

REVIEW

by Prof. Dr. Snezhina Lyubozarova Dimitrova

**Department of English and American Studies, Faculty of Classical and Modern Philology,
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of the PhD dissertation for the acquisition of the educational and scholarly degree "**Doctor**"
in the field of higher education 2. Humanities
professional field 2.1 Philology
PhD programme Romance Languages

Author: Rosina Aleksieva Kakova

Title: The Vowels of French and Bulgarian – Acoustic Description with Consideration of the
Perceptual Integration of their Frequency Components

Supervisor: Assoc. Prof. Dr. Rusi Nikolov – Plovdiv University "Paisii Hilendarski"

1. General presentation of the procedure and the doctoral candidate

By order No. ПД-22-282 / 06.02.2025 of the Rector of Plovdiv University "Paisii Hilendarski" I have been appointed as a member of the scientific jury for the procedure for the defense of the doctoral dissertation entitled "The Vowels of French and Bulgarian – Acoustic Description with Consideration of the Perceptual Integration of Their Frequency Components" for the acquisition of the educational and scientific degree "Doctor" in the field of higher education 2. Humanities, professional field 2.1 Philology, doctoral programme in Romance Languages. The author of the dissertation is Rosina Alexieva Kakova – PhD student at the Department of Romance and Germanic Studies, supervised by Assoc. Prof. Dr. Rusi Nikolov from Plovdiv University "Paisii Hilendarski".

The set of materials submitted by R. Kakova in electronic format complies with Art. 36 (1) of the Regulations for the Development of the Academic Staff at Plovdiv University and includes the following documents:

- Application form addressed to the Rector of Plovdiv University to initiate the procedure for the defense of the dissertation;
- CV in European format;
- Minutes from the departmental council meeting reporting the readiness to initiate the procedure and outlining the preliminary discussion of the dissertation;
- Dissertation;

- Author's summary of the dissertation (in Bulgarian and in French);
- List of scientific publications related to the dissertation topic;
- Copies of the scientific publications (3 copies);
- Declaration of originality and authenticity of the submitted documents;
- Report on compliance with the minimum national requirements;
- Opinion of the supervisor.

2. Relevance of the topic

The issue of the acoustic characteristics of French and Bulgarian vowels which is investigated in R. Kakova's dissertation, is relevant and topical both scientifically, in the context of contrastive linguistic analysis, and from an applied perspective in the context of teaching French pronunciation to Bulgarians. The author has justified very well the need for a contemporary contrastive study of the vowels in the two languages using modern software for acoustic analysis of speech. The object, goals, and immediate research tasks of the investigation are clearly defined in the Introduction of the dissertation.

3. Knowledge of the problem

The doctoral candidate demonstrates a good understanding of the problem, as evidenced by the review of the scientific literature on the topic of the dissertation.

Chapter 1 presents an outline of existing research on the vowels in both languages under investigation. Regarding Bulgarian, it is only natural that due attention has been given to the pioneering study by D. Tilkov (1970). However, a couple of important papers published in the last decade have not been mentioned, namely:

Andreeva, B., W. Barry & J. Koreman (2013) The Bulgarian stressed and unstressed vowel system. A corpus study, in: *14th Annual Conference of the International Speech Communication Association, Interspeech 2013*, Lyon, France, pp. 345-248.

Sabev, M. (2023) Unstressed vowel reduction and contrast neutralization in western and eastern Bulgarian: A current appraisal, *Journal of Phonetics*, vol. 99, July 2023.

Both of the above publications provide reference values for F1 and F2 of Bulgarian stressed vowels which are relevant to section 1.10.2 of the present thesis, entitled "Reference formant values for Bulgarian vowels".

The literature review on issues related to the teaching of foreign language pronunciation, which is presented at the end of Chapter 2 and predominantly in Chapter 3 of the dissertation, likewise demonstrates R. Kakova's good knowledge of these topics. Here, I have some technical notes regarding the rendition into Bulgarian of certain names. Thus, the surname of the "father" of the

SLM model, J. E. Flege, should either be transcribed into Bulgarian as Флейги or simply transliterated as Флере; Crothers should be transcribed as Кродърс. I also consider some Bulgarian translations of terms and concepts inappropriate, e.g., "контрастен анализ" – p.81, instead of the accepted "контрастивен анализ," "гласен триъгълник" – p. 37, etc. In section 3.3, the author refers to the "vowel triangle" created by D. Jones: in fact, D. Jones' cardinal vowel system is graphically represented as a trapezoidal quadrilateral (and it is still part of the International Phonetic Alphabet).

These (mostly technical) notes do not affect my positive evaluation of the author's good knowledge of the literature on the issues under investigation in the dissertation.

4. Research methodology

The research methodology has been carefully selected, and its choice – justified in detail in Chapter 2. Given the research objectives, the acoustic analysis using the TREFL module and the Speech Analyzer software proves to be particularly effective and contributes to achieving the research goals. The decision to analyse journalistic radio interviews is very well justified as well, but a very small number of vowels have been selected and actually analyzed. It also remains unclear the speech of how many speakers was analyzed, what the speakers' age was, etc. – information that is typically provided in the methodology section of studies of this kind.

5. Description and evaluation of the dissertation and its contributions

The dissertation consists of 162 pages and is divided into an Introduction, three chapters, a Conclusion, a list of scientific contributions, three appendices, a declaration, and a bibliography containing a total of 196 sources. The theoretical review presented in the first chapter is comprehensive and thorough, with due attention having been given primarily to the foundational studies in the chosen scientific field. R. Kakova demonstrates a good understanding of the terminology of contemporary acoustic phonetics. The second chapter contains the main contributions of the dissertation, namely: a good choice of analytical method, software, and empirical material, and an innovative approach to the acoustic-phonetic description of vowels with consideration of F3 values which play an essential role in describing the front rounded vowels in French. However, I would recommend that the final sections of this chapter (2.7 and 2.8) be included in the following third chapter. In the third chapter, the appropriateness and (potential) use of methods for the acoustic description of vowel sounds in foreign language teaching are discussed. It would be useful to also design and include exercises based on the results of the acoustic-phonetic analysis of learners' production, as well as methodological proposals for linking these results with mastering the correct articulation of vowels in the foreign language.

6. Assessment of the publications and the doctoral candidate's personal contribution

R. Kakova has presented a total of 3 published articles. All articles were written independently by the doctoral candidate and are related to the topic of the dissertation.

7. Author's summary

R. Kakova has submitted a summary of the text of her thesis in both Bulgarian and French. It has been prepared in accordance with the requirements of the Regulations for the Development of the Academic Staff. The summary accurately reflects the content and main research results described in the dissertation.

8. Recommendations for future use of the dissertation's contributions and results

The results from the acoustic-phonetic analysis of some French and Bulgarian vowels reported in the dissertation can serve as the basis for creating practical activities to help Bulgarian speakers master the production of French vowels, while also clarifying the relationship between acoustic characteristics, perception, and articulation.

CONCLUSION

The dissertation contains both scientific and applied results which constitute original contributions to the study of Bulgarian and French vowels. It meets the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (LDASRB), the Regulations for the Application of LDASRB, and the respective Regulations of Plovdiv University "Paisii Hilendarski."

The dissertation demonstrates that the doctoral candidate, Rosina Alexieva Kakova, possesses in-depth theoretical knowledge and practical skills in her chosen field, and shows an ability for independently conducting scientific research.

Based on the above, I give my positive evaluation for the research presented in the dissertation under review, and I recommend to the esteemed scientific jury to award the educational and scientific degree "Doctor" to Rosina Kakova in the field of higher education 2. Humanities, professional field 2.1 Philology, doctoral programme in Romance Languages.

31.03.2025

Reviewer:

Prof. Dr. Snezhina Dimitrova