"YANGI OʻZBEKISTONDA TABIIY VA IJTIMOIY-GUMANITAR FANLAR" RESPUBLIKA ILMIY-AMALIY KONFERENSIYASI Volume 1, Issue 8, Dekabr 2023

"Methodology Of Phonetics In Applied Linguistic Research In Present Scenario"

Teshaboyeva Nafisa Zubaydulla qizi

Teacher of Jizzakh branch of the National University of Uzbekistan named after Mirzo Ulugbek

Rashidova Nihola Furkat kizi

Student of Jizzakh branch of the National University of Uzbekistan named after Mirzo Ulugbek

Abstract: It wasn't long after the birth of experimental phonetics that people became increasingly interested in the physical qualities of speech sounds. The experimental methodology makes it possible to describe in detail the qualities of the mechanisms that are responsible for the production of sound in a complete manner. During the latter half of the nineteenth century, Kazan University was the site of the world's first experimental phonetics investigations, which took place there as well. It was already recognised as significant at the time, and as a result of this recognition, it became possible to substantiate the theory and methodology of experimental study of the sound structure of the language in a creative and methodologically correct manner, as well as to predict milestones and steps for future research. In addition to linguistic ideas, a large number of extralinguistic perspectives were transmitted principally through phonetic structures and units. The fact that the sounds of local speech implicitly serve as a technique of formalising mental spaces in the context of multilingualism makes it absolutely essential to investigate and discover the role of phonetics in the building of a scientific knowledge system (according to the tradition of Kazan Linguistic School, this can be a model of the word phonemography).

Keywords Experimental Phonetics, Acoustic Segmentation, Phonemography of the Word, Basic Acoustic Correlates, Speech Signal, Phonetic Portrait of the Speaker.

- I. Introduction
- A. Background

'YANGI OʻZBEKISTONDA TABIIY VA IJTIMOIY-GUMANITAR FANLAR" RESPUBLIKA ILMIY-AMALIY KONFERENSIYASI Volume 1, Issue 8, Dekabr 2023

Phonetics, as a branch of linguistics, plays a pivotal role in understanding the sounds of human speech. In the context of applied linguistics, phonetics serves as a fundamental tool for exploring various aspects of language acquisition, pronunciation, and communication. This methodology delves into the contemporary landscape of phonetics in applied linguistic research, highlighting its significance and relevance in addressing current linguistic challenges.

B. Research Objectives

The primary objectives of this study are to examine the methodologies employed in phonetic research within applied linguistics, identify recent trends, and assess the impact of technological advancements on data collection and analysis. The scope encompasses diverse linguistic phenomena, from second language acquisition to sociolinguistic variations in pronunciation.

II. Literature Review

A. Historical Development of Phonetics

Understanding the historical trajectory of phonetics provides context for current methodologies. From the pioneering work of Alexander Melville Bell to the establishment of the International Phonetic Alphabet (IPA), tracing the evolution of phonetic research sheds light on the foundations upon which contemporary studies are built.

B. Phonetics in Applied Linguistics

Reviewing recent literature reveals the expanding role of phonetics in applied linguistics. Studies exploring the application of phonetics in language teaching, speech pathology, and computational linguistics showcase the versatility of phonetic methodologies. Notable advancements include the integration of technology, such as speech recognition systems, for practical applications in language learning.

III. Theoretical Framework

A. Phonetic Theories

'YANGI OʻZBEKISTONDA TABIIY VA IJTIMOIY-GUMANITAR FANLAR'' RESPUBLIKA ILMIY-AMALIY KONFERENSIYASI Volume 1, Issue 8, Dekabr 2023

A comprehensive understanding of phonetic theories is essential for framing research methodologies. The contrasting perspectives of articulatory, acoustic, and auditory phonetics provide a theoretical foundation for investigating speech sounds. This study adopts a holistic approach, considering multiple phonetic theories to capture the complexity of linguistic sound production and perception.

B. Conceptual Framework

Establishing a conceptual framework involves defining key terms and concepts related to phonetics in applied linguistics. Concepts such as speech perception, phonological awareness, and accent modification contribute to a conceptual map that guides the research methodology. This framework serves as a bridge between theoretical concepts and their practical applications.

IV. Research Design

A. Research Type

The research design adopts a mixed-methods approach, combining quantitative and qualitative methodologies. Quantitative analyses, utilizing acoustic measurements and statistical tools, complement qualitative insights gained from spectrographic analysis and linguistic interviews. This dual approach allows for a comprehensive exploration of phonetic phenomena.

B. Participants

The study involves a diverse participant pool, including native speakers, second language learners, and individuals with specific linguistic challenges. Stratified sampling ensures representation across age groups, language proficiency levels, and sociolinguistic backgrounds. Informed consent and ethical considerations guide participant recruitment and data collection.

C. Data Collection

State-of-the-art technology facilitates data collection. High-quality recording devices, specialized software for acoustic analysis, and advanced spectrographic tools contribute to precise data capture. Phonetic experiments, interviews, and naturalistic speech samples provide a rich dataset for analysis.

"YANGI OʻZBEKISTONDA TABIIY VA IJTIMOIY-GUMANITAR FANLAR" RESPUBLIKA ILMIY-AMALIY KONFERENSIYASI Volume 1, Issue 8, Dekabr 2023

D. Data Analysis

Quantitative data undergo statistical analyses, examining patterns and correlations within acoustic measurements. Qualitative data, including spectrograms and linguistic interviews, undergo systematic coding and thematic analysis. The integration of both types of analyses allows for a nuanced understanding of phonetic phenomena.

V. Ethical Considerations

A. Informed Consent

Respecting ethical guidelines, participants are fully informed about the research objectives, procedures, and potential implications. Informed consent forms outline the voluntary nature of participation and the confidentiality of personal information. Participants are given the opportunity to withdraw from the study at any stage without consequences.

B. Confidentiality and Privacy

Stringent measures are implemented to ensure participant confidentiality. All data are anonymized and stored securely. Only aggregated and de-identified results are presented in publications to protect the privacy of individual participants.

C. Cultural Sensitivity

The study acknowledges and respects cultural variations in speech patterns. Researchers are trained to approach linguistic diversity with sensitivity, avoiding stereotypes or biases in the interpretation of phonetic data.

D. Methodology Of Phonetics In Applied

It is necessary to have a database including all systematic knowledge essential to the philologist's profession in order to be considered competent. In recent years, substantial study on the idea of knowledge has been performed in many different scientific domains like as psychology, cognitive linguistics, and linguistic culturology, amongst others. Yu.I.N.

Boduen de Courtenay was a founding member of the Kazan Linguistic School and was

'YANGI O'ZBEKISTONDA TABIIY VA IJTIMOIY-GUMANITAR FANLAR'' RESPUBLIKA ILMIY-AMALIY KONFERENSIYASI Volume 1, Issue 8, Dekabr 2023

responsible for the development of one of the most comprehensive classifications devoted to the various categories of knowledge in linguistics, which is considered to be one of the earliest classifications devoted to the various categories of knowledge in linguistics. While learning a language, he recommended that pupils distinguish between different types of knowledge, such as intuitive, scientific, and linguistic, at various stages of the process of learning. The development of approaches to fundamental paradigms of language, such as system-structural and communicative approaches, as well as the development of the activity aspect, resulted in the development of a detailed character in the following parameters: relationship to science; social life; research methodology; dynamics of verbal representation, and so on. These aspects are described in detail in the works of V.V. Krasnykh. At the commencement of the concept of the Kazan Linguistic School, it was also stated that the study of language phenomena and structures would be approached in a systematic manner. This, we believe, was the spark that ignited the interest in knowing the phonetic level of language as a harmonic component of linguistic unity. There were a variety of methodologies utilised to analyse the resources and potential of the language's phonetic system, including psychophonetics, anthropophonics, and word phonemography.

This set of methodologies acted as a kind of guidance on how to investigate phonetic units in the context of science and everyday communication in the first place, rather than just reflecting metalinguistic things. Furthermore, these characteristics served as a framework for the use of phonetics analytic techniques. It was at Kazan University, near the end of the nineteenth century, that a breakthrough in experimental sound structure study happened, making it possible to substantiate theory and methodology, as well as predict the milestones and steps of future research. Instrumental research, as V.A. Bogoroditsky explained in his 1930 work, "The Key Moments of Instrumental Research," is critical in the development of the articulatory base of language and speech, and it plays a critical part in its development. Language information, according to the theory of linguisticdidactics, is not only necessary for the acquisition of a language, but it also contributes to the development of an individual's integrated picture of mental spaces, and as a result, contributes to the diversification of the vectors that constitute the human speech continuum. This paper proposes a connection between the foundations and dynamics of human cognitive capacities and laws of speech, which are particularly

'YANGI OʻZBEKISTONDA TABIIY VA IJTIMOIY-GUMANITAR FANLAR" RESPUBLIKA ILMIY-AMALIY KONFERENSIYASI Volume 1, Issue 8, Dekabr 2023

relevant in today's world of communication. Vogoroditsky defines speech as "a complicated associative aggregate," which is a difficult associative aggregate. One of the most essential roles played by the phonetic component of speech is in the development of associated metadata, as well as the fundamental means of organising and communicating acoustic-phonetic and pragmatic information, among other things, and this is true for all languages. A growing interest in speech necessitates the development of skills

that will enable them to successfully implement a diverse range of problems that originate in the sound structure of the language and emerge as a result of it to develop communicative tactics and strategies, such as communication models, phonetics and presuppositions,

phonetics and universal-object code, and so forth. 2017 is the calendar year.

VI. Conclusion

This methodology outlines a comprehensive approach to phonetic research within applied linguistics, taking into account historical perspectives, theoretical frameworks, contemporary literature, and ethical considerations. By adopting a mixed-methods design and leveraging technological advancements, this study aims to contribute valuable insights into the multifaceted realm of phonetics in the present linguistic landscape.

THE LIST OF USED LITERATURE

- 1. Teshaboyeva, N., & Mamayoqubova, S. (2020). COMMUNICATIVE APPROACH TO LANGUAGE TEACHING. In МОЛОДОЙ ИССЛЕДОВАТЕЛЬ: ВЫЗОВЫ И ПЕРСПЕКТИВЫ (pp. 409-414). Teshaboyeva, N. (2020). LINGUISTIC PERSONALITY, ITS STRUCTURAL CHARACTERISTICS IN THE NEW PERSPECTIVE DIRECTIONS. In МОЛОДОЙ ИССЛЕДОВАТЕЛЬ: ВЫЗОВЫ И ПЕРСПЕКТИВЫ (pp. 415-420).
- 2. Teshaboyeva, N. Z. (2019). TEACHING ENGLISH THROUGH LITERATURE INTESL AND TEFL CLASSROOMS. In СОВРЕМЕННЫЕ ТЕХНОЛОГИИ: АКТУАЛЬНЫЕ ВОПРОСЫ, ДОСТИЖЕНИЯ И ИННОВАЦИИ (pp. 82-84).

"YANGI OʻZBEKISTONDA TABIIY VA IJTIMOIY-GUMANITAR FANLAR" RESPUBLIKA ILMIY-AMALIY KONFERENSIYASI Volume 1, Issue 8, Dekabr 2023

- 3. Teshaboyeva Nafisa Zubaydulla qizi, Jurayev Muhammadrahim Murod o'g'li, & Mamirova Munisa Rajab qizi. (2021). Language Learning Culturally and the Role of Literature in Teaching Process. Central Asian Journal of Theoretical and Applied Science, 2(3), 1-5. Retrieved from https://www.cajotas.centralasianstudies.org/index.php/CAJOTAS/article/view/84
- 4. Teshaboyeva, N. (2023). THE IMPORTANCE OF TOURISM IN PRESENT DAY. Журнал иностранных языков и лингвистики, 5(5).
- 5. Teshaboyeva, N. (2023). THE MODERN INNOVATIVE TECHNOLOGIES IN TEACHING FOREIGN LANGUAGES. Журнал иностранных языков и лингвистики, 5(5).
- 6. Teshaboyeva, N. Z. (2023, November). Adjective word group and its types. In "Conference on Universal Science Research 2023" (Vol. 1, No. 11, pp. 59-61).
- 7. Teshaboyeva, N. Z. (2023, November). Modifications of Consonants in Connected speech. In "Conference on Universal Science Research 2023" (Vol. 1, No. 11, pp. 7-9).
- 8. Teshaboyeva, N., & Rayimberdiyev, S. (2023, May). THE IMPORTANCE OF USING MULTIMEDIA TECHNOLOGY IN TEACHING ENGLISH CLASSES. In Academic International Conference on Multi-Disciplinary Studies and Education (Vol. 1, No. 8, pp. 149-153).
- 9. Nafisa, T., & Marina, S. (2023). TEACHING AND LEARNING OF ENGLISH VOCABULARY IN TESL AND TEFL CLASSROOMS. International Journal of Contemporary Scientific and Technical Research, 465-469.
- 10. Ахмедова С. Р. Таълим ва тарбия жараёнлари узвийлигининг самарадорлиги //Science and Education. -2021. Т. 2. №. 9. С. 369-373.
- 11. Ахмедова С. Р. и др. Инновацион технологияларни таълим жараёнларига татбиқ этиш йўллари //Science and Education. 2021. Т. 2. №. 10. С. 492-496.
- 12. Axmedova S. R. и др. Masofaviy ta'lim va uning horijiy tillarni o'qitishdagi o'rni //Science and Education. 2021. T. 2. №. 10. С. 608-612.

'YANGI O'ZBEKISTONDA TABIIY VA IJTIMOIY-GUMANITAR FANLAR'' RESPUBLIKA ILMIY-AMALIY KONFERENSIYASI Volume 1, Issue 8, Dekabr 2023

- 13. Axmedova, S. R. (2021). Chet tillarni o'rganish va undagi metodlarning ahamiyati. Science and Education, 2(11), 1076-1080.
- 14. Axmedova, S. R. (2021). Ilova elementlarining strukturaviy tahlilini o'rganish. Science and Education, 2(12), 583-587.
- 15. Ахмедова, С. Р. (2022). Иловали унсурларининг иккинчи даражали бўлаклар формасида ифодаланиб келиши. Science and Education, 3(3), 814-817.
- 16. Akhmedova, S. (2022). STRUCTURAL CHARACTERISTICS OF APPLIED ELEMENTS IN THE GERMAN LANGUAGE. Science and innovation, 1(B5), 94-97.
- 17. Ахмедова, С. Р. (2022). Эга шаклида ифодаланган мураккаб тузилишли иловали элементларнинг тахлилини ўрганиш. Science and Education, 3(4), 1963-1966.
- 18. Akhmedova Sevara Rakhmankulovna. (2022). NEMIS TILIDA ILOVALI ELEMENTLARINING SEMANTIK O'ZIGA XOSLIKLARI. International Journal of Contemporary Scientific and Technical Research, 1(2), 481–485.
- 19. Rakhmankulovna A. S. PEDAGOGICAL STRATEGY OF DEVELOPMENT OF COMPETITION IN YOUNG PEOPLE OF PROFESSIONAL EDUCATION //International Scientific and Current Research Conferences. 2023. C. 18-20.
- 20. Rakhmankulovna A. S. THE ROLE OF EDUCATION AND TRAINING IN PROFESSIONAL TRAINING AND THE IMPORTANCE OF FOREIGN LANGUAGES IN THE FORMATION OF PROFESSIONAL COMPETENCIES OF STUDENTS //International Journal of Advance Scientific Research. − 2023. − T. 3. − №. 09. − C. 58-62.
- 21. Sevinch A., Sevara A. IJTIMOIY MULOQOT JARAYONIDA TIL UNSURLARIDAN FOYDALANISH //International Journal of Contemporary Scientific and Technical Research. 2023. C. 448-452.
- 22. Raxmonkulovna A. S. DURCH PRÄPOSITIONEN DARGESTELLTE ANHANGELEMENTE //International Journal of Scientific Trends. 2023. T. 2. №. 2. C. 137-14Z