the phoneme are replaced. Among the Muscovites, who distinguish between parallel and intersecting position substitutions, the hyper phoneme was initially understood as a functional unit representing the phoneme system and proceeding from the position of neutralization, and at a later stage, a functional unit characterizing the phoneme composition of individual morphemes and representing the total part of neutralized phonemes was understood. In general, in modern phonology, phonological neutralization is understood to mean that the encounter disappears, that two phonemes do not differ in a certain phonological position. However, this does not mean that the concept of neutralization is accepted unambiguously in all phonological schools. For example, representatives of the Leningrad phonological school in their concept interpret the issues of weak and strong position and neutralization as replacements and do not accept the concepts of "archiphoneme" or "hyper phoneme". By considering the variants of consonant phonemes in Spanish, the following conclusions can be reached: the phonological capacity of consonants has a rich allophonic landscape; the frequency with which a phoneme is used in speech reveals its functional productivity; phonemes with high processing frequency usually have less relevant cues than phonemes with low processing frequency.

In bilateral/multilateral (bilateral/multilateral) oppositions in the subsystem according to the terminology of N.S. Trubetsky - unicriterion/multicriterion) phonemes enter into opposition according to the same set of distinguishing features. For example: the opposition to/x in Spanish is unilateral (bilateral), because the signs of mouth, palate (velar), deafness do not occur in other phonemes of the language. However, these phonemes form a multi-criteria opposition to the phoneme /g/. Examples of proportional (deaf and voiced) opposition in Spanish: /p/ - /b/, /t/ - /d/, /k/ - /g/, /f/ - /v/. an isolated opposition can be illustrated by the relationship between the vibrant /r/ and the lateral /l/ phonemes, which do not occur in any other encounters in the consonant system.

According to the relation of phonemes in the Spanish consonant subsystem, the phonological encounters can be described as follows:

a) For non-labial vowels on the rising sign in Spanish, the encounter /i/ – /e/ – /a/ occurs. This matchup is based on the high-mid-low bullish distinguishing mark. For labial vowels, the rising sign match is characteristic of phonemes /u/ - /o/. This matchup is based on the distinguishing feature of the members' upper and middle rise.

b) privative encounters: for example, deaf / tinny, nose / mouth, lips / non-lips, etc.

c) ranked matches. For example, the encounter between two vowels pronounced with different opening of the jaw or different height of the tone. For example: /u/ – /o/, /ü/ – /ö/, /i/ – /e/;

d) equivalent matches, for example: the relationship between the consonants /p/-/t/, /d/-/g/, /f/-/k/ in the Spanish consonant subsystem is an example of this.

In Spanish, vocalic oppositions (10 oppositions) are equivocal encounters. In all languages, neutralizing encounters represent uniformly privative encounters. Therefore, the neutralization of vowel encounters in Spanish is theoretically impossible, since only equivalent encounters exist in the Spanish phonological system.

Chapter III of the study is devoted to **“An experimental-phonetic analysis of combinatorial combinations of consonant phonemes in Spanish”**. The first paragraph of the chapter entitled **“Principles of selection of language material”** provides information about the technique of conducting the experiment, the selection of language material and announcers.

Up to 200 words and up to 50 sentences selected from the Spanish language were involved in the experimental-phonetic analysis. The sentences were selected based on the theoretical propositions referred to in the research paper. The services of Spanish speakers were used to tape the language material selected for the experiment. The pronunciation of both of the announcers who play the text fully meets the norms of literary pronunciation. Information about announcers:

Narrator I - Spanish, young, male, highly educated, citizen of Argentina living in Spain, his pronunciation corresponds to the Spanish literary pronunciation variant;

Narrator II is a Spanish, young, male, highly educated, Argentinian citizen living in Spain, whose pronunciation corresponds to the Spanish literary pronunciation variant.

The correct performance of the experiment depends on various conditions. One of these conditions is the selection of announcers to tape the material and informants to listen to the recorded material. "Praat" computer program was used in the experimental-phonetic study and analysis of the language material.

The language material intended for experimental-phonetic analysis was first voiced by native speakers (the process of speaking the text was repeated three times by announcers) and entered into the computer's memory. Although both announcers were familiarized with the experimental materials in advance, they were not given specific information about the purpose of the experimental-phonetic study, as this could in some way negatively affect the acoustic results obtained from the experiment.

At the next stage, computer programs of those words and sentences were obtained in the computer program. The acoustic parameters of the language material (frequency (F), intensity (Db) and time (T)) of the main tone were obtained using the capabilities of the appropriate computer program. Linguistic interpretation of the acoustic indicators obtained from the experiment was performed on the basis of the methodology developed by F.Y.Veysalli.

The language material was analyzed in the computer program "Praat". This program was developed by professors P.Boersma and D.Venik of the University of Amsterdam for special phonetic studies. The program is broadcast on the Internet. Praat software displays oscillograms and spectrograms with formants, fundamental frequency and intensity curves. The International Phonetic Alphabet (IPA) was used in the transcription of the text.

The second paragraph of the chapter analyzes *“The acoustic indicators of transitions in consonant combinations in Spanish”*.

Acoustic analysis of the language material in the research work was first carried out on individual words. The main issue in consonant combinations is the determination of the time spent on their pronunciation. For this, both the length of individual phonemes in each word and the temporal ratio of consonant combinations to the length of the entire word were distinguished. It is more appropriate to give the general result at the end of the experiment. Here we would like to move on to the acoustic analysis of individual words. For this purpose, we must measure the length of the whole word and the length of each phoneme included in the word, and consequently the length of the consonant clusters, and finally determine the temporal index of the segments included in the consonant cluster.

The methodology of conducting the experiment: first, the total time consumption of the word is determined, then the average phoneme length is found by dividing the total indicator by the number of phonemes. After that, the length of consonants included in the combination (coming in the neighborhood) is determined, and this total figure is divided by the number of segments included in the combination to find their individual absolute values.

The speakers spent 523 m/s to pronounce the word /drama/ (drama). The absolute length of the phonemes in the word is 104 m/s. The total time spent by the speakers in the consonant combination is 165 m/s. In a prepositional phrase, the time taken to pronounce the segments / d / and / r / of the consonant combination /dr/ is less than the time taken to pronounce each phoneme in the word. But in fact, if we take the consonants / d / and / r / by length parameters, the pronunciation of the phoneme / d / is 97 m/sec and the phoneme / r / is 68 m/sec. / sec. (see figure 3.1).

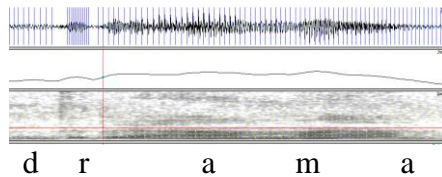


Fig. 3.1.

The average pronunciation time in the word / piedra / (stone) is 505 m/s, and the average pronunciation time of the phonemes is 84 m/s. 65 m/s and 66.5 m/s were used for the pronunciation of the components in the combination / dr / consonant in the middle of the word. The time taken for the first component is 1.5 m/s less than the time taken for the second component (see Figure 3.7).

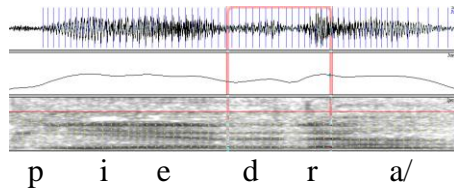


Fig. 3.7

/ dr / averages in the preposition and middle of consonant combinations

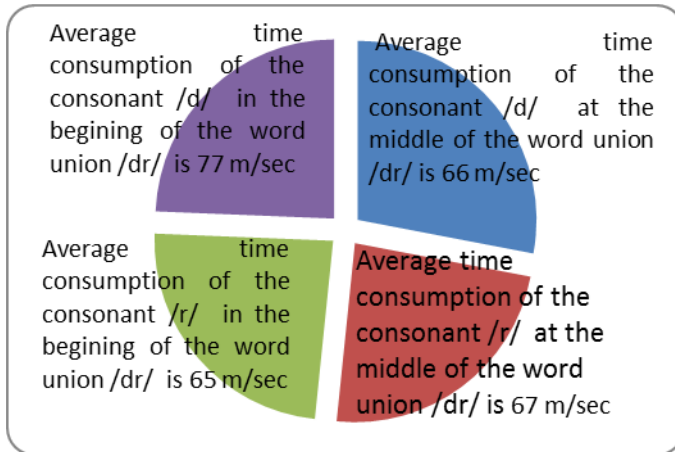


Fig. 3.13

In the thesis, the parameters of consonant combinations in different positions in Spanish were measured by this method, and the qualities of each word were defined in a summary table as follows:

Consonant compounds	Words	Absolute frequency	Medium speed	Price m / sec
/br/	/brazo/ arm	535 /b/ – 72 /r/ – 59	107	Thus, an experimental phonetic study of 50 words shows that the average length of the 12 consonant combinations is distributed between 98-125 m/sec. The length of each of these consonant combinations is about half of the total rate: 60:75 m/sec. This can be explained by the fact that the first component of a consonant combination is voiceless, plosive / p /.
/br/	/libro/ book	500 /b/ – 73 /r/ – 67	107	
/br/	/sobro/ envelope	669 /b/ – 74 /r/ – 66	124	
/bl/	/pueblo/ village	566 /b/ – 64 /l/ – 73	98	
/cl/	/clase/ class	592 /k/ – 78 /l/ – 74	103	

Paragraph 3 of the chapter analyzes “*Vowel+consonant or consonant+vowel combinations in Spanish*”.

Words selected from the Spanish language and pronounced by native speakers were used as research material. The results obtained from the oscillographic and spectrographic analysis of the language material are given in the tables. In addition, spectrograms were also used as illustrative material. The main goal of the research is to answer the following questions: 1) to study the coarticulation characteristics of vowel+consonant (VK) and consonant+vowel (KV) combinations; 2) to determine the degree of voice participation in VK and KV combinations; 3) to determine the length of the vowels involved in the combination.

In KV syllables, the interaction between the components is stronger. In KV syllables, the quality of the consonant is more dependent on the vowel, and the quality of the vowel is more dependent on the consonant. In a VC combination, both vowels and consonants are relatively weak. The nature of the transition area is determined by the following characteristics: The initial frequency of the forms F1 and F2, i.e. the frequency of the first two forms of the

vowel at the beginning of the vowel; the frequency of the end of the forms F1 and F2, i.e. the frequency that characterizes the stationary part of the vowel; the length of the transition areas, i.e the rate of change of the frequency of the formats F1 and F2.

A different transition region is observed in the sound of the vowel / a / in the position after apical consonants: although the frequency of the F1 form is lower than the stationary region of the vowel, the frequency of the F2 form is higher. From an articulatory point of view, this can be explained as follows: after the pronunciation of a consonant, the tongue is still in the forward-upward position required to produce a consonant (see Figure 3.141 a, b). In the position after the dorsal consonants there is no sharp transition zone in the initial phase of the vowel / a /: there is no significant change in the frequency of forms F1 and F2, which can be explained by the fact that / a / vowel is a back vowel (see Fig. 3.142 a).

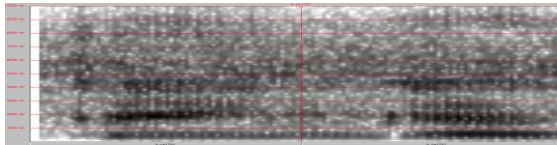


Fig. 3.142 a

In Spanish, when the vowel / e / is adjacent to the lip consonants, low frequencies are observed in the formats F1 and F2, which can be explained by the fact of the articulatory point of view, the initial phase of the vowel is closed. This causes the F1 and F2 formats to fall at the beginning of the vowel (the lips do not move from the active pronunciation position to the neutral position). The formant frequency of the vowel / e / after apical consonants attracts attention with its homogeneity, and this can be explained by the fact that the vowel / e / has the apical consonant. For example, in the words / de / and / te / (see Figure 3. 148 a).

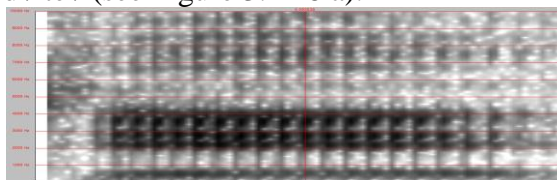


Fig. 3. 148 a

In the "vowel + consonant" combination, the consonant sound generated by acoustically different pronunciation members must affect not only the transition area of the vowel, but also its stationary part. In other words, vowels must differ from the initial phase before consonants that differ in place of formation. However, the analysis of spectrograms of "vowel + consonant" type combinations reflects a different picture, the formant frequency of the stationary part of the vowel does not depend on the acoustic quality of the next consonant (see Figure 3.158a, b).

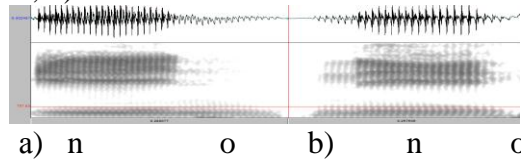


Fig. 3.158 a, b

Thus, spectral analysis can be used to study the characteristics not only of the stationary part of each phoneme, but also the changes that occur as a result of the influence of neighboring phonemes.

The presence of the nasal cavity in the formation of consonants leads to the formation of additional formants in their spectrum. However, only the lowest formant (called nasalization formant with a frequency of 200-300 hertz) has the intensity characteristic of oral vowels. The strengthening of the lowest harmonic of the sound source manifests itself in the increase of brightness (shadow) in the spectrograms. Relatively high nasal formants, which appear as horizontal bands in the spectrogram, regardless of the place of formation of the consonant, as a rule, do not have intensity due to a strong loss of energy when the air stream passes through the nasal cavity. Despite the fact that the air flow passes through the nasal cavity without obstruction, the intensity of consonants is significantly lower than the intensity of vowels.

Thus, through spectral analysis, it is possible to study not only the stationary (invariable) remaining part of each phoneme, but also the characteristics of changes that occur as a result of the influence of neighboring phonemes.

The analysis of the scientific-theoretical sources related to the topic of the research and the summary of the indicators of the

experimental-phonetic study of the linguistic material allow the following **conclusions** to be made:

1) The analysis of theoretical sources on the phonetics of the Spanish language shows that, although there are no serious differences of opinion regarding the composition of the phoneme inventory, uncertainty prevails on certain issues, for example, on the phonetics of diphthongs and triphthongs. The second controversial issue in the vowel system of the Spanish language is related to the idea that it has nasal vowels. However, there are no "pure" nasal vowels in the Spanish phonological system. Instead, "pure" vowels are "vowel+nasal consonant" (there are 3 nasal consonants in Spanish: /m/, /n/, /ɲ/), which leads us to claim that it is a phenomenon of phonetic nature. based on theoretical provisions, referring to the analysis of language material, it can be said that the phonological system of the modern Spanish language has 5 vowel-monophthongs in the vowel subsystem;

2) There are restrictions on phoneme combinations in the language, which allows us to determine universal and special features in a specific language. A syllable is a minimal unit of pronunciation in which vowels and consonants are aligned to a single pronunciation denominator. A syllable is a primary linguistic space that reflects the combinatorial features of the phoneme system of the language to which it belongs and the distribution possibilities of individual phonemes in the word structure;

3) In addition to the composition of consonant phonemes in Spanish, there is disagreement among linguists in their classification based on the articulatory factor. For example, some linguists propose the distinction of 7 articulatory signs (lip, lip-dental, interdental, dental, alveolar, palatal, velar), while others propose the distinction of five articulatory signs (being the rest except interdental and labial-dental);

4) There are no diphthongs and triphthongs in the vowel subsystem of the Spanish language. According to the current theoretical ideas, the diphthong should not be morphologically divided into components. However, Spanish "diphthongs" cross a morphological boundary, which is the main linguistic criterion proving that they are biphonemic compounds;

5) The distributional analysis of the language material shows

that two-phoneme compounds (72 compounds) are typical in Spanish. As a result of the phonotactic analysis of the language material, 9 basic syllabic patterns in the Spanish language were determined - V, VK, VKK, KV, KVK, KVKK, KKV, KKVK, KKVKK. The most common syllable pattern in Spanish is KV (mainly after stress in medial position), followed by KVK (43% of the total number of stressed syllables). In the development of syllabic patterns in Spanish, open syllabic patterns are predominant (72% of the total number);

6) In the 12 consonant combinations involved in the phonetic analysis, their length in the initial position can vary between approximately +5, -6 m/s. The time parameter of consonant combinations in Spanish depends on the acoustic quality of the components and their phonetic position in the word structure.

7) At the beginning of the word, "deaf" and "voiced" plosive-explosive consonants differ in length of pronunciation: deaf consonants are pronounced longer than voiced consonants. In addition, the participation of the vocal cords in the pronunciation of voiced consonants is significantly weakened. In the pronunciation of words, the main tone frequency is completely absent or weak in the voiced consonants.

8) In "consonant+vowel" KV type syllables, serious changes in the stationary part of vowel sounds are observed in the vicinity of nasal consonants. In KV-type syllable structures, nasalization is also observed in the stationary part of the vowel.

The main content and provisions of the dissertation are reflected in the following theses and articles of the author:

1. Aliyeva, S.Kh. On the types of syllables in Spanish // – Baku: Baku Slavic University, Actual Problems of the Humanities, – 2015. No. 4, – p.34-38.
2. Aliyeva, S.Kh. On the distribution of phonemes in Spanish language // – Baku: ANAS, Institute of Manuscripts named after M.Fuzuli, Philological issues, – 2015. No. 2, – p.170-177.
3. Aliyeva, S.Kh. The structure of a syllable as an object of syntagmatic research // – Russia: Issues of Humanitarian Sciences, – 2015. No. 6, – p.67-72.
4. Aliyeva, S.Kh. The main criteria for determining the phonological system of the language. // – Baku: Qafqaz

- University, IV International Scientific Conference Young Researchers; – Precedings, 2 nd book, – 2016, – p.922-923.
5. Aliyeva, S.Kh. On the segmental- structural formation of syllable models (on the material of Spanish language) // – Canada: International Journal of English Linguistics – October, – 2016. (Print), Vol.6, No.5, – p.139-146.
 6. Aliyeva, S.Kh. On mastering the pronunciation features of the second language // Material of the International scientific conference “Actual problems of cognitive and applied linguistics”. – Baku: AUL, – 20-21 October, – 2016, – p.394-396.
 7. Aliyeva, S.Kh. Phoneme system in Spanish as a network of phonological encounters // – Baku: Azerbaijan State Pedagogical University, Pedagogical University News, – 2016. No 1, – p.37-43.
 8. Aliyeva, S.Kh. The vowel phonemic inventories in Spanish language and their controversial issues // Held by Scieuro in London: 9th International Scientific Conference "Science and Society". – London: – 24-29 November, – 2016, Vol.3, № 1, – p.126-133.
 9. Aliyeva, S.Kh. Notes on Spanish consonants // – Baku: ANAS, Institute of Manuscripts named after M.Fuzuli, Philological issues, – 2016. No 11, – p.172-179.
 10. Aliyeva, S.Kh. Phonological analysys of the phoneme system in Spanish // Modern Directions of Scientific Research Development, Proceedings of X International Scientific and Practical Conference. – Chicago, USA: – 23-25 March, – 2022, p.196-201.
 11. Aliyeva, S.Kh. The definition of vowels and consonants in Spanish // Научное обозрение: актуальные вопросы теории и практики сборник статей VII Международной научно-практической конференции. – Пенза: – 25 октября, – 2023, № 34, – с.127-130.
 12. Aliyeva, S.Kh. The realization of the Spanish consonant phonemes in a speech // Proceedings of the 4th International Scientific Conference «Reviews of Modern Science». – Zürich, Switzerland, – 19-20 October, – 2023, – p.174-178.
 13. Aliyeva, S.Kh. On the phonotactic regularities of Spanish consonants // – Baku: Baku Girls University, Scientific Works, – 2023. Vol. 16, №3, – p.171-176.

The defense will be held on 04 March 2024 at 12.00 at the meeting of the One-time Dissertation Council BFD 2.12 established on the basis of Dissertation Council ED 2.12 of the Supreme Attestation Commission under the President of the Republic of Azerbaijan operating at the Azerbaijan University of Languages.

Address: AZ 1014, Baku, Rashid Behbudov Street, 134.

Dissertation is accessible at the Azerbaijan University of Languages Library.

Electronic version of the abstract is available on the official website of the Azerbaijan University of Languages.

Abstract was sent to the required addresses on 02 February 2024.

A handwritten signature in blue ink, appearing to be 'S. K.', is located at the bottom left of the page.

Signed for print: 02.02.2024

Paper format: 60x84 1/16

Volume: 42551 characters

Number of hard copies: 20