Building an acoustic atlas from a traditional linguistic atlas: theoretical assumptions, challenges, procedures, and results

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This presentation will show how the AVOC – Acoustic Atlas of Portuguese Stressed Vowels – was built from the ALEPG – Linguistic and Ethnographic Atlas of Portugal and Galicia –, whose data were collected from 1973 to 1997 in accordance to traditional European linguistic atlas procedures. We will see AVOC's history from the beginning up until its present phase, when more than two thirds of the target area are already fully analyzed and its methodology has been exhaustively tested. Our approach will take on a *case-study* point of view, given the extreme scarcity of Acoustic Dialectology studies in most world languages, particularly acoustic atlases (for which precedents are extremely rare).

Three fundamental questions will be considered:

- 1) The theoretical problem behind the AVOC: why, despite the significant methodological challenges presented by the acoustic analysis of a traditional linguistic atlas' sound archive, we must still study a type of informant that is almost extinct in present-day Portugal and similar countries;
- 2) The practical problem: how we can acoustically analyze data collected in a methodological paradigm that is totally different from that of Laboratorial Phonetics; an interdisciplinary solution: using the body of knowledge from parallel fields of study (e.g., Forensic Phonetics) that systematically deal with *bad acoustic data*;
- 3) Demonstration of the validity of AVOC's approach: a synthesis of AVOC's main results up to the present (e.g., reformulation of the picture of Portuguese central-southern dialects).

Two important points will then become clear: (i) traditional sound archives are fully valid for contemporary acoustic approaches on the study of dialects, as long as the adequate tools are used; (ii) interdisciplinary approaches bring decisive advancements to current Dialectology. These two points will in turn allow us to make a case for the development of Acoustic Dialectology, which has not yet sufficiently gone beyond the walls of the laboratory.