

A SURVEY OF PHONETICS EDUCATION IN ITALIAN UNIVERSITIES

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ABSTRACT

This paper summarises and comments on the results of a web-based survey that was designed to collect qualitative and quantitative data on phonetics education in Italian universities. The analysis of the data collected makes it possible to present results and make considerations on the type of courses in which phonetics is taught, on the contents that are presented in classes, on the teaching strategies implemented by the academics, on their professional profile, and on their objectives when teaching phonetics.

Keywords: phonetics education, phonetics pedagogy, teaching phonetics.

1. INTRODUCTION

Phonetics is being taught in an increasing number of university settings [1], partly as a result of its practical usefulness [2]. Research on phonetics education, however, is uncommon, certainly less so than research in any other area of the discipline. For example, a search in the proceedings of the International Congress of Phonetic Sciences reveals that from 1979 to 2019 only 5 sessions and 17 contributions were devoted to the topic.

Although interest in the subject has been growing in recent years (see the papers in the proceedings of the Phonetics Teaching and Learning Conference series [3]; as well as [4]), to the best of my knowledge, none of the available contributions deal with the topic with exclusive and explicit reference to the Italian situation¹.

Therefore, the aim of this paper is to fill the gap by offering a first characterisation of phonetics education in Italian universities, so as to understand how it compares with other experiences in Europe and around the world, and how improvements can be made.

2. METHODOLOGY

A survey was conducted among professors, readers, and lecturers teaching phonetics in Italian universities. For this purpose, a web-based questionnaire was designed to collect both quantitative and qualitative information. The questionnaire was completely anonymous and did not

collect any personal data about the respondents. The questionnaire contained both compulsory (n=29) and optional (n=9) response questions and both closed-ended (n=24) and open-ended (n=14) questions. The questionnaire was constructed using the SoSci Survey software [5] and was made available to interested parties at <https://www.soscisurvey.de/phonedit>. In order to recruit as many respondents as possible, in November 2022 the link to the questionnaire was posted in the newsletters of six Italian scientific associations and societies among whose members one might expect to find professors, readers, or lecturers teaching phonetics, namely *Associazione Italiana di Audiologia e Foniatria* (Italian Society of Audiology and Phoniatrics), *Associazione Italiana di Linguistica Applicata* (Italian Association of Applied Linguistics), *Associazione Italiana di Scienze della Voce* (Italian Association of Speech Sciences), *Associazione Universitaria Otorinolaringologi* (University Association of Otolaryngologists), and *Società di Linguistica Italiana* (Italian Society of Linguistics).

3. RESULTS AND DISCUSSION

The link to the questionnaire was clicked on 298 times; 94 people answered at least some questions in the questionnaire; 52 people answered all the questions in the questionnaire. In the rest of the paper, only data from completed questionnaires are presented and commented on. Although the database is not particularly large, it is still sufficient to reveal some general trends that can be compared with those that have emerged in previous surveys, for example the one described in [6].

The web-based questionnaire was used to collect quantitative data that were analysed by the Microsoft® Excel® software program (Version 2302) alongside qualitative data in which themes and patterns were identified. A summary of the results is presented below, organized into six thematically distinct sub-sections.

3.1. Which study courses teach phonetics?

The quantitative data collected through closed questions show that in Italian universities phonetics courses are mostly offered in undergraduate degrees

(79%). Less frequent are phonetics courses offered in graduate degrees and postgraduate specialisation schools (21%). None of the respondents reported teaching classes in phonetics at PhD level.

The undergraduate degrees in which phonetics is taught are, in decreasing order of frequency, those in foreign languages and/or linguistic mediation, Italian language and literature, communication sciences and/or sociology, and speech and language therapy. The graduate degrees and postgraduate specialisation schools in which phonetics is taught are (again in decreasing order of frequency) those of linguistics, foreign languages, Italian language and literature, education sciences.

In the light of the data collected, it appears that in Italian universities phonetics courses are more widespread in the departments of social and human sciences, than in any other departments. If these departments offer courses on topics related to phonetics, then it is likely that they prefer to teach general skills "that allow for solving all kinds of problems to dominate over specific domain knowledge in speech" [7].

Two other considerations can be drawn from the data collected. First, that in 85% of the cases, phonetics is taught in courses in which other topics are also covered, mostly those of general linguistics (morphology, syntax, etc.). As a consequence of this, on average no more than 15 hours are dedicated to teaching phonetics in a course, although it should be noted that in the database there are also extreme cases of courses in which only one or two hours are dedicated to the topic of phonetics.

The second consideration that can be drawn from the data collected is that in 70% of cases, phonetics is taught to classes of at least 50 students (and in 45% of cases even to groups of more than 100 students).

The low number of hours devoted to phonetics and the high number of students in the classroom seem to influence both the content and the way in which the subject is taught (see sections 3.2, 3.3 and 3.5).

3.2. What is taught?

The data collected show that the topic dealt with most frequently during the lessons is that of transcription of typical speech (95% of cases), more precisely that of Italian speech (71%). In fact, the transcription of dialects spoken in Italy and/or of other languages is only taught in 42% of the courses.

The second most widespread topic dealt with in lessons is articulatory phonetics (88%); followed by acoustic phonetics (60%) and perceptual phonetics (58%). Every other possible topic is only marginally covered. For example, the phonetics of additional language learning and teaching is covered only in

35% of the cases and sociophonetics or speech technologies are dealt with in just 10% of the cases.

Therefore, overall, what is being taught is still similar to what was being taught in the 1950s [8], i.e. most lecturers remain anchored to "the more leisurely approach of the past" [9], instead of moving towards an integrated approach to the teaching of phonetics that mixes the analysis of the speech signal and its production with descriptive and experimental phonetics in historical linguistics and sound change, and descriptive phonetics of the languages of the world [10].

This is probably due to three factors: firstly, the low participation in the survey of professors, readers and lecturers who teach phonetics in degrees other than the social sciences and humanities; secondly, their educational goals (see section 3.3); thirdly, their expertise (see section 3.4).

3.3. What are the teaching goals?

The data collected through closed-ended questions show that the reason why phonetics is taught is for students to acquire awareness, knowledge, and skills they did not possess before.

As far as raising awareness is concerned, for more than half of the respondents, it is important for students to become aware of the difference between written and spoken language as well as between the phonetic and phonological dimensions of spoken and listened languages.

As far as knowledge is concerned, for about half of the respondents it is important that students learn how speech is articulated and how this information can be used to classify the sounds of language and therefore transcribe them.

Finally, with regard to skills, the acquisition of which affects only a minority of respondents, it appears that the academics who responded are interested in students learning to analyse the language produced by themselves and by others, thus applying these skills to concrete situations, above all those of learning the pronunciation of additional languages.

3.4. Who teaches phonetics?

The data collected show that the majority of professors, readers, and lecturers that teach phonetics in Italian universities fall within the academic discipline² of "glottologia e linguistica" (glottology and linguistics) and, less frequently, within one of the other linguistic fields (e.g. Italian, English, Spanish, or German linguistics). In contrast, at least among the respondents, there is only one professor within the academic discipline of "scienze tecniche mediche applicate" (applied medical technical sciences), but

no academic in the fields of engineering or computer sciences.

As far as professors, readers, and lecturers' skills are concerned, almost all the respondents state that they can perceive, articulate, classify and transcribe (albeit sometimes with uncertainties) all the sounds of Italian. On the other hand, only half of the lecturers claim to be able to perform the same operations with reference also to dialects spoken in Italy and/or in other languages. Further information on respondents' abilities could not be systematically collected, but some of them wrote in the responses to open-ended questions that they do not teach acoustic and perceptual phonetics because they lack knowledge and skills in the fields

In the light of this, it seems fair to say that probably the majority of those who teach phonetics in Italian universities are rooted in (general) linguistics rather than in phonetics or speech sciences, which means that only a minority have "sufficient theoretical and methodological competence in both signal processing and language categorisation" [10] as already observed.

3.5. How is phonetics taught?

The data collected show that phonetics is taught by almost all respondents using examples, mostly invented (93% of cases) or, less frequently, real ones mainly taken from phonetic databases (60%).

Data also show that the most frequently used instructional tool during lessons is the chart of the International Phonetic Alphabet, which is used by 88% of the respondents often also in its multimedia version. Less frequent is the use of other more or less technological tools such as recorders (63% of cases) or software for articulatory (33%), acoustic (32%), perceptual (20%) or transcription (13%) analyses. The multimodal presentation of content, e.g. using videos [10], graphic simulations or three-dimensional models, is also quite infrequent (at most 15% of cases), while the use of graphs and anatomical drawings is more widespread (85%).

Therefore, despite the almost inevitable growth in the use of digital tools due to distance learning during the COVID-19 pandemic, this use in Italian universities, unlike in other countries, does not seem to have opened "new doors in the phonetics classroom", nor has it heralded the affirmation of new techniques for phonetics teaching [12]. From an educational point of view, however, this is disappointing. The access to digital tools can act as both a compensatory measure for the low number of teaching hours, where less attention can be given to individual learners especially in the case of practical activities such as speech transcription and analysis

and as a motivational measure for the students attending overcrowded, usually instructor-centred, classes.

3.6. Why is phonetics taught that way?

The qualitative data collected through closed-ended questions show that the respondents to the questionnaire teach phonetics the way they do for at least five different reasons.

In about 40% of cases, the respondents answered that they adopt the practices they reported because they believe that what they do is the best approach for students to achieve the educational objectives and goals.

In about 25% of cases, the respondents answered that they adopt the reported practices because they deliberately decided to use the teaching approach and method they had themselves been exposed to in their phonetics education, i.e. because they consider the model of their masters valid and want to perpetuate it.

In 13% of cases, the respondents reported that they do as they do because they are conditioned by circumstances that leave them no alternatives, in particular as a result of the few hours of lessons and the high number of students they have to manage.

Just as frequently, the respondents stated that they teach the way they teach because they slavishly follow a manual.

Finally, the respondents answered that they teach a certain way because that is the way they like to do it or it is the way they wished they had been taught when they were learning phonetics.

Differently, and relevant to the line of inquiry in which this research fits, none of the respondents claimed to teach in a certain way because they refer to some proposal in phonetics pedagogy. In fact, 87% of the respondents have never consulted research on this topic, although 62% of them would find it useful if phonetics teaching courses were organized, and 54% of them would participate in them if they were offered.

4. CONCLUSION

This survey is the first to have attempted a systematic quantitative and qualitative overview of phonetics education in Italy, with the aim of identifying phonetics teaching contents and practices.

The picture that emerges is that of a field with rather uniform syllabi, usually not oriented either to what have long been widespread contents in other European countries, in particular the northern ones [6], or to the inclusion among the disciplinary contents of what are now the most widespread topics in research and for research applications. It also emerges that usually teaching is not based on

“vibrant” teaching techniques such as those described for other parts of Europe [6].

Although the aim of the survey was not to assess the quality of teaching or to identify best teaching practices, it is still possible to identify at least three critical points that would deserve consideration by policy makers interested in improving the teaching of phonetics, also given its increasing relevance as an applied science [2].

The first one concerns the number of hours devoted to the subject, which is often inadequate to achieve the minimum learning goals [9] and should be increased.

The second point concerns the number of students, usually exceeding what is desirable to be able to balance theory and practice, which are inseparable components in the teaching of phonetics [9], even with digital tools and software [7, 12]. The number of students in the classroom should therefore be reduced.

The third point concerns the compilation of a syllabus of basic phonetics topics for the different classes and courses that would take up, for example, the proposal presented in [7] or in [10]. According to the data collected through the survey among academics at Italian universities, this is an action with which 70% of the respondents would agree.

To be useful and appreciated by students, this syllabus should probably include the treatment of acoustic phonetics alongside that of articulatory phonetics; the analysis of phenomena present in the Italian language but also of those traceable in other languages, even if unknown to the students; the adoption of a lab-based approach based on experiences and experiments of increasing complexity and feasibility even in large groups [13, 14, 15].

If accompanied by dedicated training in phonetics pedagogy for professors, readers, and lecturers, all this could change the teaching of the discipline and, with this, possibly increase the disciplinary commitment of learners [16].

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6. REFERENCES

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¹ Brief considerations can be found in a paper by Berruto [17] on the teaching of general linguistics where he notes that the topics of phonetics and phonology are the second most difficult to teach according to a sample of forty linguistics professors from Italian universities.

² Each academic at Italian universities belongs to a single academic discipline, also known as the *settore scientifico disciplinare*. The complete list of academic disciplines is accessible at <https://www.cun.it/documentazione/academic-fields-and-disciplines-list/>. Last accessed on November 15, 2022.