

1

Introduction

PILAR PRIETO AND SÓNIA FROTA

The present book is a collection of chapters that stem from the results presented at the Romance Tones and Break Indices (ToBI) workshop held in Tarragona, Spain, in June 2011. The overarching goal of the workshop was to try to create a consensus on the use of a common transcription system based on the Tones and Break Indices (ToBI) framework to analyze the prosody of Romance languages in a way that would accommodate dialectal variation within those languages. Each contribution to the workshop represented years of research by groups of experts in the intonation of the following languages: Catalan, French, Friulian, Italian, Occitan, Portuguese, Romanian, Sardinian, and Spanish. The resulting discussions formed the basis for a systematic comparison of prosodic labeling proposals across these languages. The chapters in this book can thus be regarded as the outcome of a collective effort encompassing nine languages and spanning more than four years.

As a whole, this book is intended to offer a comprehensive prosodic description of nine Romance languages couched within the Autosegmental Metrical (AM) framework of intonational phonology and using the ToBI transcription system. Though the study of the intonation of particular Romance languages like French, Italian, and Spanish has had a long history, to date little research has been devoted to the cross-linguistic comparison of their prosodic systems. An important goal of this volume is therefore to describe the prosodic system for each language in such fashion that it can be easily compared with those of other Romance languages. In addition, to our knowledge this is the first book that not only attempts to offer a unified description of intonation and phrasing across such a large number of Romance languages but also endeavors to accommodate the considerable dialectal variation within these languages.

One of the two noteworthy features of the nine studies included in the book is the common methodology used in each of them to elicit prosody. This methodology is based on the Discourse Completion Task procedure (henceforth DCT), which is of standard use in the fields of second language acquisition and cross-cultural

pragmatics (e.g. Blum-Kulka et al. 1989; Billmyer and Varghese 2000; Félix-Brasdefer 2010). The DCT method is an inductive method of data elicitation in which the researcher presents the subject with a series of everyday situations (such as “You go into a shop you have never been in before and ask the shop assistant if they sell tangerines”) and then asks him/her to respond accordingly. Crucially, the DCT methodology allows researchers to control for the contextual/discourse background information as well as for the specific pragmatic meanings expressed by the elicited utterances or intonation contours. The DCT questionnaire used in this project contained a set of 31 discourse contexts intended to elicit different sentence types (statements, questions, commands and requests, and vocatives), which were selected from the longer DCT questionnaire developed for the Catalan language (Prieto and Cabré 2007–12) and translated by each research team into the Romance language that was the particular object of their study. These translated versions can be found at the *Interactive Atlas of Romance Intonation* website (Prieto et al. 2010–14). The *Atlas* also includes audio recordings of responses to the DCT made at a selection of localities for each language (yielding a total of 68 recordings). The interactive nature of the website allows the user to listen to and compare analogous utterances across various Romance languages. More importantly for the reader of the present text, however, the Oxford University Press companion website to this book, available at www.oup.co.uk/companion/frota_prieto offers a selection of sound files comprising all the examples of utterances which appear in the following chapters.

The other noteworthy feature of the following chapters is that they all frame their prosodic analysis, as noted above, within the AM framework and the ToBI approach to prosodic annotation (e.g. Pierrehumbert 1980; Pierrehumbert and Beckman 1988; Ladd 2008a; Gussenhoven 2004; Jun 2005a; Beckman et al. 2005). The AM framework assumes that the intonation of an utterance is composed of a set of important tonal events, namely pitch accents (or relevant tonal movements associated with metrically strong syllables) and edge tones (or relevant tonal events associated with phrase boundaries). These tonal events can be transcribed by exclusively using H and L target levels. ToBI, on the other hand, represents the set of conventions based on the AM framework for transcribing and annotating the prosody of a given language (Cat_ToBI, Fr_ToBI, etc.). The following chapters, each devoted to a specific Romance language, will propose the categorical entities (pitch accents, boundary tones) that make up the prosodic system for that language, and in many cases will also offer a description of how those entities are phonetically realized. Given that one of the key goals of this book is to highlight phonological contrasts across Romance languages, upstep, downstep, and also alignment features of H targets have only been incorporated in the annotation when the authors show that they are contrastive in the system (i.e. they show a paradigmatic use of these features). On the other hand, since the syntagmatic effects of pitch range (or alignment) can be accounted for by non-phonological factors, they are not incorporated in the phonological

transcription. It is hoped that making prosodic annotation with ToBI more transparent in this fashion will facilitate a comparison of intonation systems across Romance languages.

The Romance ToBI project explicitly emphasizes transparency in the prosodic notation by using phonological labels in comparable ways across languages while at the same time taking into account the prosodic system of each particular language. Such transparency is essential given that our aim is to offer a unitary analysis of the same prosodic contrasts that exist across Romance. As Ladd (2008a: 129) points out, “If we give identical phonological analyses to markedly different contours, it makes cross-language and cross-dialect comparison [...] at best difficult and at worst meaningless.” Thus, whenever possible, the same analyses are provided for the same set of prosodic contrasts. That said, we must remain alert to the fact that there are contours that look the same phonetically but are phonologically different (as may be the case for L+H* and H*+L, the much discussed on-ramp and off-ramp analyses; Chen 2011; Gussenhoven 2008). And the reverse is also true: depending on the specific grammar (or set of contrastive units) of the language, the same phonological contour may end up being phonetically different (for example L* HL% in a language that truncates and in a language that compresses; Grabe 1998; Grabe et al. 2000; Ladd 2008a). Importantly, the proposed ToBI analysis for each language takes into consideration the labeling proposals presented for other Romance languages with the aim of achieving a necessary balance between language-specific phonological systems and a ToBI prosodic analysis that is comparable across Romance languages.

The book is organized in two parts. The first part comprises the nine chapters devoted to the prosodic system of each of the nine Romance languages included in the book (Chapters 2–10). Each chapter offers a ToBI analysis of the prosodic data of one language including the most relevant dialectal variation. The individual chapters all share the same structure: (i) a brief review of the literature on intonation of that language and its dialects, as well as all the relevant non-intonational features, (ii) a description of the intonation and phrasing for a basic set of intonational contours, with a special focus on dialectal variation, and (iii) a proposal for the transcription of that language’s intonation which addresses the issues raised by dialectal variation, and the similarities and differences vis-à-vis other Romance languages. The second part of the book consists of the last chapter (Chapter 11), written by the two editors. This chapter provides a broad comparative overview of the main similarities and differences in the intonation systems found across the nine Romance languages included in the book.

In what follows we present a summary of each individual chapter. The focus of Chapter 2 is Catalan, and its authors are the primary developers of the Cat_ToBI system: Pilar Prieto, Joan Borràs-Comes, Teresa Cabré, Verònica Crespo-Sendra, Ignasi Mascaró, Paolo Roseano, Rafèu Sichel-Bazin, and Maria del Mar Vanrell. The aim of the chapter is to use the Cat_ToBI system developed for the Central Catalan

variety (regarded as the standard variety) and apply it to describe the prosodic features of the other main dialects of Catalan, namely Central, Northwestern, Valencian, Balearic, Northern, and Algherese. This is done by means of a systematic comparison of the oral materials recorded using the DCT in 68 different medium-size localities across the Catalan-speaking areas. These recordings can be found at the website of the *Interactive Atlas of Catalan Intonation* (Prieto and Cabré 2007–12), and the distinguishing dialectal features can be seen in dialect maps at the end of the chapter. The main areas of intonational variation are apparent in statements, yes/no questions, and wh-questions. Finally, intonational variation is most prominent in the dialectal varieties which show intensive contact with other Romance languages (Italian and Sardinian in the case of Algherese, French in the case of Northern Catalan).

Chapter 3 is devoted to the French language. Authors Elisabeth Delais-Roussarie, Brechtje Post, Mathieu Avanzi, Carolin Buthke, Albert Di Cristo, Ingo Feldhausen, Sun-Ah Jun, Philippe Martin, Trudel Meisenburg, Annie Rialland, Rafèu Sichel-Bazin, and Hiyon Yoo conduct their research into French prosody from within a variety of theoretical frameworks. Taking as a point of departure the long tradition of research on prosody and intonation that exists for French, they propose a set of converging conclusions related to the patterns of prominence and phrasing in that language, as well as the basic set of intonation contours and their functions. Their aim is to propose a ToBI transcription system for French, F_ToBI, which will be transparent to researchers working from within different frameworks and which can allow comparative work with other Romance languages. The data analyzed in the chapter was collected using the DCT in areas corresponding to nine dialectal varieties of French spoken in Europe. The results of the chapter highlight some interesting prominence and phrasing properties of French as compared to other Romance languages, such as the presence of the Accentual Phrase. The variety of tunes is also relatively limited in French compared to other Romance languages. Moreover, the analysis reveals interesting differences in the phonetic realization of intonation contours across French dialects.

Friulian is the subject of Chapter 4, written by Paolo Roseano, Maria del Mar Vanrell, and Pilar Prieto. This chapter constitutes the first attempt to describe the intonational phonology of Friulian and its dialectal varieties within the ToBI framework. It presents an intonational analysis of the set of sentences obtained using the DCT in nine Friulian locations, each of which represents one of the language's main dialects. It provides clear evidence that from a prosodic point of view Friulian shares interesting features with neighboring Romance, Germanic, and Slavic languages. For example, Friulian has the mora as its tone-bearing unit, which makes it similar to the neighboring Southern Slavic languages. Also, in comparison with other Romance languages, Friulian has a more limited inventory of intonation contours, which is compensated for by the presence of a varied set of modal particles and a rich morphosyntactic asset, which together play a crucial role in the encoding of sentence

modality. Finally, the chapter reports minor dialectal differences in vocatives, as well as in the patterns of association of intonational units with *wh*-questions, and the phonetic realization of the low final boundary tone.

In Chapter 5 the intonational phonology of Italian is analyzed by Barbara Gili Fivela, Cinzia Avesani, Marco Barone, Giuliano Bocci, Claudia Crocco, Mariapaola D’Imperio, Rosa Giordano, Giovanna Marotta, Michelina Savino, and Patrizia Sorianello. Taking into account the vast amount of work on the intonational phonology of Italian and its regional dialects, the goal of the chapter is to propose a ToBI-based system that incorporates a cross-variety comparison, as well as a wide variety of sentence types. To this end, the authors collected DCT data on thirteen varieties of Italian, namely those spoken in Milan, Turin (Northern area), Florence, Siena, Pisa, Lucca (Tuscany area), Rome (Median area), Pescara, Naples, Salerno, Bari (Southern area), Cosenza, and Lecce (extreme Southern area). The results reveal strong regional intonation differences for some sentence types and functions, namely statements and *yes/no* questions, as well as *wh*-questions. Yet the authors also point out that, contrary to what may be claimed in terms of non-prosodic features, it is not possible to establish macrodialectal areas for Italian that have common prosodic traits.

Rafèu Sichel-Bazin, Trudel Meisenburg, and Pilar Prieto discuss Occitan in Chapter 6. This chapter constitutes the first complete description of the intonational phonology of Occitan in AM terms. Although the DCT data was collected at a total of ten locations that cover all the main Occitan dialects (see the *Atlàs interactiu de l’intonacion de l’occitan* website, Prieto et al. 2007–), the main analysis of the data (as well as the Oc_ToBI proposal) is based on the central Lengadocian dialect. The chapter shows how Occitan lies at an intermediary position between its southern Italo- and Ibero-Romance neighbors on the one hand and French on the other. Like French, Occitan displays a phrasing organization based on the Accentual Phrase (with an optional initial rise), as well as the specific intonation realization of epistemic biases. Interestingly, these phrasing characteristics are not seen in Aranese (an Occitan dialect in contact with Catalan and Spanish) or Cisalpine (an Occitan dialect in contact with Piedmontese and Italian).

Chapter 7, on the Portuguese language, was contributed by Sónia Frota, Marisa Cruz, Flaviane Svartman, Gisela Collischonn, Aline Fonseca, Carolina Serra, Pedro Oliveira, and Marina Vigário. The goal of the chapter is to offer a first ToBI prosodic analysis of Portuguese which takes into account intonational variation across dialects, comprising four Brazilian Portuguese varieties and four European Portuguese varieties. The complete set of oral data for these varieties, obtained once more using the DCT methodology, can be found in the *Interactive Atlas of the Prosody of Portuguese* website (Frota and Cruz 2012–15). The results presented show that unlike other Romance languages, such as Catalan or Spanish, Portuguese does not use different tunes to mark epistemic differences within different types of *yes/no*

questions, commands, or wh-questions (with the exception of counterexpectational questions). From a cross-variety perspective, the chapter concludes that the main division is between Brazilian and European Portuguese, which display notable differences in the intonation of narrow-focus statements, commands, and requests, as well as in the distribution of pitch accents.

Doina Jitcă, Vasile Apopei, Otilia Păduraru, and Samuil Marușca analyze the intonational phonology of Romanian in Chapter 8. The main goal of the chapter is to propose a system for transcribing the prosody of Romanian, Romanian ToBI, taking into account two main dialectal varieties (Moldavian and Transylvanian). The chapter shows how from a prosodic point of view Romanian lies at the crossroads between Romance and Balkan languages. For example, one of the prosodic features that puts Romanian within the Balkan group is the patterns of prominence found in wh-question contours: wh-words receive the nuclear pitch accent of the utterance and are followed by a postfocal accent if the sentence is long. From a dialectal perspective, the Moldavian and Transylvanian varieties differ in their pitch realizations of information-seeking yes/no questions, which have ascending or ascending–descending contours in Moldova, and descending contours in Transylvania.

Chapter 9, written by Maria del Mar Vanrell, Francesc Ballone, Carlo Schirru, and Pilar Prieto, discusses the intonational phonology of the Logudorese and Campidanese varieties of Sardinian. The authors present a first description of the intonation and phrasing patterns of Sardinian within the ToBI system, taking into account these two dialectal varieties. The DCT was used to obtain data from nine speakers at five locations: İttiri, Òschiri, Lodè, Biddecrèsia, and Sinnia. The results reveal the frequent presence of secondary accents (or initial prominences) in Sardinian. This language makes use of a restricted set of nuclear configurations and a reduced inventory of boundary tones, which might be compensated for by a more extensive use of sentence-initial particles. Finally, almost no differences were found between Campidanese and Logudorese intonation patterns, except for the use of the particle *a* to introduce yes/no questions and the use of truncation in vocatives.

Chapter 10, written by José Ignacio Hualde and Pilar Prieto, deals with the intonational phonology of Spanish and its varieties. The description presented in this chapter is based on well-established prior work on Spanish intonation and in particular on the DCT data and analyses published in *Transcription of Intonation of the Spanish Language*, a compilation coordinated by Prieto and Roseano (2010), and its associated online *Interactive Atlas of Spanish Intonation* (Prieto and Roseano 2009–12). Unlike other chapters, this chapter represents a cross-dialectal summary of previous work carried out within the AM perspective. The intonational phenomena presented are exemplified with either productions by the first author (Peninsular variety) or audio recordings elicited by means of Map Tasks for the *Interactive Atlas of Spanish Intonation*. Cross-dialectal comparison yields a set of intonational differences across Spanish dialects, as well as potential durational differences, which

contribute greatly to the percept of interdialectal separateness. Moreover, the chapter emphasizes the importance of taking into account the pragmatic contribution of prosody in the comparison of intonation across dialects.

The last chapter of the book (Chapter 11) compares the nine intonation systems of the Romance languages included in the book, drawing mainly on data reported in each chapter and highlighting the main similarities and differences. The first section is devoted to patterns of prominence and phrasing across Romance, and specifically the types of prosodic prominence that are found and prosodic domains that are relevant for each language. The second section focuses on accentuation, and specifically on how pitch events are distributed across sentences and the types of nuclear pitch configuration that are produced in the main sentence types. The use of discourse particles and other kinds of lexical and syntactic marker is also considered, as well as how these markers interact with intonation in conveying specific pragmatic meanings. The third section offers a systematic comparison of the main intonation patterns produced across Romance, focusing on the types, complexity, and distribution of pitch events. The final section offers a summary of the common prosodic features found across Romance together with a reflection on the contribution of these patterns of variation for prosodic typology.

As noted above, one of the long-term goals of this book is that it will serve to advance the development of a common approach to the transcription of intonation for Romance languages. It is our hope that this work will pave the way to more systematic comparisons across Romance (and non-Romance) languages that use not only syntactic and lexical but also prosodic mechanisms to express different pragmatic meanings. Moreover, by deepening our understanding of prosodic variation within and across languages, we hope to have contributed to advancing our knowledge of universal prosodic typology.

The editors of this book would like to make several acknowledgments. First and foremost, we would like to thank the authors of the various chapters for their high-quality contributions and readiness not only to review their papers but also to provide interesting cross-references to other chapters. Second, we are profoundly grateful to the reviewers who helped in the assessment of the papers included in this volume, thereby substantially improving the quality of the book. They are Lluïsa Astruc (Open University), Mary Baltazani (University of Ioannina), Elisabeth Delais-Roussarie (CNRS, Université de Paris 7), Mariapaola D'Imperio (Université de Provence), Cécile Fougeron (Université Sorbonne Nouvelle-Paris 3), Christoph Gabriel (Hamburg University), Barbara Gili Fivela (Università del Salento), Jean-Pierre Lai (Université Stendhal Grenoble 3), Sam Hellmuth (University of York), José Ignacio Hualde (University of Illinois at Urbana-Champaign), Doina Jitcă (Institute of Computer Science, Romanian Academy, Iasi branch), Caterina Petrone (Université Aix-Marseille), Brechtje Post (University of Cambridge), Paolo Roseano (Universitat de Barcelona), Elina Savino (Università degli Studi di Bari), Rafèu

Sichel-Bazin (Osnabrück Universität–Universitat Pompeu Fabra, Barcelona), Maria del Mar Vanrell (Freie Universität Berlin), and Marina Vigário (Universidade de Lisboa). Without all the generous effort invested in such projects by authors and reviewers, compiled volumes such as this would never see the light of day. Special thanks are also due to Marisa Cruz for her help in the preparation of the final manuscript, to Joan Borràs-Comes for providing the maps for the book, and to Paolo Roseano for compiling the index.

Finally, we would also like to acknowledge the financial aid provided to this research project by several institutions. First, we thank the Generalitat de Catalunya, the Department of Translation and Language Sciences at the Universitat Pompeu Fabra, and the Center for Linguistics at the University of Lisbon (CLUL) for their direct financial support to the 2011 Romance ToBI Workshop. The first editor would also like to express her gratitude for the financial aid provided by the Fundação para a Ciência e a Tecnologia (FCT) to the *Interactive Atlas of the Prosody of Portuguese* (PTDC/CLE-LIN/119787/2010), and the financial support provided by the FCT (Pest-OE/LIN/UI0214/2011, Pest-OE/LIN/UI0214/2013) and the University of Lisbon to the CLUL's Laboratório de Fonética. The second editor acknowledges the financial support provided by the general scientific program of the Spanish Ministry of Economy and Innovation to the research project 'Gestures, prosody, and linguistic structure' (BFU2012-31995), as well as the financial support by the Catalan government to the Prosodic Studies Group (2014 SGR-925).